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Review of Evidence on Long-term Impacts of Cash Transfer Programs

Pierre Biscaye, David Coomes, Elan Ebeling, Annie Rose Favreau, Trygve Madsen
Travis Reynolds & C. Leigh Anderson

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Professor C. Leigh Anderson, Principal Investigator
Professor Travis Reynolds, co-Principal Investigator

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Executive Summary

Cash transfer programs are interventions that directly provide cash to target specific populations with the aim of reducing poverty and supporting a variety of development outcomes. Cash transfer programs may be either conditional or unconditional. Conditional Cash Transfer programs (CCTs) are social safety net programs that transfer cash directly to low-income households contingent on meeting certain behavioral requirements (e.g., visiting a health clinic). Unconditional Cash Transfers (UCTs) share similar redistributive and social safety net goals as CCTs, yet do not condition transfers on recipient behavior.

Low- and middle-income countries have increasingly adopted cash transfer programs as central elements of their poverty reduction and social protection strategies. Bastagli et al. (2016) report that around 130 low- and middle-income countries have at least one UCT program, and 63 countries have at least one CCT program (up from 27 countries in 2008). Growth in program adoption is especially high in Africa, where 40 of 48 sub-Saharan African countries now have UCT programs (up from 20 countries in 2010).

Through a comprehensive review of literature, this report primarily considers the evidence of the long-term impacts of cash transfer programs in low- and lower middle-income countries. We identify 54 reviews that aggregate and summarize findings from multiple studies of cash transfer programs, and that report evidence on at least one long-term outcome related to general health, reproductive health, nutrition, labor markets, poverty, gender and intra-household dynamics, and/or financial inclusion. Forty-nine reviews reference CCTs, 37 reference UCTs, two reference universal basic income programs (UBIs, a sub-type of UCTs), nine reference other types of cash transfers, and two do not specify the type of cash transfer referenced. The reviewed sources most commonly report evidence from cash transfer programs in Latin America (36 sources) and Sub-Saharan Africa (32). The programs reported on in the reviews include 36 cash transfer programs from Sub-Saharan Africa, 32 from Latin America, 15 from South Asia, eight from East Asia and the Pacific, three from Europe and Central Asia, four from North America, and two from the Middle East and North Africa.

Out of the 54 reviews we examine, 27 report on the impacts of cash transfers on **general health outcomes**. We find the most evidence for the impact of cash transfers on health visits (14 reviews), followed by immunization (11), and morbidity (10). Among short-term outcomes, cash transfers are associated with increases in health visits/healthcare use and improved morbidity outcomes. For long-term outcomes, cash transfers are associated with positive infant/child mortality outcomes. Six reviews report on the impacts of cash transfers on infant or child mortality, all finding positive impacts (i.e., reduced child mortality), though none report explicitly on long-term impacts of cash transfers on mortality, such as if the mortality rates continued to remain lower after

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Please direct comments or questions about this research to Principal Investigators Leigh Anderson and Travis Reynolds at eparinfo@uw.edu.

the cash transfer had ended. The evidence for the impact that cash transfers have on immunization is mixed. The most common pathway for improved long-term health outcomes mentioned in the reviews was through increased health visits (14 reviews), which is found to improve morbidity and infant and child mortality outcomes. As far as barriers to long-term health impacts of cash transfers, several authors mention that a lack of supply-side funding for services may limit the impact of cash transfers, especially in low-income countries (Owusu-Addo & Cross, 2014; Fernald et al., 2012; Ranganathan & Lagarde, 2012).

Twenty-four reviews report on **reproductive health outcomes**. We find the most evidence for sexual activity (12 reviews), followed by infant health (9), and non-HIV sexually transmitted infection (STI) frequency (9). For short-term outcomes, cash transfers are associated with increased contraceptive use and use of skilled birth attendants, but with mixed impacts on risky sexual behavior. For long-term outcomes, cash transfers are associated with reductions in HIV frequency, STI frequency, and early marriage, and with improved infant health outcomes. Five reviews report reduced HIV frequency (including incidence and prevalence), although they only report on two programs, one in Malawi and one in Lesotho. The reviews reporting on STI frequency are more mixed, with six reporting reduced STI rates and three reporting mixed impacts. The most common pathways listed for reduced HIV/STI frequency in the reviews we examined are increased education (4 reviews), followed by income effects (3).

Bastagli et al. (2016) look at six studies that measure cash transfer impacts on marriage and fertility (another set of reproductive health outcomes), and report that five of them show delayed marriage for women who receive cash transfer benefits (in Pakistan, Malawi, and South Africa), while one of the studies shows an increase in the probability of being married for women receiving cash transfer benefits in Honduras. Khan et al. (2016) report mixed impacts of cash transfers on fertility with four studies showing a decrease in fertility, three showing no impact, and two showing an increase in fertility. Bastagli et al. (2016) note that in one quasi-experimental study in Malawi a UCT program was associated with reduced marriage and fertility while a parallel CCT program had no impact; the authors of the study conclude that income effects might be driving the observed marriage and fertility outcomes rather than other factors like education. Other reviews, however, emphasize education as a pathway to reducing early marriage and fertility. A review by McQuestion et al. (2013) reports that "programs promoting or facilitating school attendance among adolescent girls have a significant effect on reducing marriage and childbearing" (p. 379). While marriage and fertility both affect reproductive health outcomes, they can also impact gender equality and women's decision-making power.

Twenty reviews report evidence of the impact of cash transfers on **nutritional outcomes**. For short-term outcomes, cash transfers are associated with positive food consumption/security, nutrition, and anemia outcomes. Among long-term outcomes, no reviews report positive impacts on any weight outcome. Four studies find mixed impacts, two find no significant impacts, and two report negative impacts. Seven reviews that report on child height or stunting showed some positive impacts of cash transfers, but six report mixed outcomes and two report no significant impact. Bastagli et al. (2016) note that one reason some of the studies may show no significant effect is because anthropomorphic measurements can take a long time to change, and some impact evaluations only cover a short time period. By far the most common pathway mentioned for long-term health outcomes (as measured by anthropometric outcomes) is nutrition, cited in 10 reviews. One study additionally reports that women's income and control over resources is a pathway to increased child nutrition.

Twelve reviews report evidence of the impact of cash transfers on **labor market outcomes**. Cash transfers are associated with positive outcomes related to income, agricultural labor, and child labor, but most studies do not clearly identify whether the impacts are short-term or long-term. In addition, many of the reviews look at the impact on adult labor outcomes, as a common critique of cash transfer programs is that they have the potential to reduce adult labor participation. Evidence on the impact of cash transfer programs on adult labor outcomes is either mixed (indicating reviews that identified evidence of no impact but also evidence of

positive impacts) or positive (indicating increased labor market participation). Only one review identified negative impacts of cash transfers on labor supply, where a reduction in work effort was reported during the first two years of a CCT in Nicaragua (Bastagli, 2011). Nine of the 12 reviews identify education as the primary pathway through which cash transfer programs might lead to improved labor-market outcomes. Daidone et al. (2015) note that labor-market outcomes are often not the desired long-term outcomes themselves, but that labor-market outcomes are the pathway towards the eventual goal of long-term exit from poverty.

Seventeen reviews report evidence of the impact of cash transfers on **poverty outcomes**. The reviews overwhelmingly provide evidence for cash transfers increasing consumption and expenditure amongst beneficiaries (nine out of ten reviews on consumption or expenditure report an increase), but the findings are only reported in the short-term, and the studies do not evaluate continued impacts on these outcomes after benefits had ended. For long-term outcomes, cash transfers are associated with positive investment and poverty outcomes. The reviewed evidence tends to agree that CCT programs are better at reducing the intensity, rather than the incidence of poverty—though impacts for both are noted to be positive in six out of seven studies. One systematic review by Bastagli et al. (2016) notes reductions not only in the poverty gap, but also in the poverty headcount as a result of CCT programs. Three reviews describe pathways through which cash transfers improve long-term poverty outcomes, including productive activities, financial risk management, and political will. Two other reviews briefly acknowledge the roles of education (Neri, 2017) and investment (Taaffe, Longosz, & Wilson, 2017) as the mechanisms by which long-term poverty-reduction outcomes can be achieved with cash transfer programs.

Ten reviews provide evidence on the impact of cash transfer programs on **gender and intra-household decision making outcomes**. While some short-term impacts for women are reported (as highlighted prominently in Bastagli et al., 2016), many of the reviews include longer-term indicators of women's empowerment. Cash transfers are associated with positive women's savings outcomes, although this is based on a single study. The evidence is mixed for women's labor and women's empowerment, with only four out of nine reviews reporting positive impacts of cash transfers. Targeting women is often raised as a potential pathway to long-term gender outcomes, such as increasing female decision-making power, but there is little evidence to support this hypothesis.

Finally, only two sources report findings relating to **financial inclusion outcomes**—Bastagli et al. (2016) and Vincent & Cull (2013). Both reviews associate cash transfers with positive financial inclusion outcomes, although little evidence is provided for long-term impacts.

In addition to reporting on various long-term outcomes of cash transfer programs, several reviews also provide evidence on different aspects of the implementation of cash transfer programs. Eleven studies report on cost-effectiveness of cash transfer programs, while fewer report on scalability or sustainability. Comparisons of cash transfer programs, including comparing different types of cash transfer programs (e.g., CCT vs. UCT) are relatively frequent in the sample of reviews, with comparisons of cash transfer programs to other poverty reduction interventions somewhat less frequent, as well as less detailed. Relatively few reviews mention different delivery methods of cash transfers such as the use of digital delivery, though these implementation characteristics are discussed by some reviews in terms of their effects on scalability of cash transfer programs.

Most of the 11 reviews reported on cash transfer **cost-effectiveness** suggest cash transfer programs can be cost-effective, depending on the context. However, multiple sources indicate continued research is necessary. Two reviews find cash transfers to be more cost-effective than other interventions (specifically food aid, and other cost-effective interventions for HIV). Two reviews compare the costs of CCTs relative to UCTs—one finding CCTs are more cost-effective at producing desired results than UCTs, and one reporting that enforcing

conditions can be costly. Five reviews report on some aspect of the administrative costs of cash transfer programs citing widely ranging costs from as low as five percent of program budget up to fifty percent.

Eight reviews discuss the **scalability** of cash transfer programs. Three sources focus on the possibility of scaling CCTs, while the other five discuss barriers to scalability. Taafe et al. (2016) report that scaling cash transfer programs is possible, but note that the scalability of cash transfer programs varies by context and resources available to national and sub-national governments. Sanchez-Ancochea & Mattei (2011) note that consolidating several different programs can be key to streamlining bureaucratic processes, reducing costs, and reaching more people. Vincent & Cull (2011) report on the ability of electronic delivery mechanisms to improve the scalability of cash transfer programs, concluding that the cost-efficiency and increased level of convenience make electronic delivery systems a preferable choice to smart or debit cards. The reviews that focus on challenges to scalability cite supply-side constraints and high costs as the main barriers.

Three reviews report on **sustainability** of cash transfer programs. Segura-Perez et al. (2016) evaluates three programs that have achieved sustained levels of success, citing political support, clear governance structures, accountability, social participation mechanism, and monitoring and evaluation as keys to progress. The two other reviews mention barriers to continuous viability, noting that funding for cash transfer programs from outside the government raises questions of local ownership and sustainability.

Twenty reviews report on **comparisons between different types of cash transfer programs**. The most common comparison concerns conditionality, where authors compare impacts between CCT and UCT programs (13 reviews). Of these, three report larger positive impacts for CCTs for a particular outcome and two report larger positive impacts for UCTs. Eight studies report no significant difference in the impact of conditional and unconditional cash transfers, and one reports that the relative advantage of UCTs and CCTs to support more positive impacts vary depending on the outcome measure. The second most common comparison considered the impacts of cash transfer programs based on demographic characteristics of target populations (7 reviews). Of these, four reviews report that the impact was greater among poorer or more marginalized beneficiaries than it was for those that were better off, while one review reports that the opposite is true. Six other reviews examine the impact of the size of the payment of cash transfers on outcomes, with all six reporting that in general higher-amount awards are associated with greater impacts.

Bastagli et al. (2016) examine additional comparisons including the gender of the recipient, the timing, frequency, and duration of the cash transfer program, and whether the cash transfer was accompanied by an additional program, such as a nutritional supplement. The authors report that for gender of the main recipient, there "does not appear to be strong support for differences arising from specifically targeting either men or women" (p. 11). They conclude that the limited evidence on timing and frequency subject shows that these factors can have an important bearing on outcomes, noting that "a frequent and predictable transfer could be expected to favour consumption smoothing and spending on smaller assets, while lump-sum payments may be associated with investment in bulkier assets" (p. 258). The authors also point out that timing cash transfers around school (for school fees) or agricultural seasons (for inputs) may increase the impact of the transfer, but that more evidence on this is needed. On the role of transfer predictability, they report that delays in cash transfer payments may reduce impacts, but again that more research is necessary. Finally, the authors report increased beneficial impacts in health, nutrition, expenditure, and empowerment outcomes from longer exposure to cash transfers.

Thirteen reviews report **comparisons between cash transfer programs and other types of programs or interventions**. Some reviews provide detailed comparisons but most offer limited comparative analysis, suggesting research in this area is limited. Four reviews compare cash transfer programs to other types of interventions on poverty impacts, all finding that cash transfer programs can be more effective than

alternatives to improve outcome measures related to poverty, but only under specific circumstances. Four reviews compare the efficacy of cash transfers to other programs to improve maternal and child health outcomes, with no authors providing definitive evidence of greater efficacy of one type of program over another in improving health outcomes. Three reviews examine the evidence on the relative efficacy of cash transfers versus other programs in improving overall reproductive health outcomes, but the data are limited. Finally, two reviews compare cash transfers to other programs for nutrition outcomes, with mixed conclusions.

Introduction

Cash transfer programs are interventions that directly provide cash to target (usually low-income) populations with the aim of reducing poverty and supporting development outcomes such as improved education and health. Cash transfers are intended to help individuals with low and variable incomes to smooth consumption, sustain spending on daily necessities, and provide a buffer against shocks to avoid selling assets or taking on debt (DFID, 2011). Fiszbein & Schady (2009) outline several prominent arguments in favor of direct redistribution through cash transfers relative to alternative interventions intended to benefit low-income households less directly. First, since in many low-income countries public expenditure on infrastructure and public services often do not reach the poorest populations, cash transfers may have a greater impact on poverty reduction than other forms of public expenditure if targeted effectively on those populations. Second, cash transfers may help efficiently address market failures such as lack of access to credit or insurance for poor households, allowing credit-constrained households to invest in projects to increase their productivity or to cope with income volatility. Third, cash transfers may support households with inherited disadvantages to overcome inequalities of opportunity.

Primary objectives of cash transfer programs include providing a minimum consumption floor for low-income households to alleviate short-term poverty and promoting the accumulation of human capital to break the long-term cycle of poverty (Fiszbein & Schady, 2009). Over time, transfer income is believed to help poor households build human capital (e.g., education), increasing savings and/or investment in productive assets, and overall improve their living standards (DFID, 2011). A recent comprehensive review of the literature on outcomes of cash transfer programs by Bastagli et al. (2016) finds that predictable cash transfers can have both immediate effects on household expenditure and saving/investment behavior, as well as potential "longer-term effects on households' human capital, asset accumulation and livelihood strategies, in turn reducing poverty and vulnerability, and increasing resilience" (p. 22).

Cash transfer programs may be either conditional or unconditional. Conditional Cash Transfer programs (CCTs) are social safety net programs that transfer cash directly to low-income households contingent on certain behavioral requirements. CCT conditions most commonly relate to children's educational or health outcomes with the goal of reducing consumption poverty (Fiszbein & Schady, 2009). The condition rationale assumes that low-income households do not have full information on the long-term benefits of health or education, and imposes requirements to ensure they act in beneficial ways (DFID, 2011). Cash can be allocated at the discretion of the recipient, but is "conditioned" for three main reasons (Fiszbein & Schady, 2009). First, agents do not always act in the ways we would expect fully informed, rational agents to act. Second, a body of evidence also shows that people often suffer self-control problems in the immediate term that do not match their long-term attitude toward the future, also known as hyperbolic discounting. Finally, there may be conflicts of interest within the household on how to spend cash that may not result in the best use of resources for the children living there and that may result in sub-optimal intergenerational outcomes (*ibid.*).

Unconditional Cash Transfers (UCTs) share similar redistributive and social safety net goals as CCTs, yet do not condition transfers on recipient behavior. UCT programs assume that low-income households are rational actors that will access an individually appropriate mix of public services as their constraints ease (DFID, 2011). Pega et al. (2014) further suggest that UCTs may lead to greater behavioral change because they are more socially acceptable and less stigmatizing for recipients. Without the need to enforce conditions, they are usually cheaper to run (Pega et al., 2014). They are also potentially a useful mechanism in fragile or conflict-affected states (Blattman & Ralston, 2014) or during humanitarian disasters (Pega, et al., 2014). Finally, UCTs may be more beneficial in some cases because health and education service delivery agencies cannot manage the added demand brought about from households attempting to fulfill CCT conditions (Schubert & Slater, 2006). A particular type of UCT is universal basic income (UBI) programs, under which a fixed unconditional income is

paid to everyone in a given economy/geography, without specifically targeting any particular populations. The potential benefits and drawbacks of UBIs have been debated for several decades but evidence is limited, as most experiments with UBIs have been short-lived and local (Woodbury, 2017).

Cash transfers have been increasingly adopted by low- and middle-income countries as central elements of their poverty reduction and social protection strategies. Bastagli et al. (2016) report that "there are some 130 low- and middle-income countries that have at least one non-contributory UCT program (including poverty-targeted transfers and old-age social pensions)," (p. 17) with growth in program adoption especially high in Africa, where 40 of 48 sub-Saharan African countries now have a UCT, up from 20 in 2010. They further report that 63 countries have at least one CCT program, up from two countries in 1997 and 27 countries in 2008.

Cash assistance to low-income families in high-income countries such as the U.S. has been available for years, although these programs are usually labeled welfare or safety-net programs rather than cash transfers. Pension programs have been active since the 1860s, and the Social Security Act, enacted in 1935 and amended in 1939, established a number of programs with cash transfer components (WelfareInfo, 2017). Temporary Aid to Needy Families (TANF) in the U.S. is one of the largest of these programs, giving out approximately $8 billion in 2016 (Price & Song, 2016). Programs in the U.S. that are based on the CCT model in low-income countries are more recent. A program titled Family Rewards was started in New York City in 2007 and is cited as the first conditional cash transfer program in the U.S. (Dechausay et al., 2014).

A large body of literature examines the impacts of cash transfers on poverty reduction and other development outcomes. The primary purpose of this paper is to review and summarize the evidence of the long-term impacts and cost-effectiveness of cash transfer programs in low- and lower middle-income countries, with a focus on long-term impacts on health, nutrition, labor market, poverty, and intra-household and gender outcomes. For each of these outcome areas, we first summarize key takeaways from major studies on the short-term impacts of cash transfer programs, but focus the majority of the review on analyzing evidence of long-term effects on the outcomes of interest, including whether short-term benefits are sustained. A second aim of this research is to review results of studies comparing relative impacts and cost-effectiveness of cash transfer programs with different characteristics, including UCTs vs. CCTs as well as cash transfers vs. other program designs such as insurance, micro-finance, food transfers, services (e.g. free prenatal health services), school interventions, and vouchers, in addition to cash transfers that are combined with other programs.

Methods

We searched the literature for studies reporting on outcomes from cash transfer programs. We began with an initial search string[1] and a search of the Scopus database. We adapted this search string to query two more databases, PubMed and Google Scholar. We also conducted additional targeted searches to find studies pertaining to specific outcomes of cash transfers, including effects on women and youth, and effects on access to credit and financial services. We also looked for documents relating to universal basic income experiments—a specific kind of transfer that might not be captured by the basic search string, and for synonyms of "cash transfer" such as "direct benefit transfer," although these searches did not expand the evidence base.

All results were limited to publications from 2010-present. We also conducted supplementary date-restricted searches in Google Scholar limited to 2015-present in order to capture the most recent relevant reviews.

[1]TITLE-ABS-KEY (("cash transfer" OR "cash grant") AND (impact OR effect) AND (experiment* OR caus* OR evaluation OR evidence)) AND PUBYEAR > 2009

For the first round of screening (of document titles and abstracts), a source needed to meet the following criteria in order to be retained for more thorough review:

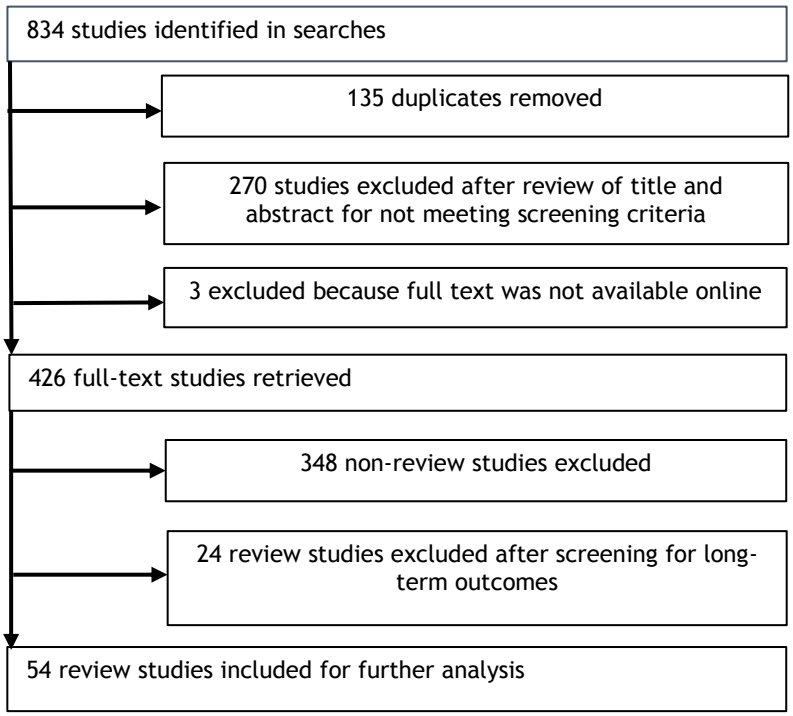
1. Reports on the impacts of a cash transfer program, *and*
2. Is either a review/meta-analysis, or a study with experimental or quasi-experimental design.

For the second round of screening (of full documents) a source needed to meet these additional criteria:

1. Cash transfer impacts related to a predefined set of outcomes of interest, namely a) health, b) reproductive health, c) nutrition, d) financial inclusion, e) labor market, f) poverty, and g) gender and intra-household decision making, *and*
2. Cash transfer impacts reported include long-term impacts on any of the above outcome areas. Reporting of "long-term" impacts could include sustained impacts on short-term outcomes (extended first-order effects) as well as outcomes that are linked to the cash transfers via downstream pathways (second- and third-order effects, as described in Bastagli et al. (2016))

We screened a total of 834 articles for whether they report on outcomes of cash transfer programs, and found 430 relevant articles including 78 unique reviews and meta-analyses. We further screened these 78 reviews and found 54 that report on at least one long-term outcome of interest (Figure 1). These reviews were either systematic (n=21)—where the author(s) documented clear search methodologies and report the full range of findings—or non-systematic (n=33), where the author(s) either selectively report findings or did not report a clear search methodology. The literature search and screening process is summarized in Figure 1. For each of the 54 reviews that met our screening criteria, we systematically recorded information on study characteristics and findings into a coding spreadsheet. An outline of the coding spreadsheet is included in Appendix A, and the completed coding spreadsheet for the full sample of 54 review documents is included as a separate appendix to this report.

Figure 1. Summary of literature search and screening process



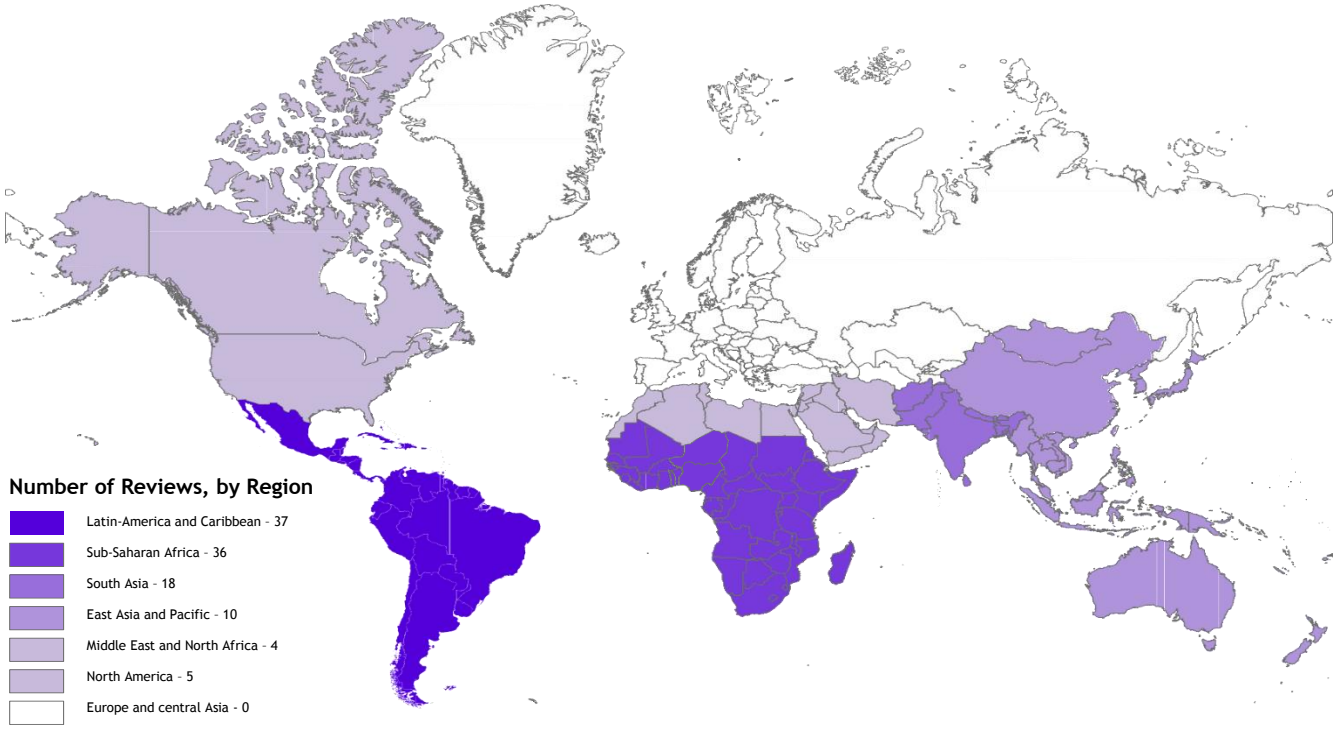
Among the 54 review papers meeting our screening criteria, and hence reporting on at least one long-term outcome of a cash transfer program, we find health (including reproductive health) and nutrition outcomes to be among the most commonly reported (Figure 2). These aggregates include many short-term outcomes of cash transfer programs, in addition to the long term outcomes of interest, as described below.

Figure 2. Number of reviews addressing general outcomes of cash transfer programs

Note: This table summarizes the outcomes from 54 unique reviews; numbers in the table do not sum to 54 because reviews can report on multiple outcomes.

The cash transfer programs featured in review papers come from a variety of geographies (Figure 3). Often, reviews and meta-analyses provide evidence from studies examining the impacts of cash transfer programs in multiple regions, so the number of programs adds to more than the 54 total reviews that met our final inclusion criteria. The reviewed sources most commonly report evidence from cash transfer programs in Latin America (37 sources) and Sub-Saharan Africa (36). We find the fewest sources reporting on cash transfer programs in North America (Canada and the U.S.) and the Middle East / North Africa, with five and four sources respectively. Appendix B summarizes key characteristics of the cash transfer programs described in the review papers included in this report, including location, transfer type, transfer conditions, transfer size, years of operation, target population, and program coverage. An overview of findings from a supplemental review of studies of long-term impacts of cash transfer programs in the U.S. is included in Appendix D.

Figure 3. Number of reviews reporting evidence of cash transfer impacts



In terms of the different types of cash transfer programs analyzed across the reviews, 49 reviews reference CCTs, 37 reference UCTs, two reference UBIs (a sub-type of UCTs), 9 reference other types of cash transfers, and two do not specify the type of cash transfer referenced (Table 2). Among the other types of cash transfers are social pensions (non-contributory cash transfers to older people) and enterprise grants (cash transfers to start or expand a small enterprise). Fifteen reviews report solely on CCTS, and three report solely on UCTs. The remaining reviews all include studies analyzing multiple types of cash transfer programs. An overview of findings from a supplemental review of UBI programs is included in Appendix E.

Table 1. Number of reviews reporting on different types of cash transfer programs

Type of cash transfers	Number of reviews
Conditional cash transfers	49
Unconditional cash transfers	37
Universal basic income (UCT sub-type)	2
Other type of cash transfers	9
Cash transfer type not specified	2

Note: This table summarizes implementation-related topics from 54 unique reviews; numbers in the table do not sum to 54 because reviews can report on multiple types of cash transfer programs.

In addition to reporting on various long-term outcomes of cash transfer programs, several reviews also provide evidence on different aspects of the implementation of cash transfer programs (Table 2), and these findings are reported separately. Eleven studies report on cost-effectiveness of cash transfer programs, while fewer report on scalability or sustainability. Comparisons of cash transfer programs, including comparing different types of cash transfer programs (e.g., CCT vs. UCT) are relatively frequent in the sample of reviews, with comparisons of cash transfer programs to other poverty reduction interventions somewhat less frequent, as well as less detailed. Relatively few reviews mention different delivery methods of cash transfers such as the use of digital delivery, though these implementation characteristics are discussed by some reviews in terms of their effects on scalability of cash transfer programs.

Table 2. Number of reviews reporting on implementation of cash transfers

Implementation of cash transfers	Number of reviews
Reports on cost-effectiveness	11
Discusses scalability	8
Discusses sustainability	3
Compares different types of cash transfers	20
Compares cash transfers to a different intervention	13
Compares delivery method of cash transfers	3
Mentions digital delivery	2

Note: This table summarizes implementation-related topics from 54 unique reviews; numbers in the table do not sum to 54 because reviews can report on multiple topics.

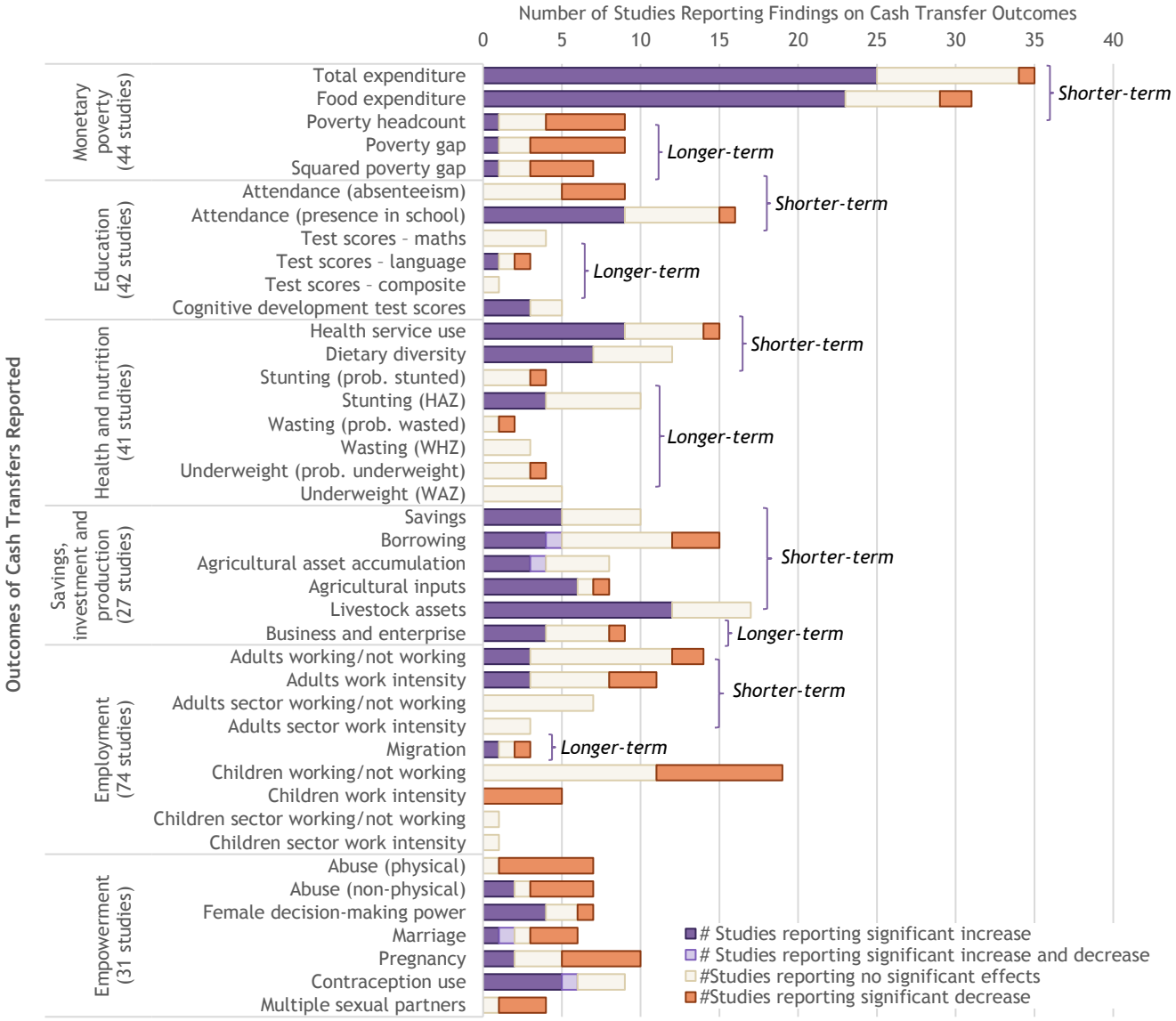
Results – Impacts of Cash Transfers by Outcome Area

In a recent expansive review of 201 empirical studies of the outcomes of cash transfers, Bastagli et al. (2016) report that "the expansion of cash transfer programs has been accompanied by a growing number of evaluations, resulting in a body of evidence on the effects of different programs on individual and household-level outcomes" (p. 17), including more recent attention to the influence of program design and implementation. However, the report also concludes that the evidence base surrounding the long term impacts of cash transfer programs is weaker than the evidence base surrounding short-term impacts (Figure 4).

As summarized in Figure 4, Bastagli et al. (2016) find abundant empirical evidence of cash transfer programs impacting a variety of monetary, education, health, savings/investment, employment, and women's

empowerment outcomes. Well-researched and documented short-term impacts of cash transfer programs include positive effects on individual and household expenditures, school attendance, health service use, and farm and livestock asset accumulation across a variety of contexts. However, the review reveals consistently less research, and fewer statistically significant findings reported, for long-term outcomes such as poverty, cognitive development, business and enterprise development, or many measures of women's empowerment. The authors conclude "the evidence is less strong for changes in third-order outcomes – that is, medium- to long-term effects – linked to cash transfers. This holds particularly for human development outcomes, i.e. health and nutrition and education" (p. 266).

Figure 4. Findings on short- and long-term outcomes of cash transfer programs



Notes: Adapted from Bastagli et al. (2016) *Table 12.1 Number of studies reporting statistically significant findings and direction of effects (at highest level of aggregation reported)*, p. 242. Definitions of "short-term" and "long-term" vary across individual studies reported. Child work and women's empowerment not clearly classified on a shorter-term versus longer-term scale.

Our review both seeks to summarize the findings of previous systematic reviews and meta-analyses that make explicit reference to the long-term (third-order) outcomes of cash transfer programs (Table 3), and to update these finding based on more recent reviews reporting on short and long-term effects.

Table 3. Key findings of systematic reviews describing long-term outcomes of cash transfer programs

Authors	Key Findings on Cash Transfer Impacts Reported
Bastagli et al. (2016)	• Wide-ranging review finds impacts of cash transfers on monetary poverty; education; health and nutrition; savings, investment, and production; employment; and empowerment. • Highlights strong evidence on short-term outcomes of cash transfer programs (Figure 1)
Glassman and Duran (2013)	• CCTs have increased antenatal visits, skilled attendance at birth, delivery at a health facility, and tetanus toxoid vaccination for mothers, and reduced the incidence of low birthweight. • No significant impact on fertility or caesarean sections was found. • Impact on maternal and newborn mortality has not been well documented.
Hagen-Zanker et al. (2011)	• Transfers have a predominantly, but not exclusively, positive impact in reducing poverty for the three money-metric indicators covered.
Hunter (2017)	• The strongest evidence that emerged concerned the positive impact of CCTs on increasing the uptake of prenatal care. • Reviewed studies tend to concentrate 2-3 years after program initiation.
Kabeer & Waddington (2015)	• Child labor decreased as a result of CCT programs, a result particularly notable for boys. • CCTs increased both household consumption and investment, and consumption patterns were smoothed. • Limited evidence of impact on girls' labor, and mixed effects on adult labor supply.
Khan et al. (2016)	• Inconclusive evidence of the impact of CCTs and UCTs on contraception due to a small sample size, heterogeneity of outcome measures, and no cash transfers specifically targeting contraception (its use was indirect or incidental in all cases)
Manley et al. (2012)	• Overall, no significant effect of cash transfers on height-for-age but impacts differ considerably by program. • CCTs achieve statistically similar results to UCTs when conditions relate to health and education, but conditions relating to work or saving are associated with worse outcomes. • Girls benefit more than boys in height-for-age measures. • Higher marginal effects in most disadvantaged areas and countries with poorer health care systems.
Owusu-Addo & Cross (2014)	• Sixteen studies from (mostly) Latin America examine CCT impacts on child health • CCTs are effective at increasing health care access for children, increasing both child and maternal nutrition, decreasing morbidity risk, increasing immunization coverage, and reducing household poverty: factors which help determine child health status. •To positively impact child health, CCTs depend on an effective health care system
Ranganathan & Lagarde (2012)	• Results from impact evaluations on 13 CCT programs (mostly from Latin America) indicate that they help increase uptake of health visits, increase immunization coverage, encouraging healthy behaviors, and impacting select health outcomes including stunting.

Sources: Authors, and Bastagli et al. (2016): Table 3.2 Headline conclusions on impacts from systematic reviews. The full Table 3.2 from Bastagli et al. (2016), reporting key findings from a sub-sample of systematic review articles (reviewing multiple short- and long-term cash transfer programs across a variety of contexts) is provided in Appendix C.
Note: Reviews are included in this table if they are: 1. systematic, 2. only include studies of cash transfer programs, and 3. report on long-term impacts of cash transfer programs.

We first report findings by outcome area, before summarizing findings on cost-effectiveness of cash transfers and comparing outcomes for cash transfers with different characteristics and for cash transfers compared to other types of interventions. When summarizing findings for particular outcome areas, we report whether the studies find positive, negative, mixed, or not significant impacts. A positive impact denotes when a program achieves the desired impact (e.g. health visits increase, infant mortality decreases, etc.), while a negative impact indicates that the program had the opposite of the desired impact. A not significant impact indicates that impacts of the program were not statistically significant. Mixed impacts are generally the result of some programs achieving positive impacts while others have no significant impact.

General Health Outcomes

Twenty-seven reviews report on the impact of cash transfers on general health outcomes (excluding reproductive health outcomes, reported on in the following section). We find the most evidence for the impact of cash transfers on health visits, followed by immunization, and morbidity. Violence (including domestic

violence, violence against children, and violent discipline) is also included as a health outcome, as the World Health Assembly declared violence a public health issue in 1996 (Krug et al., 2002). Long-term health outcomes of cash transfer programs reported in reviews include immunization (often described as both a short-term process and a long-term outcome) and infant/child mortality.

Table 4. Health impacts by outcomes measured.

Outcome	Mixed impact	Negative impact	Not significant	Positive impact	Total
Health visits	1			13	14
Healthcare use				2	2
Immunization	5		2	4	11
Violence	3	2		2	7
Sexual exploitation/abuse	1				1
Psychosocial wellbeing		3	1	5	9
Morbidity	2			8	10
Infant/child morbidity	1			3	4
Infant/child mortality				6	6
Grand total	**13**	**5**	**3**	**43**	**64**

Note 1: A positive impact denotes when a program achieves the desired impact (e.g. health visits increase, infant mortality decreases, etc.). Mixed impacts are generally the result of some programs achieving positive impacts while others have no significant impact.
Note 2: This table summarizes nutrition outcomes from 27 unique reviews; numbers in the table do not sum to 27 because reviews can report on multiple topics.

Short-term Health Outcomes

Short-term health outcomes we found reported in the reviews include health visits, healthcare use, immunization (with both short- and long-term characteristics), abuse, violence, and psychosocial wellbeing.

Fourteen reviews report on the impacts of cash transfers on health visits, and of these 13 report that cash transfers had a positive impact on health visits and two more report that they had a positive impact on healthcare use (health insurance enrollment for children and money spent on healthcare). There is less evidence that cash transfers affect sexual abuse and violence, as well as psychosocial wellbeing, including depression and intra-household/community tension. Ruckert, Huynh, & Labonte (2017) report on evidence of improved health outcomes due to UBI programs using 11 studies from North America, Africa, and Asia. Overall, the authors report positive impacts on mental health, birthweight, and health care use. They also report that UBIs allow beneficiaries to move to higher income neighborhoods, which is associated with improved overall health.

We also find some evidence of cash transfer effectiveness on second-order short-term outcomes, i.e., those outcomes that are an effect of behavioral change derived from immediate income effects (Bastagli et al., 2016, p. 23): eleven studies show a in morbidity associated with cash transfers (and three further studies show mixed impacts).

Of the five studies that report negative health impacts from cash transfers, three measure psychosocial wellbeing as an outcome, and two are outcomes relating to violence (from the same cash transfer program in Colombia). A review that focuses on the impacts of cash transfer programs on psychosocial wellbeing finds that cash transfers increased intra-household and societal tension (Samuels & Stavropoulou, 2016). A different review reports that stress levels increased in Bolivia in relatively more affluent communities receiving cash transfers as a result of beneficiaries pursuing more status-affirming behaviors (Ma et al., 2017). Finally, a review that focuses on the effect of development aid on violence reports that a cash transfer program in Colombia was associated with an increase in killings and indiscriminate violent acts (Zurcher, 2017). The author

suggests that this is a result driven by the context the cash transfer is implemented in rather than an effect of the cash transfer itself.

Long-term health outcomes

Long term health outcomes reported from the reviews include immunization and infant and child mortality.

Immunization

The evidence for the impact that cash transfers have on immunization is mixed. Four reviews report a positive impact on immunization (Malqvist et al., 2013; Fernald et al., 2012; Wiysonge et al., 2012; Pantelic, 2011), while seven report no significant impact (Bassani et al., 2013; Sanchez-Ancochea & Mattei, 2011) or mixed impact (deGroot et al., 2017; Taafe et al., 2017; Owusu-Addo & Cross, 2014; Ranganathan & Lagarde, 2011; Soares et al., 2010). The only programs that were cited as having an immunization component to the conditionalities were in Mexico (Ranganathan & Lagarde, 2012) and Nicaragua (Fernald et al., 2012). All of the other programs had health visit components to the conditionalities, but immunizations were not explicitly stated as a condition in the reviews.

One review reports that the government-funded *Oportunidades,* a cash transfer program in Mexico with an immunization condition, increased immunization rates in infants for TB and measles for those who had been receiving transfers for six months as compared to those that did not receive benefits. But these gains were not found after one year, as the proportion of children vaccinated was not significantly different between those that received cash transfer payments after one year in the program and those that did not receive benefits (Ranganathan & Lagarde, 2012). This same review reports that increases in immunization were found in Honduras, Colombia, and Nicaragua for CCTs which require regular health visits but do not specifically require immunizations. Another review reports that two randomized control trials (RCT) from Mexico and Nicaragua identify increases in child vaccination rates (Malvquist et al., 2013). The authors identify immunization as a condition of the program in Nicaragua. Fernald et al. (2012) also report positive overall impacts on immunization, as Honduras, Mexico, Nicaragua, Peru, and Colombia had increased vaccination rates for some sub-groups while only Jamaica showed no impact.

Owusu-Addo & Cross (2014) report mixed outcomes for immunization, with programs in Honduras, Mexico, and Nicaragua showing positive gains, while programs in Brazil and Zimbabwe show no significant impact. Additionally, the improvements in vaccination rates differed among the beneficiaries within countries as children over two years old were not found to have increased immunization rates in Mexico, Colombia, and Honduras. Two studies report that *Bolsa Família* in Brazil had no impact on child immunization, and the authors note that the lack of impact of cash transfers on immunization in Brazil could be due to supply side constraints (Sanchez-Ancochea & Mattei, 2011; Soares et al., 2010). Along the same lines, Owusu-Addo & Cross (2014) note that "for CCTs to increase access to primary health care for children, a well functioning and free health care system must be in place to meet the increased demand for health services that would result from CCT initiatives" (p. 616).

Infant and Child Mortality

Six reviews report on the impacts of cash transfers on infant or child mortality, all of which find positive impacts (i.e., reduced child mortality). None of these studies report explicitly on long-term impacts of cash transfers on mortality, such as if the mortality rates continued to remain lower after the cash transfer had ended. Four of the six sources report on the reduced infant or child mortality due to the Mexican cash transfer program *Opportunidades*, while one of them reports on a UCT in Niger. The final review does not specify the program or country.

Fernald et al. (2012) report that *Opportunidades* in Mexico significantly decreased infant mortality. Over half of this decline was the result of reducing respiratory and intestinal infections, and increasing nutrition. The authors attribute this decline to an increase in health visits due to participation in the cash transfer program.

But another review reports that while one study shows the *Opportunidades* program reduced infant mortality by 17% between 1992 and 2001, another study puts the reduction at only 2% between 1995 and 2002 (Murray et al., 2014). Cecchini & Madariaga (2011) and Ranganathan & Lagarde (2012) also report that *Opportunidades* reduced child mortality and rural child mortality respectively, although they do not specify to what extent. Pega et al. (2015) report that a UCT program worth $208 USD over four months, and which was targeted to prevent malnutrition among children in communities experiencing drought in Niger, resulted in a 74% reduction in child mortality.

Pathways for Long-term Health Outcomes

The most common pathway for improved long-term health outcomes mentioned in the reviews was through increased health visits (14 studies). The second-order impacts improved through health visits include morbidity (Taafe et al., 2017; Tirivayi et al., 2016; Pega et al., 2015; Owusu-Addo & Cross, 2014; Narayanan, 2011) and infant and child mortality (Tirivayi et al., 2016; Pega et al., 2015; Fernald et al., 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011). Two reviews mention that nutrition is the causal pathway to infant mortality (Ranganathan & Lagarde, 2012) and mental health (Ruckert et al., 2017). Finally, Ma et al. (2017) state that the pathway from health visits to better child health is debated in the literature.

As far as barriers to long-term health outcomes, several authors mention that a lack of supply-side funding for services may limit the impact of cash transfers, especially in low-income countries (Owusu-Addo & Cross, 2014; Fernald et al., 2012; Ranganathan & Lagarde, 2012). Specifically, Ranganathan & Lagarde (2012) note that "The early CCT programmes for which evidence of impact is the most robust and positive have been implemented in middle-income countries. Their implementation in these settings typically relied on the existence of adequate infrastructure (banks, roads and health facility network) and information systems that have undoubtedly contributed to their success" (p. S104). Fernald et al. (2012) also report that if beneficiaries have limited access to health services, the cost of accessing those services may be more than the cash benefit. Additionally, even if cash transfers increase demand for health services, if those services are of low-quality they may not improve health outcomes.

Reproductive Health Outcomes

Twenty-four reviews report on reproductive health outcomes. We include any aspect of fertility, pregnancy, childbirth, and sexual activity in reproductive health. We find the most evidence for sexual activity (to include risky sexual behavior, sexual debut, transactional sex, and age-disparate sex), followed by infant health, and STI frequency. Since HIV prevention and treatment is the target of many cash transfer programs, especially in Sub-Saharan Africa, it is reported on separately here from other STIs.

Table 5. Reproductive health impacts by outcome measured.

Outcome	Mixed impact	Negative impact	Not significant	Positive	Total
Sexual activity	8		1	3	12
Contraceptive use	1		1	3	5
Post-natal care	1				1
Skilled birth attendance	1			6	7
Antenatal care	2		1	4	7
STI frequency	3			6	9
HIV frequency				5	5
HIV treatment	1		1	2	4
Fertility	4			2	6
Infant outcomes	2			7	9
Early marriage				1	1
Maternal mortality	2			1	3
Grand total	**25**	**0**	**4**	**40**	**69**

Note 1: A positive impact denotes when a program achieves the desired impact (e.g. health visits increase, infant mortality decreases, etc.). Mixed impacts are generally the result of some programs achieving positive impacts while others have no

significant impact.
Note 2: This table summarizes nutrition outcomes from 24 unique reviews; numbers in the table do not sum to 24 because reviews can report on multiple topics.

Short-term Reproductive Health Outcomes

The impact of cash transfers on sexual activity is reported in 12 of the reviews we examined, with mostly mixed impacts. One specific outcome that shows positive effects was sexual debut. Three different evaluations show a reduction in sexual activity, including reduced transactional sex, reduced age-disparate sex, and reduced HIV risk behavior in South Africa from the Child Support Grant, a UCT targeted at adolescents aged 10-18 (Gibbs et al., 2017). The grant is paid to the caregivers of low-income families with adolescent children. Another review reports that schoolgirls in Kenya who benefited from an education-related cash transfer were found to have a delayed sexual debut as reported by one RCT (Remme et al., 2014). The other positive impact on sexual activity is reported by Taafe et al. (2016) where risky sexual behavior was reduced by 20% for participants in a lottery style cash transfer program in Lesotho offering the chance to win $50 or $100 USD. Participants in this program received lottery tickets conditional on remaining STI- and HIV-free every four months, but they were only paid if they won the lottery. The reduction in risky sexual behavior was found among the entire group that received lottery tickets, not just those that won. The same review reports that risky sexual behavior was also reduced for 9th and 10th grade girls in an education-related CCT in South Africa.

Four other reviews report mixed impacts on risky sexual behavior (Gibbs et al., 2017; Glassman et al., 2013; Pettifor et al., 2012; Ranganathan & Lagarde, 2012). Pettifor et al. (2017) reports that a cash transfer in Malawi reduced risky sexual behavior for women, but increased risky sexual behavior for men. One review reports mixed impacts on children's transactional or age-disparate sex (Gibbs et al., 2017), while another review reports that there was no impact of a cash transfer on transactional sex (Kalamar et al., 2016).

Other short-term outcomes that show some evidence of positive associations with cash transfer programs are contraceptive use, the use of skilled birth attendants, and antenatal care.

Long-term Reproductive Health Outcomes

HIV and STI Frequency

Five reviews report on HIV frequency (including incidence and prevalence), although they only report on two programs, one in Malawi and one in Lesotho. All five report positive impacts (i.e. reduction of HIV frequency) of cash transfers on HIV. Dellar et al. (2015) and Taafe et al. (2016) both report on the reduction of HIV frequency among cash transfer beneficiaries in Lesotho and Malawi. Dellar et al. (2015) reports on the results from two RCTs in which HIV infections were reduced by 25% in Lesotho for participants of a cash transfer program and by 64% for female high school students who participated in a cash transfer in Malawi. Taafe et al. (2016) report that adolescent girls in both the CCT and UCT arm in Malawi's intervention had reduced HIV prevalence as compared to non-beneficiaries, and that, in Lesotho, women in a lottery style cash transfer program had 33% lower HIV prevalence than those not in the program, however this review also reports that an unpublished report mentions that the reduced HIV prevalence was not sustained for the Malawi cash transfer program beneficiaries in a five-year follow up study. Pettifor et al. (2012) and Taafe et al. (2017) also report that Malawi's *Zomba* CCT program aimed at adolescent women reduced HIV prevalence among beneficiaries. Finally, Forget et al. (2013) also report on the same program in Malawi, but conclude that the UCT arm was more effective at reducing HIV transmission than the CCT arm.

The reviews reporting on STI frequency are more mixed, with six reporting positive impacts (i.e. reduction in STI frequency) and three reporting mixed impacts. A study in rural Tanzania showed a 25% drop in the incidence of STIs (Heise et al., 2013). Another review reports that two RCTs from South Africa found reduced incidence of Herpes Simplex Virus (HSV) and another study in Malawi reports reduced HSV prevalence for girls (Cluver et al., 2015). The review by Remme et al. (2014) also report on the reduction of HSV in Malawi while

Taafe et al. (2016) report on the reduction of STIs in Tanzania and South Africa. The authors note that in Tanzania one year after the end of the cash transfer program, the reduction in STIs was sustained among men, but not women. Finally, Pettifor et al. (2012) also report reduced STI prevalence in Malawi and Tanzania.

Kalamar et al. (2016) report that the impact on STI frequency for the Malawi cash transfer program was mixed because it only reduced HIV and STI frequency among girls who were enrolled in school at the beginning of the intervention. Ranganathan & Lagarde (2012) also report mixed impacts of cash transfer programs on STI frequency, citing a study in Tanzania that showed a 25% drop in STIs and one in Malawi that reports no evidence that a cash transfer impacted HIV status. Gibbs et al. (2017) similarly report a reduction in STI frequency in Tanzania and no impact in Malawi. Finally, Taafe et al. (2017) also report that STI incidence was reduced for participants of cash transfer programs in Tanzania, Lesotho, and South Africa.

Marriage and Fertility

Bastagli et al. (2016) look at six studies that measure marriage and report that five of them show delayed marriage for women who receive cash transfer benefits (in Pakistan, Malawi, and South Africa), while one of the studies shows an increase in the probability of a woman receiving cash transfer benefits in Honduras of being married. The delayed marriage in Malawi's *Zomba* cash transfer program was only found in the UCT arm, and not in the CCT arm. A different review reports that the age of marriage increased in Mexico and Pakistan, which is important because child marriage is associated with more unwanted pregnancies and short birth spacing (McQuestion et al., 2013).

Fertility is not a targeted outcome of most cash transfer programs, but there are anecdotal arguments that increased fertility is an unwanted side-effect of cash transfer programs (Bastagli et al., 2016). Other cash transfer programs, such as Malawi's *Zomba* Cash Transfer Program, aim to reduce unwanted and adolescent pregnancies. Fertility outcomes are reported six times in our review, with mostly mixed impacts. Bastagli et al. (2016) examine 10 studies on fertility, and find evidence against the argument that cash transfer programs increase fertility. They find that five of the studies show significant results of a decrease in fertility (CCTs in Turkey and Pakistan, and a UCT in Malawi), while two studies that examine Honduras' *Programa de Asignacion Familiar* (PRAF) program show a significant increase in fertility. The authors argue that a possible explanation for the increase in fertility in Honduras is that the transfer values were linked to the number of children in a family, thereby creating an incentive to have more children. The remaining three studies examined by Bastagli et al. show no impact on fertility. All of the programs reporting fertility outcomes in this review were CCTs with the exception of the one in Malawi, which had both a CCT and UCT program. The significant reduction in pregnancy in Malawi was found only among UCT recipients, which the authors note that, along with marriage, could explain the pathway as being a pure income effect as "the unconditional transfer group are under no incentive to swap childbearing for school" (Bastagli et al., 2016, p. 222). Gibbs et al. (2017) also report that all five evaluations of cash transfer programs in South Africa (all CCTs) found reduced pregnancy rates.

Khan et al. (2016) report mixed impacts of cash transfers on fertility with four studies showing a decrease in fertility (Malawi UCT, Zambia, Kenya, and South Africa), three showing no impact (Mexico, Nicaragua, and Malawi CCT), and two studies showing an increase in fertility (Honduras and Mexico). The four programs in which fertility decreased were all UCTs in Sub-Saharan Africa, while the programs in which there was no impact or an increase in fertility were all CCTs. The authors also report that for Malawi's *Zomba* program aimed at schoolgirls, there was a 6.7% reduction in pregnancy for girls enrolled in the UCT arm while there was no significant impact on pregnancy in the CCT arm. Glassman et al. (2013) also report mixed impacts on fertility, with Honduras again showing an increase in fertility, but a meta-analysis involving Honduras, Nicaragua, Mexico, and Uruguay shows no significant impact of cash transfers on fertility. Another review reports that a cash transfer program in Malawi reduced teenage pregnancies for girls who had dropped out of school but had no effect on those that remained in school while the probability of childbearing among girls 17-19 years old was not affected by participation in a cash transfer in Pakistan (McQuestion et al., 2013).

Infant Birth Weight

Infant birth outcomes also show some evidence of positive impacts including one review that reports a decrease in neonatal mortality (Jehan et al., 2012) and one that reports mixed impacts (Glassman et al., 2013). Included in infant outcomes is birthweight, for which four studies report positive impacts (increased birthweight) and one reports mixed impact.

Pathways for Long-term Reproductive Health Outcomes

The most common pathway listed for reduced HIV/STI frequency in the reviews we examined is increased education (four reviews), followed by income effects (three reviews). Pettifor et al. (2012) state that "Women with more education have been found to be at lower risk of HIV infection, have fewer children, and have greater earning potential" (p. 1730). Taafe et al. (2017) also connect education cash transfers to HIV prevention and state that "CTs that directly promote education can indirectly prevent HIV infection. In this way, education-focused cash transfers may also be used as a preventative HIV intervention" (p. 612). Taafe et al. (2016) and Remme et al. (2014) also list education as an important pathway to reduced STI frequency. Pettifor et al. (2012) and Taafe et al. (2016) list income effects as another pathway to reduced HIV/STI frequency. Girls who receive benefits from cash transfer interventions are less likely to have transactional sex or to engage in sexual activity with older men (who are more likely to have HIV) (Taafe et al., 2016). Pettifor et al. (2012) similarly report that providing income to young women through either CCTs or UCTs reduced HIV risk by allowing them to make safer choices in sexual partners and avoid transactional sex. Finally, as mentioned above, Bastagli et al. (2016) note that the impact of Malawi's UCT on reduced marriage and fertility while the CCT arm had no impact is an argument for the importance of income effects on these outcomes rather than education. Other reviews, however, mention that education is a pathway to reducing early marriage and fertility. McQuestion et al. (2013) report that "The reviewed studies indicate that programs promoting or facilitating school attendance among adolescent girls have a significant effect on reducing marriage and childbearing" (p. 379)

Nutrition Outcomes

Twenty of the 54 reviews we examined report evidence of the impact of cash transfers on nutritional outcomes. The most common outcome measured is anthropometric outcomes (including height, weight, stunting, etc.) with 25 reported. The second most common is direct nutrition measurements, including dietary diversity, micronutrients, and malnutrition.

Table 6. Nutrition impacts by outcome measured

Outcome	Mixed impact	Negative impact	Not significant	Positive impact	Total
Received deworming drugs			1		1
Food consumption/security				4	4
Nutrition	2		2	14	18
Anemia			1	2	3
Anthropometric outcomes	11	2	4	8	25
Grand total	**13**	**2**	**8**	**28**	**51**

Note 1: A positive impact denotes when a program the desired impact (e.g. stunting frequency decreases, average height increases). Mixed impacts are generally the result of some programs achieving positive results while others have no significant impact.
Note 2: This table summarizes nutrition outcomes from 20 unique reviews; numbers in the table do not sum to 20 because reviews can report on multiple topics.
Note 3: The "Nutrition" outcome includes dietary diversity, protein intake, micronutrient intake, malnutrition, and general nutritional status.

Short-term Nutrition Outcomes

The majority of the reviews report positive impacts on short-term or intermediate-term (second-order) nutrition outcomes, including receipt of deworming drugs, food consumption/security, and in the intermediate term general nutrition and anemia. Four reviews that report on dietary diversity find positive impacts of cash transfers. Bastagli et al. (2016) review 12 studies on the impacts of cash transfers on dietary diversity and find that seven of them showed significant positive improvements, while the remaining five report no significant impact. Narayanan (2011) reports that UCTs are an effective intervention to improve dietary diversity, and cites examples from Malawi and Zambia. Additionally, de Groot et al. (2017) report that cash transfers have increased dietary diversity in both Sub-Saharan Africa and Latin America.

Other short-term nutrition outcomes measured include protein intake, which was positively impacted (Segura-Perez et al., 2016), and infant and child nutrition (both positively impacted) (Narayanan, 2011; Sanchez-Ancochea & Mattei, 2011). When the results were measured as nutrition only, the impact is mixed, with two reviews reporting mixed impacts (Ruel & Alderman, 2016; Cecchini & Madariaga, 2011), two reviews reporting no significant impact (Pega et al., 2015; Bastagli, 2011), and three reviews reporting positive impacts (Tirivayi et al., 2016; Gentilini, 2015; Ranganathan & Lagarde, 2012). When incidence of malnutrition was measured, all three reviews report positive impacts (Pega et al., 2015; Owusu-Addo & Cross, 2014; Sanchez-Ancochea & Mattei, 2011). One review reports on the chance that individuals would receive deworming drugs during a drought, and finds that cash transfers had no impact on this outcome (Pega et al., 2015).

Reviews also report largely positive impacts for food consumption and food security (de Groot et al., 2017; Segura-Perez et al., 2016; Gentilini, 2015; Richter, 2010). de Groot et al. (2017) note that both household food consumption and dietary diversity increased for cash transfer recipients in Sub-Saharan Africa and Latin America. The authors cite examples of Brazil, where recipients increased their purchases of fruits and vegetables, and Colombia, where recipients increased protein consumption. Two reviews report positive outcomes for anemia, and one reports no significant impact. Tirivayi et al. (2016) report that previous reviews have established CCTs can reduce anemia, while Segura-Perez et al. (2016) report reduced incidence of anemia for children in Mexico's *Progressa*. Bastagli (2011) reports that evaluations of CCTs in Brazil and Honduras showed no impact on incidence of anemia.

Long-term Nutrition Outcomes

Long-term nutrition outcomes reported in these reviews include impacts on child anthropometric measures, including height, weight, and stunting prevalence. Ten studies report evidence of impacts on weight, nine report impacts on height, and ten report impacts on stunting.

Weight

Studies that measure the impact of cash transfers on child weight included measured outcomes of weight, prevalence of underweight children, and prevalence of wasting. No reviews report positive impacts on any weight outcome. Four studies find mixed impacts, two find no significant impacts, and two report negative impacts. Fernald et al. (2012) report that weight-for-age (WAZ) increased in cash transfer recipients in Brazil and Nicaragua, and children under six and rural children in Mexico. They report no increase in WAZ for recipients in Peru or Malawi. Bastagli et al. (2016) review eight studies that report on the prevalence of underweight children, and report that only one study showed a decrease in prevalence while the other seven showed no impact. Owusu-Addo & Cross (2014) also report mixed outcomes for weight, with studies showing a decrease in underweight children among beneficiaries in Colombia and Nicaragua, but a decrease in WAZ for those in Brazil. Ranganathan & Lagarde (2012) also report on the negative WAZ outcome in Brazil, and they

explain that it is likely due to a misunderstanding among the mothers of recipients who thought that having a malnourished child in the household was a condition for receiving benefits.

Height and Stunting

Reviews that report on child height or stunting showed some positive impacts of cash transfers (seven reviews). Another six reviews report mixed outcomes and two report no significant impact. Bastagli et al. (2016) review 13 studies that measured stunting, and find five of them reporting a significant decrease in stunting, while the other eight report no significant impact. Table 7 summarizes the findings from Bastagli et al. (2016) on anthropomorphic outcomes. The authors note that one reason some of the studies may show no significant effect is because anthropomorphic measurements can take a long time to change, and some impact evaluations only cover a short time period. Another reason reported is that increased nutrition due to cash transfers has a greater potential to affect stunting during the first 1,000 days of life. Where evidence on stunting is aggregated for both younger and older children it may underestimate the effects of cash transfers on younger children (Bastagli et al., 2016).

Cecchini & Madariaga (2011) report on six studies examining stunting in Mexico, and report that four of them show a decrease in stunting prevalence while the other two show no impact. Soares et al. (2010) report a mixed impact of cash transfers on stunting, with no impact in Brazil but a decrease in Mexico and Colombia. In a meta-analysis, Manley et al. (2012) report a small increase in height-for-age (HAZ) over 18 studies, but note that the overall statistical significance is weak. They also note that the impact was larger overall for girls than for boys. Molina-Millan et al. (2016) also report mixed impacts for stunting, with no impact in Nicaragua, and a decrease over the first five years of life in Colombia. They also report that higher cash transfer amounts are associated with less stunting in Mexico. Ranganathan & Lagarde report a decrease in stunting in Nicaragua. Finally, both Tirivayi et al. (2016) and Richter (2010) report decreased prevalence of stunting across multiple studies.

In a recent comprehensive review by de Groot et al. (2017) on the effects of cash transfers on child nutrition the authors report mixed evidence of the impacts on child anthropometric outcomes, including positive impact in eight countries, no significant impact in seven countries, and mixed results in another five countries. Additionally, the authors report that some short-term positive impacts faded in the long-run, noting that the *Apni Beti Apna Dhan* program in India resulted in increased WAZ in girls four years after birth, but not after more than 10 years (de Groot et al., 2017).

Table 7. Impacts of cash transfer programs on anthropometric outcomes in studies reviewed in Bastagli et al. (2016).

Country	Program	Outcome measured	Type of transfer	Significant impact	Age range of measured population
Latin America					
Colombia	Famillias en Acción	HAZ	CCT	0.161 increase	under 24 months
Ecuador	BDH	HAZ	UCT/CCT	NS	12-35 months
		HAZ	UCT/CCT	NS	up to 6 months at baseline
		WAZ	UCT/CCT	NS	under 6 years
Nicaragua	Atención a Crisis	HAZ	CCT	0.072 increase (after 9 months in program)	under 6 years old at start of program
		HAZ	CCT	NS (after 2 years in program)	under 6 years old at start of program
		WAZ	CCT	NS	under 6 years old at start of program

	RPS	HAZ	CCT	0.3575 increase	6-48 months
		HAZ	CCT	NS	under 5 years
		Probability of being stunted	CCT	5.5 percent reduction	under 5 years
		Probability of being underweight	CCT	0.062 percentage point reduction	under 5 years
		Probability of being wasted	CCT	NS	under 5 years
Mexico	PAL	HAZ	CCT	NS	up to 24 months
		HAZ	CCT	0.41 increase	up to 6 months
	PROGRESA	Probability of being stunted	CCT	NS	12-36 months
Sub-Saharan Africa					
Tanzania	TSAF	HAZ	UCT/CCT	NS	up to 48 months
		WAZ	UCT/CCT	NS	up to 48 months
		WHZ	UCT/CCT	NS	up to 48 months
Uganda	KWFP	Probability of being stunted	CCT	NS	61-83 months
		Probability of being underweight	CCT	NS	61-83 months
Zambia	CGP	HAZ	UCT	NS	under 5 years
		WAZ	UCT	NS	under 5 years
		WHZ	UCT	NS	under 5 years
Asia					
Bangladesh	Shombhob	Probability of being stunted	CCT	NS	up to 36 months at start
		Probability of being underweight	CCT	NS	not reported
		Probability of being wasted	CCT	0.125 percentage point reduction	12-24 months when enrolled
Indonesia	PKH	HAZ	CCT	NS	up to 36 months
		WAZ	CCT	NS	under 36 months
		WHZ	CCT	NS	up to 36 months

Source: Adapted from Bastagli et al. (2016), tables 8.5-8.7 (p. 147)

Pathways for Long-term Nutrition Outcomes

By far the most common pathway mentioned for long-term health outcomes (as measured by anthropometric outcomes) is nutrition, cited in 10 reviews (Bastagli et al., 2016; Molina-Millan et al. 2016; Ruel & Alderman, 2016; Tirivayi et al., 2016; Pega et al., 2015; Owusu-Addo & Cross, 2014; Manley et al., 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Soares et al. 2010). Child nutritional status is improved by increasing both the quantity and type (diversity, protein rich, etc.) of food. Bastagli et al. (2016) note that the consumption of vegetables and protein increased for beneficiaries of Colombia's *Famillias en Acción* program, and an evaluation of the program found a 0.16 increase in HAZ for children under 24 months of age. Additionally, Owusu-Addo & Cross (2014) report that Nicaragua's *Atención a Crisis* increased the consumption of milk, meat, and eggs among older children, but there was no impact found on child anthropometric outcomes. Tirivayi et al. (2016) report that along with food intake, cash transfers increase diversity and quality of food, and the height and weight of children. Additionally, Richter (2010) cites the similar pathway of food consumption, which only takes into account quantity of food and not the quality. Bastagli et al. (2016) report that although there have been some impacts on child anthropometric outcomes from increased nutrition,

"changes in design or implementation features, including complementary actions (e.g. nutritional supplements or behavioural change training), may be required to achieve greater and more consistent impacts on child anthropometric measures" (p. 8). One study additionally reports that women's income and control over resources is a pathway to increased child nutrition (Owusu-Addo & Cross, 2014).

Labor Market Outcomes

A total of 12 reviews and meta-analyses report on the impacts of cash transfers on labor market outcomes. The goal of many cash transfer programs is to reduce child labor while increasing education. In contrast, for adult labor, a potential unintended, and unwanted, side effect of cash transfers is reduced adult labor participation (Bastagli et al., 2016). However, this outcome, although cited as a concern, is not generally supported in the evidence base. For most labor market outcomes, the studies do not clearly identify whether the impacts are short-term or long-term.

Table 8. Labor market impacts by outcomes measured

Outcome	Mixed impact	Negative impact	Not significant	Positive impact	Total
Income				2	2
Agricultural labor				3	3
Child labor	2			5	7
Adult labor	6		2	2	10
Grand total	**7**	**0**	**2**	**13**	**22**

Note 1: A positive impact denotes when a program the desired impact (e.g. stunting frequency decreases, average height increases). Mixed impacts are generally the result of some programs achieving positive results while others have no significant impact.
Note 2: This table summarizes labor market outcomes from 12 unique reviews; numbers in the table do not sum to 12 because reviews can report on multiple topics.

Short- and Long-term Labor Outcomes

Income-related Outcomes

Three reviews offer evidence on the impact of cash transfers on income-related outcomes. A review by Molina-Millan et al. (2016) finds evidence that a CCT program in Nicaragua increased male income in the long-term by 10-30% through an increase in off-farm monthly income. The authors sum up the Nicaragua study by noting that the program has "…produced large long-term differential impacts on earnings for men, consistent with increased human capital leading to better labor market outcomes" (*ibid.*, p. 14). Two other reviews do not find the same long-term impacts on income, but do find impacts on wages paid: one systematic review finds evidence that cash transfer programs were associated with increased wages paid to cash transfer beneficiaries (Ma, Bauchet, Steele et al., 2017), and another review finds increased wages for male beneficiaries in Mexico (Cecchini & Madariaga, 2011), although neither review offers an explanation as to why cash transfers may be associated with increased wages for recipients.

Agricultural Labor Outcomes

Two reviews report evidence on three outcomes of interest relating to agricultural labor. One source reports on UCT programs, and how they result in changes to agricultural labor allocation from wage labor to own-farm. The review finds that, as a result of UCTs, men and women from Zambia, Kenya, Lesotho, and Ghana increased the time spent on the family farm (Daidone, Pellerano, Handa et al., 2015). Additionally, in Zambia, Kenya, and Lesotho, the UCTs reduced the participation and intensity of agricultural wage labor—an effect that was particularly strong for Zambian women, who experienced a 17 percentage point reduction in participation, and worked 12 fewer days per year (*ibid.*), though the study does not specify whether the reduced labor participation was concentrated in particular agricultural activities. The authors note that these changes in

labor supply spurred by UCTs reflect an intermediate step that facilitates progress down the road towards eventual long-term graduation from poverty. A final source finds that cash transfer programs in Mexico and Nicaragua decreased agricultural labor force participation (Molina-Millan, Barham, Macours et al., 2016).

Child Labor Outcomes

Five studies find positive impacts (i.e., reductions) of cash transfers on child labor, while two find mixed results. In a systematic review, Kabeer & Waddington (2015) draw on evidence from conditional cash transfer programs in Latin America and South Asia, and their meta-analysis finds that these programs resulted in decreased child labor rates on average—a finding that was far more pronounced for boys than for girls. In a second systematic review, Bastagli et al. (2016) review 19 studies that report on child labor outcomes, eight of which show a significant decrease in child labor. The other 11 studies show no significant impacts. The authors note that there is more evidence for the impact of cash transfers to reduce child labor intensity rather than labor participation. Cecchini & Madariaga (2011) report mixed impacts on child labor, noting that "…recipient families tend to combine work and school attendance, rather than replacing the former with the latter" (p. 143). The authors report that many programs reduce labor participation among children, although sometimes only in certain groups. For example, Paraguay's *Tekopora* program only impacted work participation among children aged 4-9 years, while no significant impact was found among other aged groups.

Adult Labor Outcomes

Some opponents of cash transfers argue that these programs may act as a disincentive to adults participating in the labor force (Bastagli, 2011). However, evidence on the impact of cash transfer programs on adult labor outcomes is either mixed (indicating reviews that identified evidence of no impact but also evidence of positive impacts) or positive (indicating increased labor market participation). Only one review identified any negative impacts of cash transfers on labor supply.

Two systematic reviews (Bastagli et al., 2016; Kabeer & Waddington, 2015) address cash transfer impacts on adult labor. Bastagli et al. (2016) report on the quality of the evidence included in their review, noting that they only opted to include "…studies that showed no or low concerns in terms of risk of bias and methodological rigour" (p. 6). The authors find mixed results, noting that over half of the reviewed studies showed no effect on labor force participation, fewer studies showed an increase in participation and intensity, and even fewer identified decreases. In a meta-analysis of three cash transfer programs (in Pakistan, Mexico, and Brazil), Kabeer & Waddington (2015) find no significant effects of cash transfers on adult labor force participation. The authors argue that the amount of the cash transfer in most cases is not enough to allow beneficiaries to trade work for leisure.

Another four reviews find mixed impacts of cash transfer programs on adult labor outcomes. Tirivayi, Knowles, & Davis (2016) find mixed impacts of cash transfer programs across populations and geographies, where adult labor force participation increased in Latin America and increased for older beneficiaries and small families in Sub-Saharan Africa, and reduced labor force participation for women, informal, and unpaid workers in Brazil, as well precipitated reductions for pensioners in South Africa. Additionally, the authors find that beneficiaries across Latin America—and Kenyan males—shifted their labor from on-farm to non-farm labor, and find reductions in casual work across Sub-Saharan Africa (*ibid.*). Another review finds mixed evidence: labor participation increases in Brazil and rural Chile, but no impacts in Colombia and Mexico. Finally, one review on UBI impacts reports that although there is the belief that UBI programs may create a disincentive to work, evidence from North America in the 1970s indicates that few beneficiaries left the labor market and overall work effort was not significantly reduced (Ruckert et al., 2017).

The only reported evidence of negative impacts of cash transfers on adult labor markets comes from Bastagli (2011), who finds that CCTs in Nicaragua appear to reduce work effort in the first two years of the program. However this effect on hours worked disappears in later years, which the author hypothesizes is due to program implementation adjustments which reduced benefits for latecomers to the program. However, the author also finds no association in Brazil and Mexico between CCT programs and labor supply.

Pathways for Long-term Labor Outcomes

Nine of the 12 reviews reporting on the impact of cash transfer programs on labor market outcomes identify education as the primary pathway through which labor-market improvements flow. CCT programs which mandate education to qualify for the transfer work to reduce child labor by ensuring that students are in school, rather than in the workforce (e.g., Kabeer & Waddington, 2015). One review focuses on Brazil's *Bolsa Família* CCT program, and identifies a pathway to better labor market outcomes that is even broader than education: "…social processes beyond human capital stocks may shape young beneficiaries' long-term trajectories and outcomes in the labor market" (Jones, 2016, p. 473).

Finally, Daidone et al. (2015) note that labor-market outcomes are not the desired long-term outcomes themselves, but that labor-market outcomes are the pathway towards the eventual goal of long-term exit from poverty.

Poverty Outcomes

A total of 17 reviews report impacts of cash transfer programs on poverty outcomes.

Table 9. Poverty impacts by outcome measured

Outcome	Mixed impact	Negative impact	Not significant	Positive impact	Total
Consumption	1			9	10
Income				1	1
Productive activities				1	1
Investment				3	3
Risk management				2	2
Inequality	1			1	2
Poverty	1			6	7
Grand total	**3**	**0**	**0**	**23**	**26**

Note 1: A positive impact denotes when a program the desired impact (e.g. stunting frequency decreases, average height increases). Mixed impacts are generally the result of some programs achieving positive results while others have no significant impact.
Note 2: This table summarizes poverty outcomes from 17 unique reviews; numbers in the table do not sum to 17 because reviews can report on multiple topics.

Short-term Poverty Outcomes

The reviews overwhelmingly provide evidence for cash transfers increasing consumption and expenditure amongst beneficiaries (nine out of ten reviews), but the findings are only reported in the short-term, and the studies do not evaluate continued impacts on these outcomes after benefits had ended (as similarly reported across a larger sample of short-term outcome studies examined by Bastagli et al., 2016).

One review by Daidone et al. (2015) examines impacts of UCTs in Zambia, Kenya, Lesotho, and Ghana on productive activities. The authors evaluate six categories of productive activities agricultural inputs, agricultural tools, agricultural production, home production of food, livestock ownership, and non-farm enterprises, and find generally positive impacts of UCTs. The impact of UCTs on these outcomes vary country-

to-country, but for each of the six groups of outcomes, the authors identify positive impacts in at least one country[2].

Long-term Poverty Outcomes

Evidence for longer-term impacts appeared in the following categories: inequality, investment, and poverty.

Inequality Outcomes

Two reviews report on impacts of cash transfer programs on inequality. Sanchez-Ancochea & Mattei (2011) report on the effects of the *Bolsa Família* CCT in Brazil. The authors note that the country has experienced continual reductions in inequality as measured by the Gini coefficient since the program's early days, and estimate that 10% of the reduction in inequality is attributable to *Bolsa Família*. They conclude that this estimate represents a likely low bound, as the authors identify multiple other studies of *Bolsa Família* reporting similar or even greater effect sizes. Another review provides mixed evidence from Latin America: cash transfer programs in Mexico and Brazil reduced inequality as measured by the Gini coefficient, but had no impact on inequality in Chile (Cecchini & Madariaga, 2011).

Investment Outcomes

One review highlights the positive impacts of UCTs for the elderly in Namibia and South Africa, noting that they enabled coping behaviors and increased inter-generational investment in grandchildren (Narayanan, 2011). Another review and accompanying meta-analysis of evidence from nine countries in Latin America and South Asia finds positive impacts of cash transfer programs on investment, though the impacts were small—on average, only 10-20% of the transfer amount (Kabeer & Waddington, 2015). A final review finds impacts specific to agriculture, with the authors noting increased rates of farm implement and livestock ownership in Latin America and Sub-Saharan Africa (Tirivayi, Knowles, & Davis, 2016).

Poverty Outcomes

The reviewed evidence tends to agree that CCT programs are better at reducing the intensity, rather than the incidence of poverty—though impacts for both are noted to be positive in six out of seven studies. A review by Richter (2010) finds sustained impacts on poverty outcomes, noting that "further analyses show that CCTs are effective tools for poverty relief in the short term and the reduction of poverty and inequality in the longer term" by increasing human capital and "breaking the intergenerational transmission of poverty" (p. 85). Pantelić (2011) cites Lomelí (2008) in noting that CCT programs reduce the poverty gap, rather than pushing families over the poverty threshold, a finding echoed by evidence from South Africa and Mexico (Taaffe, Longosz, & Wilson, 2017). Another review echoes the strength of cash transfer programs at reducing the poverty gap, citing positive impacts in Argentina, Brazil, Ecuador, Jamaica, and Mexico (Ceccini & Madariaga, 2011).

One systematic review by Bastagli et al. (2016) notes reductions not only in the poverty gap, but also in the poverty headcount that result from CCT programs. Another review shows positive impacts of CCTs on both the poverty gap and the poverty headcount ratio, but demonstrates that their magnitudes differ. CCTs reduced the poverty gap by nine to thirteen percentage points in Nicaragua and seven percentage points in Colombia, but only reduced the poverty headcount ratio by five to seven percentage points in Nicaragua, three in Colombia,

[2] Positive impacts in the following areas, impacted countries in parentheses: agricultural inputs (Zambia, Lesotho, Ghana), agricultural tools (Zambia), agricultural production (Zambia, Lesotho), home production of food (Kenya), livestock ownership (Zambia, Kenya, Lesotho), and non-farm enterprises (Zambia, Kenya). Source: Daidone et al., 2015.

and one percentage point in Mexico (Bastagli, 2011). A final review provides findings from Vietnam, Peru, Guatemala, and South Africa and a cross-country comparison in Europe, finding decreases in poverty incidence resulting from CTs, while one study finds no evidence of impact in Vietnam (Hagen-Zanker & Himmelstine, 2016).

Pathways for Long-term Poverty Outcomes

Daidone et al. (2015) report positive impacts of UCTs on productive activities in many Sub-Saharan African countries. Productive activities represent outcomes unto themselves as well as pathways towards long-term exit from poverty, as the authors claim that "increasing productive activities…is an important step towards sustainable graduation [from poverty]" (p. 97).

Concerning the impacts on inequality of the *Bolsa Família* program in Brazil, Sanchez-Ancochea, & Mattei (2011) posit that sustained impact over the long term will hinge on the ability of the CCT program to change the political behavior of the poor so that they can elect leaders who will, in turn, effect systemic change:

> "Most of the evidence points out to Bolsa Família's positive contribution to the reduction of poverty and inequality in the short run. The programme has given financial support to a significant share of the Brazilian poor, who were previously excluded from social provision. Bolsa Família cannot, however, deliver a sustained improvement in health and education outcomes and a reduction of poverty and inequality in the long run. These goals will only be met through an expansion in health and education services and, especially, an improvement in their quality – together, of course, with the transformation of the economic system" (Sanchez-Ancochea & Mattei, 2011, p. 313).

Another potential pathway which is explored in some detail emerged from a review that examines the effects of UCTs on behaviors that affect financial risk. Daidone et al. (2015) find that UCTs "have allowed beneficiary households to better manage risk in all four countries" (p. 96), according to a variety of indicators like savings, giving informal transfers, paying off debt and increasing creditworthiness. Though the impacts "vary from country to country, and context to context…In each case, the programme increases the likelihood of graduation, and perhaps serves as a pathway to graduation, though it is difficult to see yet where this pathway is going, or how far it can take beneficiary households" (*ibid.*, p. 100). The authors wrap up their review by cautioning that cash transfers will not cure poverty on their own, and need to work in conjunction with other programs in order to help households sustainably emerge from poverty over the long term.

Finally, two other reviews briefly acknowledge the roles of education (Neri, 2017) and investment (Taaffe, Longosz, & Wilson, 2017) as the mechanisms by which poverty-reduction outcomes are achieved through cash transfer programs. Neri (2017) emphasizes that the goal of conditionality in Brazil's cash transfer program is to increase education, with the expectation that increased education—and the additional human capital that results—will help with long-term poverty reduction. However, this widely accepted causal pathway is challenged by Jones (2016), who questions whether the pathway of education to human capital development to positive employment outcomes to reduced poverty in the long run actually holds up under scrutiny. The author finds that though more beneficiaries are indeed being schooled, that this does not necessarily translate to human capital development and better labor market outcomes; she also finds in the broader literature other factors besides a lack of human capital development (e.g., race, gender) that may be just as important (if not more so) in hindering exit from poverty (*ibid.*).

Gender and Intra-household Decision Making Outcomes

Ten reviews provide evidence on the impact of cash transfer programs on intra-household decision making and gender outcomes. While some short-term impacts for women are reported (as highlighted prominently in

Bastagli et al., 2016), many of the reviews include longer-term indicators of women's empowerment, or are unclear in whether measured empowerment outcome were short-term or long-term.

Table 10. Intra-household decision making impacts by outcome measured

Outcome	Mixed impact	Negative impact	Not significant	Positive impact	Total
Women's labor	1		1	1	2
Women's savings				1	1
Women's empowerment	3		1	3	7
Grand total	**4**	**0**	**1**	**9**	**14**

Note 1: A positive impact denotes when a program the desired impact (e.g. stunting frequency decreases, average height increases). Mixed impacts are generally the result of some programs achieving positive results while others have no significant impact.
Note 2: This table summarizes intra-household decision making outcomes from 10 unique reviews; numbers in the table do not sum to 10 because reviews can report on multiple topics.

Long-term Impacts on Gender and Intra-household Decision-making

Women's Empowerment

Women's empowerment is the outcome category most frequently covered by the reviews, in part due to the variety of ways in which empowerment can be measured. Bastagli et al. (2016) report positive impacts on women's empowerment from cash transfers, as measured through increased decision-making power within the household, with four out of the five studies producing significant results finding positive impacts. Positive impacts on women's empowerment are also observed by Pantelić (2011), who finds that providing cash transfers to female heads of household in Mexico increases their participation in economic networks and results in 25% of the transfer amount being invested into productive activities. Using other measures of empowerment, Ruel & Alderman (2013) report evidence from Mexico, Brazil, and Nicaragua suggesting that CCTs resulted in improvements in women's control over resources, women's self-esteem, women's knowledge of health and nutrition, and enhanced participation in social networks.

In contrast a recent review by de Groot, Palermo, Handa et al. (2017) finds mixed quantitative evidence of the impact of cash transfers on women's empowerment. For CCTs, the authors identify small positive impacts or positive impacts distributed only among select subgroups (three studies), no impacts (one study), or negative impacts (one study). They further report that recent quantitative work in Kenya, Uganda, Ecuador, and Yemen has yielded similar mixed results. The authors further note that these mixed quantitative findings contrast markedly with the qualitative evidence base, which generally documents impacts of positive impacts of cash transfer programs on women's empowerment – de Groot et al. (2017) attribute the discrepancy in part to the difficulty of quantitatively measuring the various indicators of women's empowerment through surveys.

Further mixed evidence of the impacts of cash transfer programs on women's empowerment outcomes comes from a new review conducted by Ma et al. (2017). The authors present positive evidence (seven studies) that cash transfers targeting women increase women's bargaining power within the household, potentially helping to reduce gender inequality. However, the review also highlights evidence from six studies and a comprehensive review that CCTs can unintentionally contribute to increased gender inequality by placing the burden of compliance on the woman.

Finally, Cecchini & Madariaga (2011) find that while cash transfers were associated with increased women's empowerment as measured by consumer-decision making power in Mexico and Brazil, and with an increase in self-esteem amongst women beneficiaries in Chile, no such impacts were found among women receiving cash transfers in Colombia. The authors further cite a study evaluating a program in Nicaragua which showed that resources flowing to women through CCT programs were mainly invested in improving diets and reducing

workloads *for men* (*ibid.*). Finally a review by Ellsberg, Arango, Morton et al. (2015) identifies no impacts of cash transfers on women's empowerment in Ecuador.

Women's Labor

The systematic review by Bastagli et al. (2016) identifies 10 studies providing sex-disaggregated findings on the impacts of cash transfer programs on the intensity of work among adult beneficiaries, with all but two finding at least one statistically significant impact. However they find no clear gender-related patterns (rather, effects reported include a mixture of increases and decreases in overall work intensity). In cases where women's labor force participation increased, the gains were often attributed to reduced time spent in childcare, with the cash transfer or CCT supporting increased schooling. However in other cases women report no time gains or less labor force time owing to the need to support children's schooling including transporting children to school.

Cecchini & Madariaga (2011) find positive effects on empowerment of cash transfer programs as measured by an increase in paid employment in Brazil, Colombia, and Chile, with notable differential subgroup impacts across countries. The positive effects on women's paid employment in Chile are particularly strong in rural areas with male heads of household, but the positive effects on women's employment in Colombia only emerge in urban areas (Cecchini & Madariaga, 2011). Female beneficiaries of the cash transfer program in Brazil are more likely to have paid employment than women not enrolled in the program (*ibid.*). Finally, Molina-Millan et al. (2016) find evidence that cash transfers increase male labor force participation in Mexico, but observe no impacts for women.

Women's Banking and Savings

Bastagli et al. (2016) report that most savings, investment and production indicators for measuring the impacts of cash transfers are generally reported at the household rather than individual level (p. 161). However they identified eight studies reporting gender-disaggregated outcomes of cash transfer programs on savings and investment behavior. Three find some of the savings, investment and production results to be concentrated in female-headed households – programs in Kenya, Malawi and Ghana saw increasing savings and investment especially among women, a finding attributed to the lower baseline assets (relative to men) of women participants in the program. Two other studies reviewed by Bastagli et al. (2016) find different types of impacts for male versus female household heads or beneficiaries (e.g., men more likely to respond to cash transfers by investing in goats or pigs, while women more likely to invest in chickens or seed inputs). Two other studies find no significant differences between men and women in terms of savings or asset accumulation.

One review focuses primarily on the advantages and disadvantages of different delivery methods for cash transfer programs. The authors note that beneficiaries of cash transfer pilot projects continue to make use of the financial services used to deliver the program long after the program has lapsed (Vincent & Cull, 2011).

From the same evaluation comes more qualitative evidence demonstrating the long-term impact of the cash transfer program: "…many of the personal accounts opened for [the cash transfer program] were still open long after the project had finished, suggesting that recipients were indeed still enjoying the ancillary benefits of access to financial services infrastructure for saving and person-to-person transfers (e.g. remittances)" (*ibid.*, p. 44).

Pathways for Long-term Empowerment Outcomes

Conditional cash transfer programs frequently target women in the household, based on the understanding that providing resources to women will translate into positive impacts on children (Ruel & Alderman, 2013). But the

impacts on women themselves is less well demonstrated. Three studies report positive impacts on women's empowerment simply by targeting women with the CCT (Ma et al., 2017; Ruel & Alderman, 2013; Pantelić, 2011). But in their comprehensive review Bastagli et al. (2016) note that the results of one of the most rigorous empirical evaluations of a cash transfer program—a study assessing the different impact of having a male or female recipient in the Give Directly program in Kenya—showed non-significant differences across men and women recipient households for key impacts such as savings or livestock ownership.

Those studies finding that women had more time to allocate to paid labor find that this is connected to reduced child care responsibilities with children in school rather than at home. Bastagli et al. (2016) identify children's schooling as mandated by CCTs as one of the key factors potentially impacting women's labor force participation. However, the opposite effect is also noted: studies finding no impact on women's labor force participation indicate that the conditionality imposed by CCTs (i.e., ensure children are in school) imposes an additional burden of compliance on women, with new demands on their time from transporting children to and from school (*ibid.*).

Financial Inclusion Outcomes

Only two sources report findings relating to financial inclusion outcomes.

Table 11. Financial inclusion impacts by outcome measured

Sources and *Outcomes*	Mixed impact	Negative impact	Not significant	Positive impact	Total
Bastagli et al., 2016					
Receipt of remittances				1	1
Informal savings arrangements				1	1
Savings use to cope with shocks				1	1
Vincent & Cull, 2011					
Inclusion via cell phones				1	1
Inclusion via debit / smart cards				1	1
Grand total	**0**	**0**	**0**	**5**	**5**

Note 1: A positive impact denotes when a program the desired impact (e.g. stunting frequency decreases, average height increases). Mixed impacts are generally the result of some programs achieving positive results while others have no significant impact.
Note 2: This table summarizes financial inclusion outcomes from 2 unique reviews; numbers in the table do not sum to 2 because reviews can report on multiple topics.

The review by Vincent & Cull (2013) concerns cash transfer implementation and the positives and negatives of the different delivery methods used for cash transfers. The authors look at one method for delivering cash transfer programs that offers concrete evidence of positive impacts on financial inclusion: smart or debit cards. One effect of the emergency cash transfer program in Malawi—delivered using biometric smart cards—was that beneficiaries continued to use the financial infrastructure put into place even after the program had ended, with personal accounts opened expressly for the program still open and active and being used for savings and remittances (*ibid.*). This evidence corroborates what other studies say about debit or smart card delivery: "It has been shown that recipients of social cash transfers in pilot projects, who have received their transfers electronically, make continuing use of their access to the financial services infrastructure above and beyond the initial intended purpose of accessing cash" (*ibid.*, p. 44).

Vincent & Cull (2013) also consider the potential of cell phones as a delivery mechanism for cash transfers and, after reviewing the reasons why M-PESA has been embraced in Kenya, conclude that cell phone cash transfer delivery is a promising option there:

> "Official data shows that an increasing volume of money transfers in Kenya is taking place by cell phone compared to traditional channels, such as the post office, commercial money-transfer companies such as Western Union or through friends and family. Factors contributing to this rapid growth include the wider penetration of cell phones amongst those who do not have a personal bank account, the low cost of transfers relative to the formal banking sector, and the convenience — which includes the ability to remit money more securely." (Vincent & Cull, 2013, p. 43).

Finally, the review by Bastagli et al. (2016) seeks to, among other things, identify evidence of differential impacts resulting from different delivery methods for cash transfers. The evidence base was very limited, but the authors identify one study from Mexico finding relevant behavioral changes resulting from the move of the Oportunidades program from cash to electronic (an inclusion-enhancing change). These changes included reduced informal savings arrangements, increased frequency of receipt of remittances, and an increased likelihood to use savings—rather than loans or consumption reductions—to cope with exogenous shocks.

Results – Implementation of Cash Transfer Programs

Cost-effectiveness

We found 11 reviews that report on some measurement of cost-effectiveness of cash transfer programs. Gentilini (2015) compares the cost-effectiveness of cash transfers to that of food aid, and reports that "Costs for cash transfers and vouchers tend to be significantly lower relative to in-kind food" (p. 135). Although the authors report that in general cash transfers (and vouchers) are more efficient than food transfers, they caution that comparisons are difficult due to differences in methods and approaches, and that "the availability of tools for transparent, comparable, and systematic cost analysis is limited" (p. 157).

Two reviews report on the cost-effectiveness of CCTs relative to UCTs. Forget et al. (2013) report that CCTs are more cost-effective at producing specific selected outcomes (those related to the conditions of the cash transfer program) because the conditions produce behavior targeted at those outcomes. They cite the example of the *Zomba* cash transfer experiment in Malawi in which the CCT was slightly more effective at increasing school attendance but the UCT was more effective at improving other outcomes, such as reducing early marriages, early births, and HIV transmission. The researchers explain this by arguing that the poorest and most vulnerable populations will be less able to comply with the conditions and therefore be excluded from receiving any CCT benefits, however all those receiving the UCT would still be eligible. The authors of the review report that "the cost per unit outcome will be higher with a UCT because a UCT will continue to pay those families who choose not to comply" (p. 90). The authors also note, however, that UCTs or basic income programs are more desirable if you trust families to use money in a way that will benefit them the most. Ma et al. (2017) report that enforcing conditions can be costly, and they suggest continued research into the cost-effectiveness of CCTs and UCTs as they found no study that directly compares benefits and costs of conditions.

Five reviews report on some aspects of the administrative costs of cash transfer programs, including the costs of monitoring conditions and targeting. Cecchini & Madariaga (2011) report that the costs of monitoring conditions varies widely. In Mexico, the cost of checking conditions rose from 8% to 24% of the total cost of the program between the first and third year. They also report that another study of 10 countries showed that monitoring conditions (plus additional support services) was never higher than 12% of program costs. Another review reports that administrative costs represented half of the program costs for a cash transfer program in Nicaragua (Ranganathan & Lagarde, 2012). Pantelic (2011) finds that CCTs in general have low operating costs, stating "on average, the administration costs for mature CCT programs represent about 5 per cent of total programme outlays, which, compared with other social programmes (i.e. food-based programmes, which average 36 per cent administrative costs), indicates that CCT programmes are run relatively efficiently" (p.

798). Finally, one source reports on the administrative costs of a pilot universal basic income (UBI) program in the U.S., which they estimate to be 1-2% (Colombino, 2015).

For targeting costs, Bastagli (2011) reports that in Honduras, the cost of identifying beneficiaries was about 25% of the total operational budget. In contrast, the administrative costs of a CCT in Brazil fell from 15% to 5% after implementers changed their targeting procedures. Cecchini & Madariaga (2011) also report on targeting costs, with the initial targeting taking up 61% of the overall program costs for the first year of Mexico's *Progresa*, but dropping to only 3% after three years.

Only one review included in our search (Remme et al., 2014) reports a cost-effectiveness ratio, and this source compares the cost-effectiveness of different HIV interventions, measured in USD per DALY averted. The authors report that cash transfers for school girls "could also be cost-effective in generalized epidemics" with a cost-effectiveness ratio of $212-912 USD per DALY averted (Remme et al., 2014, p. 14). This is compared to other cost-effective interventions such as couples counseling ($17 USD), gender empowerment for female sex workers (FSW) ($13-19 USD), female condom promotion for FSW ($32-56 USD), expanded female condom distribution ($24-1499 USD), and post-exposure prophylaxis (PEP) for rape survivors ($2120-2729 USD) (*ibid.*). The authors note that the cost-effectiveness measurement used only takes into account the impact of these interventions on HIV prevention, and that an additional benefit of the cash transfer program is that it is likely to also impact non-HIV outcomes.

Finally, three sources report on the general costs or cost-effectiveness of cash transfer programs without going into specific details. Richter (2010) reports that the average cost of CCT programs in Latin America is about 0.4% of GDP. A different review states that "Studies in Southern and Eastern Africa have found cost-effectiveness of national cash transfers and school support for adolescents in generalized epidemics, with long-term savings on avoidance of future negative outcomes" (Cluver et al., 2015, p. 4). Taafe et al. (2016) report that there is no evidence on the cost effectiveness of cash transfer programs on HIV prevention, however cash transfers are cost-effective in general once all outcomes are taken into account.

Scalability

Eight reviews discuss the scalability of cash transfer programs. Three of these sources discuss the possibility of scaling up cash transfer programs, while the other five discuss barriers for scalability.

Taafe et al. (2016) state that "Scaling cash transfer programmes is possible, especially within the larger and established national social protection programme. Existing platforms and experience implementing such programs could facilitate their implementation and scalability for HIV prevention in many places" (p. 22). They note that Brazil is a successful example of scaling up; *Bolsa Família* covered 14 million families in 2015 after just over a decade of existence. Additionally, they mention that the scalability of cash transfer programs varies by context and resources available to national and sub-national governments. Sanchez-Ancochea & Mattei (2011) also use *Bolsa Família* as a successful example of scaling up, noting that four separate cash transfer programs were consolidated into *Bolsa Família*, which streamlined bureaucratic processes, reduced costs, and reached more people.

Vincent & Cull (2011) report on the ability of electronic delivery mechanisms to improve the scalability of cash transfer programs. They conclude "The major benefit of electronic delivery systems is the increased cost-efficiency (lower transaction cost per transfer than traditional "pull" systems involving the physical delivery of cash), not to mention the increased levels of convenience both to the programme implementer and the transfer recipient" (p. 49). The authors additionally note that scaling up cash transfers using smart or debit cards would require a much greater initial investment in setting up banking infrastructure as compared to scaling up cash transfers using cell phones.

Of the sources that mention barriers to scaling up cash transfer programs, three of them mention supply-side constraints while the other two mention high costs. Cluver et al. (2015) describe a school condition in Tanzania that had to be removed because there were not enough schools to handle the increased demand. Jehan et al. (2012) report that the rapid scale up of India's *Janani Suraksha Yojana* program and the subsequent increase in women giving birth in health facilities has led to reports of poor quality care and questions about the ability of the health system to handle the increased demand. Another review that mentions supply-side constraints to scalability reports that "In Nepal, there is evidence suggesting that failure to provide basic support measures, in the form of good quality care and referral transportation is likely to have compromised the success of CCTs to incentivize women to give birth in health care facilities" (Ranganathan & Lagarde, 2012, p. S104).

Pantelic (2011) reports on the high costs of cash transfer programs and claims that CCTs "are constrained by government budgets, making it difficult to scale up, as they face challenges of fiscal affordability, institutional and operational obstacles, and the need to achieve political support" (p. 800). The author notes that despite the costs to governments, cash transfers are relatively cost-effective and the greatest expense is generally the transfer itself. Finally, Colombino (2015) argues that one barrier to implementing UBI programs is the large cost associated with the programs, especially in countries that do not already have social support programs in place.

Sustainability

Three reviews report on sustainability of cash transfer programs. One of them discusses examples where programs were able to successfully build sustainability, while the other two discuss barriers to sustainability.

Segura-Perez et al. (2016) reviewed *Bolsa Família* in Brazil, *Más Familias en Acción* in Colombia, and PROSPERA in Mexico. The authors report that "All three programs had strong political support and clear and transparent governance structures, including accountability and social participation mechanisms, which might explain their success and sustainability" (p. 124). The authors also mention that these programs had strong monitoring and evaluation components which contributed to successful program governance.

The two reviews that mention barriers to sustainability note that funding for cash transfer programs from outside the government raises questions of local ownership and sustainability. Cecchini & Madariaga (2011) report that although Nicaragua's RPS program was successful, it was financed by a loan from the Inter-American Development Bank (IDB), and the program was cut after the loan expired in 2007. RPS was replaced by several other programs, including a food transfer and a micro-credit program. They also note that Mexico's PROGRESA was initially financed through government funds in order to protect it from conditions and risks that come with outside financing, although the World Bank and IDB have lately begun financing the program. Jehan et al. (2012) report that state funding for two of India's cash transfer programs suggests a greater likelihood of sustainability, in contrast with Nepal's part donor-funded *Aama* program, which they note may cause "concerns about the lack of ownership at the district level" and questions of sustainability (p. 150). The authors conclude that "Short-term or insecure funding sources inevitably prompt urgent questions about scale-up and longevity" (p. 150).

Comparing Different Types of Cash Transfer Programs

A total of 20 reviews report on comparisons between different types of cash transfer programs (Table 12). The most common comparison concerns conditionality, where authors compare impacts between conditional cash transfer (CCT) and unconditional cash transfer (UCT) programs (13 studies). Two other common comparisons are for targeting (7 studies), where the authors compare impacts of cash transfer programs based on demographic characteristics (e.g., impacts for low-income versus higher-income beneficiaries), and the impacts of cash transfers based on the value of the cash transfer (6 studies). Finally, additional comparisons

include the gender of the recipient, the timing, frequency, and duration of the cash transfer program, and whether the cash transfer was accompanied by an additional program, such as a nutritional supplement.

Table 12. Number of reviews mentioning a comparison of different types of cash transfer programs.

Type of comparison	Number of reviews
Conditionality	13
Targeting	7
Value of cash transfer	6
Gender of recipient	1
Timing and frequency	1
Duration	1
Addition of supplemental program	1

Note: This table summarizes cash transfer program comparisons from 20 unique reviews; numbers in the table do not sum to 20 because reviews can report on multiple topics.

Conditionality

The most common comparison of cash transfer design and implementation in the reviews we examined is conditional vs. unconditional cash transfers, found in 13 reviews. Of these, three report larger positive impacts for CCTs for a particular outcomes and two report larger positive impacts for UCTs. Eight studies report no significant difference in the impact of conditional and unconditional cash transfers, and one reports that the relative advantage of UCTs and CCTs to support more positive impacts varied depending on the outcome measure (Table 13).

Table 13. Difference in effectiveness for UCTs and CCTs, by outcome area reported

Outcome	UCT more effective	CCT more effective	No difference/ Mixed
Health visits		2	
Psychosocial well-being	1		
Nutrition			2
HIV/STI frequency			3
Fertility	2		
Sexual behavior			2
Education		2	1

Note: This table summarizes cash transfer program comparisons from 13 unique reviews; numbers in the table do not sum to 13 because reviews can report on multiple topics.

Two studies report on the difference in health visits between CCTs and UCTs, both of them reporting higher impacts for CCTs. Ruel et al. (2016) include an RCT in their review that showed a CCT with a health conditionality increased health visits in Burkina Faso, and contrast this to a study of a UCT that did not have an impact. de Groot et al. (2017) do not overtly compare CCTs and UCTs, but claim that "CTs (especially CCTs) increase preventative healthcare visits and antenatal care-seeking in most cases" (p. 635).

One review reports on the impact of conditions for psychosocial well-being, and finds evidence that UCTs had a larger impact. Samuels & Stavropoulou (2016) note a study that found "...the cash transfer reduced psychological distress among schoolgirls offered the conditional transfer by 17 per cent and by 38 per cent amongst those offered the unconditional cash transfer. The researchers attributed the difference to the 'heavy burden' the regular attendance conditionality imposed on adolescent girls and their mental health" (p. 1102).

Two reviews report on nutritional outcomes, both reporting no difference in outcomes between CCTs and UCTs. Ma et al. (2017) examine the impact of cash transfers on child nutrition. The authors report that a meta-

analysis of 21 studies reveals no significant difference between CCTs and UCTs at "achieving desired outcomes", although the authors do mention that several studies suggest slightly larger effect sizes for CCTs as compared to UCTs (p. 509). Finally, Manley et al. (2012) also conduct a meta-analysis of 15 programs from 10 countries in Latin America, Sub-Saharan Africa, and South Asia on conditions associated with child nutrition and cash transfer programs, reporting on height-for-age z-score (HAZ) outcomes. They find that overall, transfers with conditions do not impact nutrition any better than programs without conditions, and in fact programs with conditions unrelated to health have a negative influence on HAZ.

Three reviews report on the impact of CCTs and UCTs on HIV or STI frequency, with all three reporting no difference between the two. Taafe et al. (2016) report that there was no difference in HIV prevalence between girls who were randomized to receive CCTs and those randomized to receive UCTs in Malawi's *Zomba* cash transfer program. The authors argue that "for HIV, attaching conditions to cash transfers to incentivize a certain behaviour or outcome may be unnecessary if the outcome will happen through an "income effect"" (p. 22). Cluver et al. (2015) report that cash transfers reduced STI frequency in Malawi, but there was no difference in a reduction of HIV and HSV prevalence between the conditional and unconditional cash transfers. Finally, also in Malawi, Taafe et al. (2017) report that there was little difference in the reduction in HIV prevalence between the CCT and UCT arms of a cash transfer designed to keep girls in school.

Two reviews report that UCTs are more effective in reducing fertility than CCTs. Bastagli et al. (2016) report that although CCTs had a larger impact on girls' school attendance, UCTs had a larger impact on delaying marriage and pregnancy among beneficiaries of Malawi's *Zomba* cash transfer program. Another review reports on an RCT, also from Malawi, which found that the likelihood of being pregnant was lower for participants in the UCT arm of the program as compared to both the CCT and control groups (Khan et al., 2016).

For sexual behavior outcomes, two reviews report evidence that there was no difference in impact between CCTs and UCTs. Peterman et al. (2017) find no difference in measures of sexual abuse among school girls in Malawi, defined as having a sexual partner older than 25 years, between conditional and unconditional beneficiaries. Pettifor et al. (2012) note that providing cash to young women in Sub-Saharan Africa reduces their risk of HIV by addressing structural barriers. They report that young women are less likely to have older partners or transactional sex if they are provided cash, with or without conditions.

Three reviews report on the significance of conditions on education outcomes. Bastagli et al. (2016) analyze three studies that explicitly test the differences between CCTs and UCTs, and they note that overall "while CCTs tend to yield slightly better outcomes compared to UCTs, the differences are not always significant" (p. 260). The authors point out one study which tested cash transfers that were 'labeled', rather than enforced, to encourage school enrolment and that led to slightly higher participation and math scores. They also report on a study that compared the type of education conditionality, reporting that a program which conditioned payment on graduation rather than attendance increased attendance by 5 percentage points while the attendance CCT had no significant effect. Ma et al. (2017) also report that public services, such as schools, see an increase in use due to conditions imposed by CCTs, but they report that a meta-analysis of 35 studies on school enrollment showed that CCTs and UCTs are equally effective at producing the desired program outcomes. Finally, Forget et al. (2013) report that the CCT and UCT arms of the *Zomba* cash transfer program in Mali both increased school attendance but the CCT arm was more effective. They note, however, that measured learning outcomes were not different between the two interventions.

Of the nine reviews that mention there was no difference in the outcomes for CCTs vs. UCTs, six of them cite Malawi's *Zomba* cash transfer program as evidence (Peterman et al., 2017; Taafe et al., 2017; Taafe et al., 2016; Cluver et al., 2015; Pettifor et al., 2012; Ranganathan & Lagarde, 2012). These reviews report a similar reduction in the proportion of girls who had older sexual partners or who engaged in transactional sex for those

in the CCT arm or the UCT arm of the cash transfer (Pettifor et al., 2012). Additionally, another review reports that there was no difference in the reduction of HIV and HSV for girls in the CCT and UCT comparison groups of this program (Cluver et al., 2015). This program is possibly overrepresented because *Zomba* was set up as an experiment, with some girls randomized to receive benefits conditional on school attendance while others received the benefits without conditions.

Forget et al. (2013) point out that comparing CCTs to UCTs is made more difficult by the fact that the majority of CCTs are in Latin America, while the majority of UCTs are in Sub-Saharan Africa. The authors again use examples from the experimental study of Malawi's *Zomba* cash transfer program, as well as another one in Zimbabwe, to show that CCTs are better at incentivizing specific behavior but less effective for other desired outcomes. They use the example of *Zomba's* education related CCT, and report that the girls receiving a CCT (who were required to attend school regularly) had slightly higher school attendance than those receiving a UCT, although those in the UCT group also had higher school attendance as compared to the control group. Those in the UCT group though had a reduced incidence of early marriage, early births, and HIV transmission as compared to those receiving the CCT. The researchers of the study explain that this may be due to the fact that the benefits from the program were not sufficient to allow the poorest families in both the CCT and UCT to send their daughters to school. Therefore the poorest group in the CCT group likely did not receive any benefits while those in the UCT group did (Forget et al., 2013).

Ma et al. (2017) describe how conditions can both increase the impact of programs on targeted outcomes as well as contribute to adverse unintended outcomes. The authors outline several key arguments, both for and against conditions. They note that "…conditions may be beneficial if they act as a screening mechanism to dissuade non-poor households from participating in the program because the opportunity costs of fulfilling program conditions would be higher for those households" (p. 510). The authors report that others argue that conditions may actually prevent the poorest and most marginalized from participating, and cite examples from Mexico's *Oportunidades* program where indigenous and extremely poor individuals in better-off communities were more likely to drop out than others. The authors also report that 'labeled' cash transfers (those that create the perception of conditionality without actually enforcing it) can be as effective as CCTs. They cite evidence from the *Bono de Desarrollo Humano* program in Ecuador in which schooling and child height outcomes were only impacted for those that believed there was a condition. The conditions for this particular program were "unclear and not well enforced" leading to differing perceptions of conditionality (p. 509). Additionally, they report evidence from an RCT in Morocco which showed that school attendance was higher for beneficiaries receiving a labeled cash transfer as opposed to a CCT. The authors conclude that future experimentation with conditions is desirable. The findings surrounding the impacts of conditions on cash transfer programs reported by Ma et al. (2017) are summarized in Table 14.

Table 14. Theory and impact of conditionality on cash transfer program outcomes and costs.

Aspect of Conditionality	Reported in literature
Philosophical reasons for conditionality	• Support conditionality: Conditionality increases public support through beneficiary accountability • Against conditionality: Conditionality contributes to insecurity of vulnerable populations and imposes a paternalistic attitude
How conditions produce intended program outcomes	• Participant perception of conditionality effects program outcomes • RCT evidence shows that both CCTs and UCTs produce positive impacts • Meta-analysis shows that CCTs and UCTs are equally effective at producing desired outcomes
How conditions contribute to adverse unintended consequences	• Lack of choice in service providers increases burden of compliance and leads to drop out • Conditions more likely to prevent participation from extremely poor and marginalized • Implications of conditionality for gender relations, possible increased exclusion for women

	• Evidence not from RCTs
Operating costs of conditionality	• Monitoring conditions can represent varying percentages of total program cost depending on the intensity of monitoring • No study found that directly compares benefits and costs of conditionality

Source: Adapted from Ma et al. (2017), Table 3d (p. 503)

Targeting

Cash transfers may have different impacts based on the characteristics of the intended beneficiaries, such as socioeconomic status. Seven reviews mention differing impacts for cash transfer programs for different groups of beneficiaries.

The most common beneficiary characteristic for which differences in outcomes are reported is the socioeconomic status of the beneficiaries. Four reviews report that the impact was greater among poorer or more marginalized beneficiaries than it was for those that were better off, while one review reports that the opposite is true. Tirivayi et al. (2016) mention several qualitative studies from Sub-Saharan Africa which report that "UCTs increased spending on inputs and agricultural productivity for households with relatively higher asset endowments and not for the asset poor" (p. 54).

The other four reviews find stronger impacts among more marginalized cash transfer recipients. In a meta-analysis of 18 studies examining the impact of cash transfers on child nutritional status in Latin America, Sub-Saharan Africa, and South Asia, Manley et al. (2012) found higher marginal effects for cash transfers in the most disadvantaged areas, and in countries with poorer health care systems (as measured by higher infant mortality rates and fewer hospital beds). The authors further go on to state that "These findings fit with the recent (September 2010) findings published by economic modellers at UNICEF (UNICEF 2010), who find that returns to investments in child health are highest in remote rural areas" (p. 34). In a systematic review, Owusu-Addo & Cross (2014) report that Mexico's PROGRESA increased the height and reduced the prevalence of stunting among beneficiaries, but the effects were largest for those from poorer communities whose mothers were literate. Taafe et al. (2016 and 2017) report that the RESPECT program in Tanzania lowered incidence of sexually transmitted infections (STIs), and that the effects were strongest among the lowest socioeconomic-status participants.

One review by Hunter et al. (2017) reports on the difference in impact based on whether a beneficiary lives in an urban or rural area. The authors reviewed a study from India for a one-time cash payment program and report that there was no difference in the impact of the use of skilled birth attendants between rural and urban areas. The authors do report that there was a larger impact however in states where the payment was higher and there was a lower baseline rate of births in healthcare facilities.

Size of Payment

Six reviews mention the impact of the size of the payment of cash transfers on outcomes, and all six report that in general higher-amount awards are associated with greater impacts. Bastagli et al. (2016) report on 15 studies that measured the impact of varying levels of transfer amounts. The authors report that in general "higher transfer levels are associated with larger impacts, including higher food expenditure, savings and investment in livestock and improvements in education and health and nutrition outcomes among beneficiaries of higher transfers compared to those receiving lower transfers" (p. 11). Counter to arguments that large transfers may discourage labor force participation, they also report that the only evidence showing that larger sized transfers are linked to reduced working hours among adults is in the context of family members who are taking care of dependents. Finally, the authors identify one negative impact of larger cash transfers, reporting

that larger transfers to women was associated with a higher likelihood of being physically abused by a male partner in Mexico's *Oportunidades* program.

Taafe et al. (2016) report on a study that shows a $20 transfer reduced STI incidence in Tanzania's RESPECT program, while a $10 transfer did not significantly lower STI incidence. The authors interpret this finding as indicating that "more than just a "nudge" is needed to have an impact on behavior through cash transfers" (p. 19). Owusu-Addo & Cross (2014) report that doubling the amount of cash transfers to mother's in Mexico's *Oportunidades* program was associated with higher HAZ, reduced stunting, and reduced prevalence of overweight children through increased spending on quality food. Molina-Millan et al. (2016) also report that larger amounts of cash transfers are associated with significantly less stunting in Mexico. Taafe et al. (2017) report that medium- and high-amount conditional vouchers significantly increased male circumcision, while no- and low-amount vouchers did not. Another review reports on a study that examined India's Janani Suraksha Yojana program, which found that the program had a higher impact on use of a skilled birth attendant in states that were high-focus (where births in healthcare facilities had a lower baseline rate and transfer payments were larger) (Hunter et al., 2017). Finally, Cecchini & Madariaga (2011) report on the impact of CCTs on national poverty levels. The authors state that in the countries "where the coverage and amount of the transfers are lower, there is no major impact on poverty" (p. 119). The authors use positive examples of Argentina, Brazil, Ecuador, Jamaica, and Mexico, while pointing out that the modest amounts of the transfers for Honduras' Family Allowance Program has not substantially reduced the poverty level in that country.

Other Cash Transfer Design Characteristics

Bastagli et al. (2016) is the only review to report impact based on the gender of recipient, timing and frequency of transfer, duration of benefits, and the addition of supplemental programs.

The authors report that for gender of the main recipient, there "does not appear to be strong support for differences arising from specifically targeting either men or women" based on their review of four studies (p. 11). The studies with no significant results include measurements of impact on poverty, and savings, investment, and production from the Give Directly program in Kenya, education from a program in Morocco, and health visits from a program in Burkina Faso. The one study they report on that shows a differential impact based on the gender of the recipient was from a pension program in South Africa. The study finds a reduction in young adult male labor force participation for those living with female beneficiaries, but an increase in young adult male labor force participation for those living with male beneficiaries. Bastagli et al. (2016) do not report a mechanism for this, but do note that "…potentially unanticipated intra-household effects of cash transfers may vary depending on the type of recipient and/or the structure of the household" (p. 255).

Bastagli et al. (2016) review three studies that report impacts based on transfer frequency, timing, and predictability. The authors conclude that the limited evidence on this subject shows "the timing and frequency of transfers can have an important bearing on outcomes and differing impacts on different outcome areas and specific indicators. For example,[…] a frequent and predictable transfer could be expected to favour consumption smoothing and spending on smaller assets, while lump-sum payments may be associated with investment in bulkier assets" (p. 258). The authors also point out that timing cash transfers around school (for school fees) or agricultural seasons (for inputs) may increase the impact of the transfer, but that more evidence on this is needed. Finally, on the role of transfer predictability, they report that delays in cash transfer payments may reduce its impact, but again that more research is necessary.

Bastagli et al. (2016) find a relatively large amount of evidence reporting on the impact of cash transfers based on the duration of exposure to the program (24 studies). Overall, the authors report beneficial impacts in health, nutrition, expenditure, and empowerment related to longer exposure to cash transfers. Of the nine studies they review that focus on the effects of exposure time on poverty outcomes, in general they find that

longer exposure is associated with higher expenditure (including food expenditure). For education, they examine eight studies and report that only one shows longer exposure lead to increased school attendance, and none show that longer exposure by itself lead to increased language or math test scores.

The authors also review five studies related to the impact of duration on child anthropometrics, and find two studies of Mexico's *Oportunidades* program that report increased HAZ scores for children in families that received higher cumulative transfers (both longer duration and increased transfer size). Another study, reporting on Ecuador's *Bono de Desarrollo Humano* (BDH) program finds reduced child growth among households that stopped receiving benefits after seven years compared to those that still received the transfers. Bastagli et al. (2016) report that two more studies measuring the impact of duration on child anthropometrics show no significant differences. Two more studies measuring the impact of duration on health care use find higher levels of clinic attendance in Peru and Mexico for both children and adults in households receiving transfers for longer time periods.

For employment, Bastagli et al. (2016) review four studies on adult labor and six on child labor. Two studies on the impact of duration of exposure related to adult labor find increased participation and intensity of work among women, and one finds a reduction in adult labor intensity but only for those who received fewer transfers (possibly related to transfer predictability). The final study finds no significant impacts of duration on adult labor. The six studies on duration related to child labor show mixed impacts. Three studies on *Oportunidades* report "significant reductions in the likelihood of working among boys and a marginal increase in migration of adolescent boys some five years later" while another study finds increased duration for Peru's *Juntos* was associated with increased work (Bastagli et al., 2016, p. 259). In Nicaragua's *Red de Proteccion Social* (RPS) one study finds a small, but significant, increase in the probability of working for girls in beneficiary areas after two years compared to no impact after the first year.

Finally, for impacts on savings, investment and production, Bastagli et al. (2016) review two studies and find "an extremely small but significant increase in productive loans associated with longer exposure to Mexico's Oportunidades", but overall limited evidence showing impact which the authors attributed to duration of exposure (Bastagli et al., 2016, p. 259). Finally, for impact of duration on empowerment, they review three studies, two of which report that longer duration of exposure reduced the likelihood of being married and increased contraceptive use while the third reports no significant impacts.

Bastagli et al. (2016) also review eight studies that report on the addition of supplemental programs to cash transfers and find that including training, grants, or products may help to increase some intended impacts of programs. For poverty outcomes, they review five studies and report that there is little evidence to support the idea that training or insurance increases expenditure, although one study reports that women who participated in Uganda's Women's Income Generating Support (WINGS) program with their husbands had lower expenditures as compared to women who participated in the program by themselves. The WINGS program did show increased savings, business start-up and survival for those who received additional supervision and training. They also report fewer women engaged in business but an increase in savings group participation. In Ghana, the value of harvest increased for those who received rainfall insurance along with payments as compared to those who only received the cash transfer.

Two studies that examine education find no impact on child development or school attendance when a cash transfer program was combined with a scholarship or additional lump-sum payments in Nicaragua's *Atención a Crisis* program. For employment, no impact was found on labor participation and intensity for Uganda's WINGS program as a result of supplemental programs, but there was a significant increase in non-agricultural self-employment for those receiving a productive business grant in Nicaragua. The business grant was also associated with an increase in non-agricultural work hours for children 8-15 years old in Nicaragua.

The one study reviewed by Bastagli et al (2016) that reports on nutrition finds that including nutritional supplements in Niger substantially reduced moderate acute malnutrition as compared to those that only received cash payments. Finally, for empowerment a study of the WINGS program in Uganda finds no significant impact on physical or emotional abuse associated with additional business training, but a significant increase in controlling behavior.

Comparing Cash Transfers to Other Interventions

We identified thirteen reviews that report comparisons between cash transfer programs and a variety of other types of programs/interventions (Table 15). The most common comparisons reported relate to impacts on poverty (4) and maternal and child health (4), while three reviews compare reproductive health outcomes, and two compare nutritional outcomes. Some reviews provide detailed comparisons but most offer limited comparative analysis.

Table 15. Number of reviews comparing outcomes for cash transfer programs to other types of programs, by outcome type

Outcome Category	Number of Reviews	Types of Programs/Interventions Compared to Cash Transfers
Poverty	4	• Microfinance programs (Pantelić, 2011) • Social insurance (Bastagli, 2011; Taaffe et al., 2017) • Increased access to credit/loans (Taaffe et al., 2017) • Remittances (Hagen-Zanker & Himmelstine, 2016) • "Other targeted public transfer programs" (including near-cash transfers, food transfers, universal food subsidies, nonfood subsidies, public works, and social funds) (Bastagli, 2011)
Maternal and Child Health	4	• Conditional microcredit and unconditional microcredit (Bassani et al., 2013) • User-fee removal interventions (Bassani et al., 2013) • Short-term payments to offset costs of accessing maternity services (Murray et al., 2014) • Vouchers (Bassani et al., 2013; Malqvist et al., 2013; Murray et al., 2014)
Reproductive Health	3	• Health counseling (Remme et al., 2013) • Communications (McQueston et al., 2013; Remme et al. 2013) • Peer education & outreach (Dellar et al. 2015; McQueston et al., 2013) • In-school interventions (Dellar et al., 2015, McQueston et al., 2013; Remme et al., 2013) • Community-level interventions (Dellar et al., 2015; Remme et al., 2013) • Condom promotion and distribution (Remme et al., 2013) • Post-exposure prophylaxis for rape survivors (Remme et al., 2013)
Nutrition	2	• In-kind food transfers (Gentilini, 2015; Pega et al., 2015) • Food vouchers (Gentilini, 2015)

Comparison of Impacts on Poverty Outcomes

Four reviews compare cash transfer programs to other types of interventions on poverty impacts (Pantelić, 2011; Bastagli, 2011; Hagen-Zanker & Himmelstine, 2016; Taaffe et al., 2017). All reviews find that cash transfer programs can be more effective than alternatives to improve outcome measures related to poverty, but only under specific circumstances.

For example, Pantelić (2011) notes that cash transfers can be especially effective relative to microfinance for those living in extreme poverty. Pantelić (2011) uses six operational and impact criteria related to poverty reduction to evaluate cash transfer programs against microfinance programs in the Latin American region. The author reports a division of microfinance and CCT effectiveness by income level, noting that "microfinance may be better suited for those living on US$2 per day or higher, while conditional cash transfers may be more beneficial for those living in extreme poverty" (p. 790). More broadly, the author finds that CCTs provide both poverty relief in the short-term and help encourage investments in human capital that will help to eliminate

poverty in the long-term. However, the study concludes that neither CCTs nor microfinance can eliminate poverty on its own, and that the programs may instead be used as complementary tools to combat poverty in both the short- and long-term.

Taaffe et al. (2017) compare the impact of cash transfers, insurance, and increased access to credit/loans on poverty reduction, and similarly conclude that cash transfers may be more effective than alternative programs targeting the poor. However, the main source for this finding appears to be a single study, Thompson's (2014) wide-ranging analysis of cash transfer program effectiveness for child protection in the context of emergencies in the regions of Latin America, Africa, and Asia. Citing this study, which does not report on poverty outcomes, Taaffe et al. (2017) state that, while insurance and increased access to credit/loans can often offer better value for money than cash transfers, "in many settings [cash transfers] work better than the alternatives" (p. 603), pointing to stronger impacts on education and health outcomes as two examples. The authors go on to note that the evidence for higher relative positive impacts from cash transfers is especially strong for the poorest households, again citing evidence from Thompson (2014).

Hagen-Zanker & Himmelstine (2016) compare cash transfer programs (both CCTs and UCTs) to remittances for a range of poverty indicators at the household level. While the evidence base is small and highly context specific, eight of the eleven reviewed studies show cash transfers and remittances can both have positive impacts on reducing poverty. However, the authors find that remittances have a larger magnitude of positive impact on poverty reduction in five out of the eleven studies. The only study in the review to find a greater magnitude of impact for cash transfers is a cross-country comparison in Europe (Gianetti et al., 2009). The authors attribute this difference to the fact that the countries of interest—Slovenia, Poland, the Czech Republic, and Hungary—are places where "social protection coverage is generally high and social protection has a greater effect on overall poverty reduction" (Hagen-Zanker & Himmelstine, 2016, p. 39). In addition, the authors include five other factors that could explain variation in impact—including targeting of the transfer, coverage, timing of transfer, use of transfer, and amount of transfer. Notably, Hagen-Zanker & Himmelstine clarify that in four of the eleven cases, the size of the remittances was significantly larger than cash transfers (and only in two studies were remittances at the same level or smaller than cash transfers). The authors caution that, as many of the included studies may have limited internal validity, their conclusions are tentative and additional quantitative and qualitative research is required.

Bastagli (2011) briefly compares CCTs against other targeted public transfer programs and social insurance in their broad overview of CCT program design in low- and middle-income countries in Latin America—with mixed findings. Bastagli first notes that CCTs have coverage and distributional patterns that favor those living in poverty. Specifically, when compared against other targeted public transfer programs (including near-cash transfers, food transfers, universal food subsidies, nonfood subsidies, public works, and social funds, as evaluated by Coady et al., 2004), cash transfer programs are "among the most progressive programmes" (p. 62). The author finds that the share of cash transfers in gross income increases with a decrease in income, and reports that this indicates cash transfers are reaching poorer populations to a greater degree than other programs. However, due to low transfer amounts of CCTs, Bastagli (2011) finds that the impact of CCTs in some countries is "lower than that achieved by targeted social insurance transfers with relatively higher unit subsidies" (p. 62).

Comparisons of Impacts on Maternal and Child Health Outcomes

Four reviews compare the efficacy of cash transfers to other programs to improve maternal and child health outcomes. No authors provide definitive evidence of greater efficacy of one type of program over another in improving health outcomes.

Bassani et al. (2013) compare the impacts of CCTs and UCTs with conditional microcredit (CM) and unconditional microcredit (UCM), conditional and unconditional vouchers, and user-fee removal interventions on five outcomes related to child health. In general, their review finds "no high or moderate quality evidence" to show any of the financial incentive programs positively impact child health (p. 9). Their review does note that the elimination or reduction in user-fees had a particularly pronounced impact on the use of health services compared to the other interventions, but caution that the quality of evidence for this effect is low and further research is required.

In a review of 18 studies from Asia, Latin America, and Sub-Saharan Africa, Malqvist et al. (2013) investigate targeted interventions to improve maternal and child health equity. The review concludes that financial incentive programs like CCTs and vouchers "might be a possible way to reduce inequities in maternal and child health care provision" (p.9), however, the authors do not make claims about the relative efficacy of vouchers compared to cash transfers. Malqvist et al. (2013) also note that country context and program design (such as the inclusion of cultural adaptations and the extent of population targeting) could be influential in determining the success of financial incentive programs.

Murray et al. (2014) evaluate methods to improve the utilization, experience, and outcomes of maternity care in 17 low- and middle-income countries. Across 83 studies, the five interventions considered include UCTs, CCTs, short-term payments to offset costs of accessing maternity services, vouchers for maternity services, and vouchers for merit goods—which they reference under the broad title of "demand-side financing" interventions. Apart from UCTs and vouchers for merit goods, for which the authors note a lack of sufficient evidence, Murray et al. (2014) report all other programs have the capacity to increase utilization of maternal healthcare, or uptake of related merit goods. However, they find insufficient evidence to report effects on maternal and infant mortality and morbidity outcomes for any intervention. While the authors present data related to specific types of interventions, they do not explicitly compare types as their goal is instead to examine the general outcome trends for demand-side financing interventions, and they therefore do not draw any conclusions about relative impacts by type of intervention.

Finally, a recent systematic review of the effects of cash transfers and vouchers on maternity health by Hunter et al. (2015) combines evidence from seven published reviews. One study included in the review finds that a short-term cash payment in a district hospital in India was equally effective in increasing the uptake of maternity care services when compared to free 24-hour care. The authors note that short-term cash payments differ from traditional cash transfer programs. While cash transfer programs are designed to be administered regularly with the aim of reducing overall poverty, short-term cash payments in a maternity health context are usually conditional on the recipient haven given birth at a health care facility, and are limited to a small number of disbursements (Hunter et al., 2015, p.13).

Comparisons of Impacts on Reproductive Health Outcomes

The evidence on the relative efficacy of cash transfers versus other programs in improving overall reproductive health outcomes is limited.

Remme et al. (2014) provide a comparison of a host of programs including cash transfers targeted toward women to improve HIV related outcomes and behaviors. While their report does not include findings about their relative efficacy, it does note that five interventions (couple counseling, gender empowerment community mobilization, female condom promotion, expanded female condom distribution, and post-exposure prophylaxis for rape survivors) are "cost-effective HIV interventions, with [cost-effectiveness ratios] well below the respective countries' GDP per capita." The authors designate school support for orphans and cash transfers for schoolgirls as possible cost-effective strategies in "generalized epidemics" (p. 14).

McQueston et al. (2013) review 19 studies from 15 different countries throughout Africa, Asia, Latin America, and the Caribbean related to the effectiveness of various interventions to reduce adolescent childbearing. Across the geographic regions, the authors find that compared to other interventions such as the provision of free school materials, mentoring, and education, the available evidence suggests that CCTs are the most effective at increasing the age of marriage among adolescent girls. The authors further identify a number of cash transfer studies that have varying degrees of positive impact on adolescent pregnancies and childbearing, but do not compare the relative efficacy of cash transfers to other interventions for this specific outcome.

A review by Dellar et al. (2015) focuses on HIV prevention needs of adolescent girls and young women in southern Africa. While research is limited, the authors report that two initial studies indicate CCTs can reduce HIV infection rates. While the authors do not directly compare the efficacy of CCTs to other types of programs within their review, they do additionally analyze several other programs' impacts on HIV prevention. They find that in-school interventions have been reviewed extensively and show positive impacts on knowledge development, but note that very few randomly controlled studies have analyzed definitive outcomes like HIV/AIDS incidence. They further report lack of evidence on definitive outcomes for interventions to increase youth-friendliness of health services and for community-level interventions.

Comparisons of Impacts on Nutrition Outcomes

Two reviews compare cash transfer programs to other programs for nutrition outcomes, with mixed conclusions. Pega et al. (2015) analyze the effectiveness of UCTs compared with in-kind food transfers within disaster contexts in low- and middle-income countries. Compared with food transfers, the authors report no evidence that UCTs have any influence on either child mortality or severe acute malnutrition. However, due to methodologic limitations, the authors report the "body of evidence to be of very low overall quality and thus very uncertain across all outcomes" (p. 2).

Gentilini (2015) compares cash transfers to in-kind food transfers and to vouchers across ten developing countries. When compared with control groups, cash transfer, in-kind food transfer, and vouchers can all bolster food consumption, income, dietary diversity, poverty, and malnutrition. The authors find that cash transfers are more effective than food transfers at increasing food consumption (5 out of 7 studies), but that food transfers outperform cash transfers at increasing calories consumed in a household (4 out of 6 studies). The authors caution that "overall effectiveness cannot be generalized and it depends not only on particular objectives, but also on the specific indicators used to measure those objectives" (p. 160).

Conclusion

Low- and middle-income countries have increasingly adopted cash transfer programs as central elements of their poverty reduction and social protection strategies. Bastagli et al. (2016) report that around 130 low- and mid-income countries have at least one UCT program, and 63 countries have at least one CCT program (up from 27 countries in 2008). Growth in program adoption is especially high in Africa, where 40 of 48 sub-Saharan African countries now have UCT programs (up from 20 countries in 2010).

Through a comprehensive review of literature, this report primarily considers the evidence of the long-term impacts of cash transfer programs in low- and lower middle-income countries. A review of 54 reviews that aggregate and summarize findings from multiple studies of cash transfer programs reveals largely positive evidence on long-term outcomes related to general health, reproductive health, nutrition, labor markets, poverty, and gender and intra-household dynamics, though findings vary by context and in many cases overall conclusions on the long-term impacts of cash transfers are mixed. In addition, evidence on long-term impacts

for many outcome measures is limited, and few studies explicitly aim to measure long-term impacts distinctly from immediate or short-term impacts of cash transfers.

Although the programs reported on in the reviews include 37 cash transfer programs from Sub-Saharan Africa, 36 from Latin America, 18 from South Asia, ten from East Asia and the Pacific, three from Europe and Central Asia, five from North America, and four from the Middle East and North Africa, much of the evidence comes from multiple studies evaluating the most prominent cash transfer programs, especially Latin American programs. Twenty-two reviews include findings from studies of the PROGRESA/*Oportunidades* program in Mexico, 15 reviews report findings for the *Programa de Asignación* Familiar (PRAF) in Honduras, 15 report on Nicaragua's *Red de Protección Socia*l (RPS), 13 report on the *Bolsa Familia* program in Brazil (and three others report on the previous iteration of that program), and 13 report on Colombia's *Familias en Acción*. Findings from programs the rest of the world are not as strongly represented in the body of evidence: nine reviews report findings from studies of the *Zomba* Cash Transfer Program in Malawi, and eight reviews report on South Africa's Child Support Grant and Foster Grant programs, on Kenya's Orphans and Vulnerable Children Cash Transfer program, and on India's *Janani Suraksha Yojana* program. More evidence on the long-term impacts of cash transfer programs and on how these impacts might differ by context and program design will emerge as more of the existing global cash transfer programs mature and are evaluated.

The available evidence indicates that cash transfer programs can be cost-effective, depending on the context and program design. Evidence of the cost-effectiveness, scalability, and sustainability of these programs is limited, but a few studies present initial findings on factors that appear to support or hinder cost-effectiveness, scalability, and sustainability. Several reviews suggest that design characteristics of cash transfer programs, including conditionality, targeting, and payment size, timing, frequency, and duration may all affect the impacts of the programs. Evidence on whether CCTs or UCTs are more effective at improving particular outcomes is mixed and may depend on the outcome measure of interest, but the reviews indicate that programs generally have greater impacts when targeting poorer or more marginalized populations and when providing transfers of larger size. Few reviews compare outcomes between cash transfer programs and other types of programs or interventions, though there is some limited evidence indicates that cash transfer programs might be more effective than alternatives to improve outcome measures related to poverty under specific circumstances.

References

Ambia, J., & Mandala, J. (2016). A systematic review of interventions to improve prevention of mother-to-child HIV transmission service delivery and promote retention. *Journal of the International AIDS Society*, 19(1), 20309.

Bassani, D. G., Arora, P., Wazny, K., Gaffey, M. F., Lenters, L., & Bhutta, Z. A. (2013). Financial incentives and coverage of child health interventions: a systematic review and meta-analysis. *BMC Public Health*, *13*(3), S30.

Bastagli, F. (2011). Conditional cash transfers as a tool of social policy. *Economic and Political Weekly*, 61-66.

Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). *Cash transfers: what does the evidence say. A rigorous review of programme impact and the role of design and implementation features*. London: ODI. Retrieved from https://www.odi.org/sites/odi.org.uk/files/resource-documents/10749.pdf

Blattman, C. & Ralston, L. (2015). Generating employment in poor and fragile states: Evidence from labor market and entrepreneurship programs. *J-PAL*. Retrieved from https://www.povertyactionlab.org/sites/default/files/publications/Blattman_Employment%20Lit%20Review.pdf

Cecchini, S., & Madariaga, A. (2011). *Conditional cash transfer programmes: the recent experience in Latin America and the Caribbean*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1962666

Cluver, L. D., Hodes, R. J., Sherr, L., Orkin, F. M., Meinck, F., Ken, P. L. A., ... & Vicari, M. (2015). Social protection: potential for improving HIV outcomes among adolescents. *Journal of the International AIDS Society*, 18(7Suppl 6).

Colombino, U. (2015). *Is unconditional basic income a viable alternative to other social welfare measures?*. IZA World of Labor.

Daidone, S., Pellerano, L., Handa, S., & Davis, B. (2015). Is Graduation from Social Safety Nets Possible? Evidence from Sub-Saharan Africa. *IDS Bulletin*, 46(2), 93-102.

Dechausay, N., Miller, C., & Quiroz-Becerra, V. (2014). *Implementing a conditional cash transfer program in two American cities: Early lessons from Family Rewards 2.0*. New York: MDRC, October 2014

de Groot, R., Palermo, T., Handa, S., Ragno, L. P., & Peterman, A. (2017). Cash Transfers and Child Nutrition: Pathways and Impacts. *Development Policy Review*, *35*(5), 621-643.

Dellar, R. C., Dlamini, S., & Karim, Q. A. (2015). Adolescent girls and young women: key populations for HIV epidemic control. *Journal of the International AIDS Society*, *18*(2Suppl 1).

DFID (2011). *DFID cash transfers literature review*. London, UK: Department of International Development. Retrieved from http://r4d.dfid.gov.uk/PDF/Articles/cash-transfers-literature-review.pdf

Ellsberg, M., Arango, D. J., Morton, M., Gennari, F., Kiplesund, S., Contreras, M., & Watts, C. (2015). Prevention of violence against women and girls: what does the evidence say? *The Lancet*, *385*(9977), 1555-1566.

Fernald, L. C., Gertler, P. J., & Hidrobo, M. (2012). Conditional cash transfer programs: effects on growth, health, and development in young children. In King, R., & Maholmes, V., *The Oxford Handbook of Poverty and Child Development*. Oxford University Press.

Fiszbein, A., & Schady, N. R. (2009). *Conditional cash transfers: reducing present and future poverty*. World Bank Publications. Retrieved from http://siteresources.worldbank.org/INTCCT/Resources/5757608-1234228266004/PRR-CCT_web_noembargo.pdf.

Forget, E. L., Peden, A. D., & Strobel, S. B. (2013). Cash Transfers, Basic Income and Community Building. *Social Inclusion*, *1*(2), 84-91.

Gentilini, U. (2015). Revisiting the "Cash versus Food" Debate: New Evidence for an Old Puzzle? *The World Bank Research Observer*, *31*(1), 135-167.

Gibbs, A., Jacobson, J., & Kerr Wilson, A. (2017). A global comprehensive review of economic interventions to prevent intimate partner violence and HIV risk behaviours. *Global Health Action*, *10*(sup2), 1290427.

Glassman, A., Duran, D., Fleisher, L., Singer, D., Sturke, R., Angeles, G., ... & Saldana, K. (2013). Impact of conditional cash transfers on maternal and newborn health. *Journal of Health, Population, and Nutrition*, 31(4 Suppl 2), S48.

Hagen-Zanker, J., & Himmelstine, C. L. (2016). How effective are cash transfers in reducing poverty, compared to remittances? *Social Policy and Society*, *15*(1), 29-42.

Heise, L., Lutz, B., Ranganathan, M., & Watts, C. (2013). Cash transfers for HIV prevention: considering their potential. *Journal of the International AIDS Society*, *16*(1).
Hindin, M. J., Kalamar, A. M., Thompson, T. A., & Upadhyay, U. D. (2016). Interventions to prevent unintended and repeat pregnancy among young people in low-and middle-income countries: a systematic review of the published and gray literature. *Journal of Adolescent Health*, *59*(3), S8-S15.
Hunter, B. M., Harrison, S., Portela, A., & Bick, D. (2017). The effects of cash transfers and vouchers on the use and quality of maternity care services: A systematic review. *PloS One*, 12(3), e0173068.
Jehan, K., Sidney, K., Smith, H., & de Costa, A. (2012). Improving access to maternity services: an overview of cash transfer and voucher schemes in South Asia. *Reproductive Health Matters*, *20*(39), 142-154.
Jones, H. (2016). More Education, Better Jobs? A Critical Review of CCTs and Brazil's Bolsa Família Programme for Long-Term Poverty Reduction. *Social Policy and Society*, *15*(3), 465-478.
Kabeer, N., & Waddington, H. (2015). Economic impacts of conditional cash transfer programmes: a systematic review and meta-analysis. *Journal of Development Effectiveness*, *7*(3), 290-303.
Khan, M. E., Hazra, A., Kant, A., & Ali, M. (2016). Conditional and unconditional cash transfers to improve use of contraception in low and middle income countries: A systematic review. *Studies in Family Planning*, *47*(4), 371-383.
Lund, C., De Silva, M., Plagerson, S., Cooper, S., Chisholm, D., Das, J., ... & Patel, V. (2011). Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. *The Lancet*, *378*(9801), 1502-1514.
Ma, Z., Bauchet, J., Steele, D., Godoy, R., Radel, C., & Zanotti, L. (2017). Comparison of direct transfers for human capital development and environmental conservation. *World Development*, *99*, 498-517.
Målqvist, M., Yuan, B., Trygg, N., Selling, K., & Thomsen, S. (2013). Targeted interventions for improved equity in maternal and child health in low-and middle-income settings: a systematic review and meta-analysis. *PLoS One*, *8*(6), e66453.
Manley, J., Gitter, S., & Slavchevska, V. (2012). *How effective are cash transfer programmes at improving nutritional status? A Rapid Evidence Assessment of Programmes' Effects on Anthropometric Outcomes*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
McQueston, K., Silverman, R., & Glassman, A. (2013). The efficacy of interventions to reduce adolescent childbearing in low-and middle-income countries: a systematic review. *Studies in Family Planning*, *44*(4), 369-388.
Molina-Millan, T., Barham, T., Macours, K., Maluccio, J. A., & Stampini, M. (2016). *Long-Term Impacts of Conditional Cash Transfers in Latin America: Review of the Evidence*. Inter-American Development Bank.
Murray, S. F., Hunter, B. M., Bisht, R., Ensor, T., & Bick, D. (2014). Effects of demand-side financing on utilisation, experiences and outcomes of maternity care in low-and middle-income countries: a systematic review. *BMC Pregnancy and Childbirth*, *14*(1), 30.
Narayanan, S. (2011). A case for reframing the cash transfer debate in India. *Economic and Political Weekly*, 46(21), 41-48.
Neri, M. (2017). A next generation of conditional cash transfer programs. *Revista de Administração Pública*, *51*(2), 168-181.
Nores, M., & Barnett, W. S. (2010). Benefits of early childhood interventions across the world:(Under) Investing in the very young. *Economics of Education Review*, *29*(2), 271-282.
Owusu-Addo, E., & Cross, R. (2014). The impact of conditional cash transfers on child health in low-and middle-income countries: a systematic review. *International Journal of Public Health*, *59*(4), 609-618.
Pantelić, A. (2011). A comparative analysis of microfinance and conditional cash transfers in Latin America. *Development in Practice*, *21*(6), 790-805.
Pega, F., Walter, S., Liu, S.Y., Pabayo, R., Lhachimi, S., & Saith, R. (2014). Unconditional cash transfers for reducing poverty and vulnerabilities: Effect on use of health services and health outcomes in low- and middle-income countries. *Cochrane Database of Systematic Reviews*, 2014 (6).
Pega, F., Walter, S., Liu, S. Y., & Lhachimi, S. K. (2015). Unconditional cash transfers for assistance in humanitarian disasters: effect on use of health services and health outcomes in low-and middle-income countries. *Cochrane Database of Systematic Reviews*, 2015 (9).
Peterman, A., Neijhoft, A., Cook, S., & Palermo, T. M. (2017). Understanding the linkages between social safety nets and childhood violence: a review of the evidence from low-and middle-income countries. *Health Policy and Planning*, 32(7), 1049-1071.

Pettifor, A., MacPhail, C., Nguyen, N., & Rosenberg, M. (2012). Can money prevent the spread of HIV? A review of cash payments for HIV prevention. *AIDS and Behavior*, *16*(7), 1729-1738.
Price, D. J., & Song, J. (2016). *The Long-Term Effects of Cash Assistance*. Working Paper, Stanford University.
Ranganathan, M., & Lagarde, M. (2012). Promoting healthy behaviours and improving health outcomes in low and middle income countries: a review of the impact of conditional cash transfer programmes. *Preventive Medicine*, 55(sup1), S95-S105.
Remme, M., Siapka, M., Vassall, A., Heise, L., Jacobi, J., Ahumada, C., ... Watts, C. (2014). The cost and cost-effectiveness of gender-responsive interventions for HIV: a systematic review. *Journal of the International AIDS Society*, *17*(1), 19228. http://doi.org/10.7448/IAS.17.1.19228
Richter, L. (2010). Social cash transfers to support children and families affected by HIV/AIDS. *Vulnerable Children and Youth Studies*, *5*(sup1), 81-91.
Ruckert, A., Huynh, C., & Labonté, R. (2017). Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1-5.
Ruel, M. T., Alderman, H., & Maternal and Child Nutrition Study Group. (2013). Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? *The Lancet*, *382*(9891), 536-551.
Samuels, F., & Stavropoulou, M. (2016). 'Being able to breathe again': The effects of cash transfer programmes on psychosocial wellbeing. *The Journal of Development Studies*, *52*(8), 1099-1114.
Sánchez-Ancochea, D., & Mattei, L. (2011). Bolsa Família, poverty and inequality: Political and economic effects in the short and long run. *Global Social Policy*, *11*(2-3), 299-318.
Schubert, B., & Slater, R. (2006). Social cash transfers in low-Income African countries: Conditional or unconditional? *Development Policy Review*, *24*(5), 571-578.
Segura-Pérez, S., Grajeda, R., & Pérez-Escamilla, R. (2016). Conditional cash transfer programs and the health and nutrition of Latin American children. *Revista Panamericana de Salud Pública*, *40*(2), 124-137.
Soares, F. V., Ribas, R. P., & Osório, R. G. (2010). Evaluating the impact of Brazil's Bolsa Familia: Cash transfer programs in comparative perspective. *Latin American Research Review*, *45*(2), 173-190.
Taaffe, J. E., Longosz, A. F., & Wilson, D. (2017). The impact of cash transfers on livelihoods, education, health and HIV–what's the evidence? *Development Policy Review*, 35, 601-619.
Taaffe, J., Cheikh, N., & Wilson, D. (2016). The use of cash transfers for HIV prevention—are we there yet? *African Journal of AIDS Research*, *15*(1), 17-25.
Tirivayi, N., Knowles, M., & Davis, B. (2016). The interaction between social protection and agriculture: A review of evidence. *Global Food Security*, *10*, 52-62.
Vincent, K., & Cull, T. (2011). Cell phones, electronic delivery systems and social cash transfers: Recent evidence and experiences from Africa. *International Social Security Review*, *64*(1), 37-51.
WelfareInfo (2017). The History of Welfare. Retrieved from http://www.welfareinfo.org/history/
Wiysonge, C. S., Ngcobo, N. J., Jeena, P. M., Madhi, S. A., Schoub, B. D., Hawkridge, A., ... & Hussey, G. D. (2012). Advances in childhood immunisation in South Africa: where to now? Programme managers' views and evidence from systematic reviews. *BMC Public Health*, *12*(1), 578.
Woodbury, S. A. (2017). Universal Basic Income. In *The American Middle Class: An Economic Encyclopedia of Progress and Poverty* [2 volumes] (Robert S. Rycroft, Ed.), p. 314.
Zürcher, C. (2017). What Do We (Not) Know About Development Aid and Violence? A Systematic Review. *World Development*, 98, 506-522.

Appendix A. Review Coding Framework

- **Document Information**
  - Title
  - Abstract
  - Database
  - Author(s) (Last name, Initial)
  - Published (Y/N)?
  - Publication Journal
  - Full APA Citation
  - Link
  - Year
- **Geography**
  - Country
    - If systematic review and multiple, number of countries
    - List countries
  - Region
    - Sub-Saharan Africa? (Y/N)
    - South Asia? (Y/N)
    - Southeast and East Asia? (Y/N)
    - Latin America? (Y/N)
    - North America? (Y/N)
    - Middle East/North Africa (MENA)? (Y/N)
- **Review Information and Inclusion Criteria**
  - Brief summary of study's key takeaways
  - Study findings
  - Describe factors affecting validity (external and internal) of findings
  - Systematic review? (Y/N)
  - Included studies start (year)
  - Included studies end (year)
  - Databases searched
  - Last search date
  - Describe additional inclusion criteria (e.g. specific geographic range, study methodology, program type [e.g. UCT CCT], etc.)
  - Describe additional sampling methods (e.g. snowball sampling, expert recommendations)
  - Number of studies identified by searches
  - Number of studies included and reviewed about CTs
  - Reports on quality of evidence? (Y/N)
    - Describe
- **Outcomes**
  - Health? (Y/N)
    - General findings of impact of CTs on health (positive, negative, mixed, no evidence)
    - Outcome 1
    - Impact (positive, negative, mixed, not significant)
    - Outcome 2
    - Impact (positive, negative, mixed, not significant)
    - Outcome 3
    - Impact (positive, negative, mixed, not significant)
    - Additional outcomes
    - Impact (positive, negative, mixed, not significant)
    - Describe findings for outcomes (specify countries if possible)
    - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
    - List outcomes which are **sustained** = impacts measured after the end of the CT (e.g. continued breastfeeding of new children)
    - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)

        - If second order outcome, describe pathway
- Nutrition? (Y/N)
    - General findings of impact of CTs on nutrition (positive, negative, mixed, no evidence)
    - Outcome 1
    - Impact (positive, negative, mixed, not significant)
    - Outcome 2
    - Impact (positive, negative mixed, not significant)
    - Outcome 3
    - Impact (positive, negative mixed, not significant)
    - Additional outcomes
    - Impact (positive, negative mixed, not significant)
    - Describe findings for outcomes (specify countries if possible)
    - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
    - List outcomes which are **sustained** = impacts continue after end of CT (e.g. continued breastfeeding of new children)
    - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)
        - If second order outcome, describe pathway
- Financial Inclusion? (Y/N)
    - General findings of impact of CTs on financial inclusion (positive, negative, mixed, no evidence)
    - Outcome 1
    - Impact (positive, negative mixed, not significant)
    - Outcome 2
    - Impact (positive, negative mixed, not significant)
    - Outcome 3
    - Impact (positive, negative mixed, not significant)
    - Additional outcomes
    - Impact (positive, negative mixed, not significant)
    - Describe findings for outcomes (specify countries if possible)
    - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
    - List outcomes which are **sustained** = impacts continue after end of CT (e.g. continued breastfeeding of new children)
    - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)
        - If second order outcome, describe pathway
- Reproductive Health? (Y/N)
    - General findings of impact of CTs on reproductive health (positive, negative, mixed, no evidence)
    - Outcome 1
    - Impact (positive, negative mixed, not significant)
    - Outcome 2
    - Impact (positive, negative mixed, not significant)
    - Outcome 3
    - Impact (positive, negative mixed, not significant)
    - Additional outcomes
    - Impact (positive, negative mixed, not significant)
    - Describe findings for outcomes (specify countries if possible)
    - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
    - List outcomes which are **sustained** = impacts continue after end of CT (e.g. continued breastfeeding of new children)
    - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)
        - If second order outcome, describe pathway

- Labor Market? (Y/N)
  - General findings of impact of CTs on labor market (positive, negative, mixed, no evidence)
  - Outcome 1
  - Impact (positive, negative mixed, not significant)
  - Outcome 2
  - Impact (positive, negative mixed, not significant)
  - Outcome 3
  - Impact (positive, negative mixed, not significant)
  - Additional outcomes
  - Impact (positive, negative mixed, not significant)
  - Describe findings for outcomes (specify countries if possible)
  - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
  - List outcomes which are **sustained** = impacts continue after end of CT (e.g. continued breastfeeding of new children)
  - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)
    - If second order outcome, describe pathway
- Poverty? (Y/N)
  - General findings of impact of CTs on poverty (positive, negative, mixed, no evidence)
  - Outcome 1
  - Impact (positive, negative mixed, not significant)
  - Outcome 2
  - Impact (positive, negative mixed, not significant)
  - Outcome 3
  - Impact (positive, negative mixed, not significant)
  - Additional outcomes
  - Impact (positive, negative mixed, not significant)
  - Describe findings for outcomes (specify countries if possible)
  - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
  - List outcomes which are **sustained =** impacts continue after end of CT (e.g. continued breastfeeding of new children)
  - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)
    - If second order outcome, describe pathway
- Gender and Intra-household decision making? (Y/N)
  - General findings of impact of CTs on gender and intra-household decision making (positive, negative, mixed, no evidence)
  - Outcome 1
  - Impact (positive, negative mixed, not significant)
  - Outcome 2
  - Impact (positive, negative mixed, not significant)
  - Outcome 3
  - Impact (positive, negative mixed, not significant)
  - Additional outcomes
  - Impact (positive, negative mixed, not significant)
  - Describe findings for outcomes (specify countries if possible)
  - List outcomes which are **definitive** = impact in perpetuity (e.g. mortality, stunting, contracts HIV/AIDS)
  - List outcomes which are **sustained =** impacts continue after end of CT (e.g. continued breastfeeding of new children)
  - List **second-order** outcomes = impacts resulting from direct CT outcomes (e.g. higher wages resulting from increased school enrollment)
    - If second order outcome, describe pathway

- **Implementation of CT Programs**

- Compares different types of CT programs? (Y/N)
  - Describe findings
- Reports cost effectiveness of a CT program? (Y/N)
  - Describe findings
- Compares a CT program to another intervention? (Y/N)
  - Describe findings
- Review compares delivery method of CTs? (Y/N)
- Mention of digital delivery of CTs? (Y/N)
  - Describe findings (special attention to financial inclusion)
- Authors discuss scalability of CT interventions? (Y/N)
  - Describe findings
- Authors discuss sustainability of CT intervention? (Y/N)
  - Describe findings

The full coding framework is included in an accompanying Microsoft Excel file.

Appendix B. Summary of Cash Transfer Program Characteristics

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Latin America & Caribbean										
Argentina	Programa Familias por la Inclusion Social	CCT		~$11-20 USD (2006) per month per person	2002-?	Families at social risk	539,386 families (2007); 8.3% of total population (2009) and 46.4% of poor population	National	Cecchini & Madariaga, 2011; Pantelić, 2011	
Bolivia	Bonosol/Bolivida pension	Social pension (UCT)			1997-present		800,000 individuals (2010)	*National*	Bastagli et al., 2016	International Labour Organization
Bolivia	Bono Juana Azurduy	CCT	Pre- and post-natal visits, regular child health checkups. Immunizations, educational sessions, and give birth at professionally assisted center.	$250 USD over 33 months		Pregnant/breastfeeding women w/o health insurance	3.5% of total population (2009) and 6.4% of poor population (2009)	National	Murray et al., 2014; Cecchini & Madariaga, 2011	
Bolivia	Juancito Pinto	CCT	School attendance (80%)	~$2 (2007) per month per person	2006-?	Children under 18, attending up to 8th grade	1.2 million families (2009); 17.5% of total population (2009) and 32.4% of poor population (2009)	National	Pantelić, 2011; Cecchini & Madariaga, 2011	
Brazil	Bolsa Alimentação	CCT	Health conditions: health check-ups and vaccinations	$6.25 USD (2002) per beneficiary/ per month (pregnant women and children under 7) up to maximum $18.25 USD	2001–2003	Poorest households, chosen by infant malnutrition prevalence	2 million households (2003)	National	de Groot et al., 2017; Bastagli et al., 2016; Owusu-Addo & Cross, 2014; Fernald et al., 2012; Manley, Gitter & Slavchevska, 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Brazil	Bolsa Escola	CCT	School attendance (85%)		2001-2003	Families living in extreme poverty	5 million households (2003)	*National*	Neri, 2017; Bastagli et al., 2016; Kabeer & Waddington, 2015; Cecchini & Madariaga, 2011	World Bank Brazil - An Assessment of the Bolsa Escola Programs
Brazil	Bolsa Família (formerly Bolsa Alimentação and Bolsa Escola)	CCT/UCT	School attendance and regular health visits, , no condition for extremely poor household income	$18 USD per child, $35 USD for extremely poor households, range of $18-$175 USD per HH	2003-present	Families living in poverty and extreme poverty	13.8 million households (2013)	National	de Groot et al., 2017; Hunter et al., 2017; Neri, 2017; Peterman et al., 2017; Bastagli et al., 2016; Segura-Pérez, Grajeda & Pérez-Escamilla, 2016; Jones, 2016; Kabeer & Waddington, 2015; Manley, Gitter & Slavchevska, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011; Sánchez-Ancochea & Mattei, 2011; Soares et al., 2011	
Brazil	Benefício de Prestação Continuada (BPC)	Social pension			1996-present		3.7 million individuals (2014)	*National*	Neri, 2017; Bastagli et al., 2016	International Poverty Centre
Chile	Chile Solidario	CCT	Households need to meet minimum levels of well-being (education, health, housing, employment, income)	$22.73 USD per month at beginning of 2-year program, decreases to $7.57 USD by the end	2002-present	Households in extreme poverty	256,000 families (2009); 6.8% of total population and 51.7% of poor population (2009)	National	Kabeer & Waddington, 2015; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011; Soares et al., 2010	
Colombia	Familias en Acción	CCT	Health conditions: children must attend regular health check-ups	$50 USD on average (approx. 30% of household consumption)	2000-present	Poorest households from selected municipalities, targeted at women	2.5 million households (2016)	National	de Groot et al., 2017; Peterman et al., 2017; Taaffe et al., 2017; Bastagli et al., 2016; Segura-Pérez, Grajeda & Pérez-Escamilla, 2016; Molina-Millan et al., 2016; Kabeer & Waddington, 2015; Owusu-Addo & Cross, 2014; Fernald et al.,	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
									2012; Manley, Gitter & Slavchevska, 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Colombia	Subsidios Condicionados a la Asistencia Escolar (SCAE)	CCT	School attendance; live more than 2km from school		2005-present	Poor families	46,000 children (2010)	Regional (Bogota)	Bastagli et al., 2016; Cecchini & Madariaga, 2011	
Dominican Republic	Solidarity Programme	CCT	School attendance (80%) and passing grade; health checkups for children under 5 and pre- and post-natal care; obtain ID for family members	~$7-14 USD (2008) per person per month	2005-2012	Families in extreme and moderate poverty	755,683 households (2011)	National	Bastagli et al., 2016; Cecchini & Madariaga, 2011; Pantelić, 2011	
Ecuador	Bono de Desarrollo Humano (BDH)	UCT/CCT	School attendance and regular health check-ups (originally a CCT, then changed to UCT)	$15 USD per household (2005), or about 6-10% of baseline HH expenditure	2003-present	Families living in poverty	443,803 households (2015)	National	de Groot et al., 2017; Gibbs et al., 2017; Peterman et al., 2017; Bastagli et al., 2016; Fernald et al., 2012; Manley, Gitter & Slavchevska, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Ecuador	Bono Solidario	CCT/UCT	Began as UCT, but eventually conditioned on health- and education-seeking behavior	~150,000 sucres (~$22.50 USD) per month (1999)--about 11% of HH expenditure	1998-2003	Mothers with non-adult children; handicapped; elderly.	1.2 million households	National	de Groot et al., 2017; Manley, Gitter & Slavchevska, 2012	
Ecuador	WFP Colombian refugee RCT (WFP cash transfer)	CCT		$40 USD monthly	April-Sept 2011		3,642 individuals (2011)	Pilot	Bastagli et al., 2016; Ellsberg et al., 2015; Gentilini, 2015	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
El Salvador	Comunidades Solidarias Rurales (CSR)	CCT	School attendance (90%) and regular health visits, immunizations	$30 USD per month	2005-present	Families in extreme poverty in select poor 'municipalities	80,222 households (2013)	*National*	Hunter et al., 2017; Bastagli et al., 2016; Hunter et al., 2016; Murray et al., 2014; Glassman et al., 2013; Cecchini & Madariaga, 2011; Pantelić, 2011	Food and Nutrition Security Platform (FNS)
Guatemala	Mi Familia Progresa	CCT	Ante-natal healthcare visits; 90% school attendance	150 quetzales ($15 USD) per month	2008-present	Pregnant women	250,000 households (2013)	National	Hunter et al., 2017; Glassman et al., 2013; Cecchini & Madariaga, 2011; Pantelić, 2011	
Honduras	Programa de Asignación Familiar (PRAF)	CCT	Children must attend primary school (85%) and regular health visits	$17 USD on average (approx. 10% of household consumption	1990-present	Children under 17 years old, pregnant and lactating women, elderly over 65 years, destitute adults under 65 years.	660,790 households (2010 expected); 8.7% of total population and 12.3% of poor population (2009)	National	de Groot et al., 2017; Hunter et al., 2017; Taaffe et al., 2017; Bastagli et al., 2016; Khan et al., 2016; Kabeer & Waddington, 2015; Murray et al., 2014; Owusu-Addo & Cross, 2014; Glassman et al., 2013; McQueston, Silverman & Glassman, 2013; Fernald et al., 2012; Manley, Gitter & Slavchevska, 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Honduras	Bono 10,000	CCT	Attendance in public education system		2010-present	Families living in extreme poverty	600,000 households (2012 expected)	*National*	Bastagli et al., 2016; Cecchini & Madariaga, 2011	The World Bank
Jamaica	Programme of Advancement Through Health and Education (PATH)	CCT	Attend school and health visits	$9 USD per individual per month	2001-present	Children, pregnant/lactating women, elderly, destitute adults	307,000 individuals (2009); 11.3% of total population (2009)	National	de Groot et al., 2017; Bastagli et al., 2016; Fernald et al., 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011	
Mexico	PROGRESA/Oportunidades	CCT	Attend primary school and health	$20 USD on average per month	1997-present	Poor households	6.1 million households (2015)	National	de Groot et al., 2017; Gibbs et al., 2017; Hunter et al., 2017;	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
			visits, immunization for children <2	(approx. 25% of household consumption)		in poor communities			Taaffe et al., 2017; Bastagli et al., 2016; Khan et al., 2016; Samuels & Stavropoulou, 2016; Segura-Pérez, Grajeda & Pérez-Escamilla, 2016; Molina-Millan et al., 2016; Gentilini, 2015; Kabeer & Waddington, 2015; Murray et al., 2014; Owusu-Addo & Cross, 2014; Glassman et al., 2013; Ma°lqvist et al, 2013; McQueston, Silverman & Glassman, 2013; Fernald et al., 2012; Manley, Gitter & Slavchevska, 2012; Pettifor et al., 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Mexico	PROCAMPO	CCT			1994-present		2.6 million producers (2014)	*National*	Bastagli et al., 2016	The World Bank
Mexico	Programa Apoyo Alimentario (PAL)	CCT		$13 USD (2004-2005) monthly	2003-2016	Poor and remote communities in rural Mexico	1.5 million households (2015)	*National*	Bastagli et al., 2016; Gentilini, 2015; Ruel et al., 2013; Narayanan, 2011	e-Gender Impact: The World Bank's Gender Impact Evaluation Database
Mexico	Programa de Atención a Adultos Mayores en Zonas Rurales	Social pension			2007-present		2.1 million beneficiaries (2014)	*National*	Bastagli et al., 2016	Inter-American Development Bank
Nicaragua	Red de Protección Social (RPS)	CCT	Attend school and health check-ups	$25 USD bi-monthly on average (approx. 20 % of household	RPS1 1999-2001 RPS2 2002-2006	Randomly selected municipalities	10,000 households (2002)	Pilot	de Groot et al., 2017; Taaffe et al., 2017; Bastagli et al., 2016; Hagen-Zanker & Himmelstine, 2016; Khan et al., 2016;	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
				consumption)					Molina-Millan et al., 2016; Kabeer & Waddington, 2015; Owusu-Addo & Cross, 2014; Fernald et al., 2012; Glassman et al., 2013; McQueston, Silverman & Glassman, 2013; Manley, Gitter & Slavchevska, 2012; Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Nicaragua	Atención a Crisis	CCT	Attend school (85% attendance rate) for children 7-15 years old; children 0-5 regular health visits.	$145 USD per year food grant, $90 USD (+$25 per child) per year health/education grant	2005-2006	Families living in extreme poverty	3,000 households (2006)	Pilot	de Groot et al., 2017; Peterman et al., 2017; Bastagli et al., 2016; Owusu-Addo & Cross, 2014; Fernald et al., 2012; Manley, Gitter & Slavchevska, 2012; Cecchini & Madariaga, 2011	
Panama	Red de Oportunidades	CCT	Attend school and health check-ups	$50 USD per month	2006-present	Extremely poor	50,889 families (2007); 10.9% of total population and 39.5% of poor population (2009)	National	Ranganathan & Lagarde, 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Paraguay	Tekoporã	CCT	School attendance for children, adult literacy programs; healthcare checkups	~$3-9 USD (2008) per person per month	2005-present	Households in extreme poverty	131,159 households (2015)	National	Bastagli et al., 2016; Cecchini & Madariaga, 2011; Pantelić, 2011	
Peru	Juntos	CCT	Attend school and health check-ups	$30 USD per month (2007)	2005-present	Families living in extreme poverty, risk and exclusion	769,158 households (2015)	National	Bastagli et al., 2016; Samuels & Stavropoulou, 2016; Murray et al., 2014; Fernald et al., 2012; Cecchini & Madariaga, 2011; Pantelić, 2011	
Trinidad & Tobago	Targeted Conditional Cash Transfer	CCT	Agreements negotiated with families for			Families living in poverty	2.4% of total population and 14.6% of poor	National	Cecchini & Madariaga, 2011	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
	Programme (TCCTP)		fulfilment of 49 minimum standards from education, health, ID, etc.				population (2009)			
Uruguay	Plan de Equidad	CCT	School attendance	~$5-13 USD (2008) per month	2007-present	Children, 6-14		*National*	Kabeer & Waddington, 2015; Cecchini & Madariaga, 2011	The World Bank – Income Transfer Policies in Uruguay
Uruguay	Plan de Atención Nacional a la Emergencia Social (PANES)	CCT	Ante-natal healthcare visits	1360 pesos ($55 USD) per month	2005-2007	Families living in extreme poverty	300,000 families (2005); 9.6% of total population and 54.2% of poor population (2007)	*National*	Hunter et al., 2017; Cecchini & Madariaga, 2011; Pantelić, 2011	
Sub-Saharan Africa										
Burkina Faso	Nahouri Cash Transfers Pilot Project	CCT, UCT			2008-2010		2,160 households (2008)	Pilot	Bastagli et al., 2016	
Democratic Republic of Congo	IDPs ARCC II project	UCT	N/A	$18.57 USD, bi-monthly	2014-2015	Internally displaced individuals living in informal camps	23,480 families	*Regional (North Kivu and Orientale Provinces)*	Gentilini, 2015	American Institutes for Research
Ethiopia	Productive Safety Net Programme (PSNP)			$16.20 USD per month	2005-?		7.5 million individuals annually	National	Gentilini, 2015; Ruel et al., 2013; Narayanan, 2011	
Ghana	Innovation for poverty randomised trial	UCT	N/A		2008-2011		8200 households (2009)	Pilot	Bastagli et al., 2016	
Ghana	Livelihood empowerment against poverty (LEAP)	UCT/CCT		89 to 15 Cedi per month (£3.60-£6.70)	2008-present	Extremely poor households	90,785 beneficiaries (2016) planned to expand to 200,000 by late 2016	*National*	de Groot et al., 2017; Bastagli et al., 2016; Daidone et al., 2015	Unicef
Kenya	Give Directly experiment	UCT	N/A	US$300 or US$1100	2011-2013		471 households (2013)	Pilot	de Groot et al., 2017; Bastagli et al., 2016; Ellsberg et al., 2015	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Kenya	Hunger and Safety Net Programme (HSNP)	UCT	N/A		2008-present		100,000 households (2015 target)	Pilot	de Groot et al., 2017; Bastagli et al., 2016	
Kenya	Orphans and Vulnerable Children Cash Transfer (OVC-cash transfer)	UCT	N/A	$40 USD every 2 months (approx. 20% of HH expenditure)	2004-present	Extremely poor households with at least one orphan or vulnerable child	240,000 households (2016)	*National*	Gibbs et al., 2017; Peterman et al., 2017; Bastagli et al., 2016; Khan et al., 2016; Samuels & Stavropoulou, 2016; Daidone et al., 2015; Forget, Peden & Strobel, 2013; Pettifor et al., 2012	Kenya National Safety Net Program – Cash Transfer for Orphans and Vulnerable Children
Kenya	Adolescent Girls Initiative - Kenya	CCT	Attend school (80% attendance)	2250-3000 KES ($23-$25 USD) per term for six school terms; about 10% of avg. HH expenditure over four months		Female adolescents, 11-15	6000 girls (estimated)	*Pilot*	Peterman et al., 2017	Adolescent Girls Initiative - Kenya
Lesotho	Child Grant Programme (LCGP)	UCT	N/A	120-250 Maloti per month (£10.90-£22.80)	2009-present		19,800 ultra-poor households (2014)	*In transition from pilot to national*	Bastagli et al., 2016; Daidone et al., 2015	International Policy Centre for Inclusive Growth
Lesotho	The Lesotho Study to reduce STI and HIV incidence	CCT	Testing negative for STIs	Participants received lottery tickets (to win $50 or $100 USD) every four months		Men and women, 18-32		Pilot	Taaffe et al., 2017; Taaffe, Cheikh & Wilson, 2016	NAM - aidsmap
Malawi	Social Cash Transfer Programme (SCTP)	UCT	N/A	At the time of the pilot (2006), transfers were: $4.30 (single-	2006-present	Ultra-poor and labor-constrained households	150,341 households (2015)	Pilot	de Groot et al., 2017; Bastagli et al., 2016; Fernald et al., 2012; Narayanan, 2011	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
				headed household) to $12.85 (for 4+ people) with per child educational bonus of 200 Malawi kwacha (primary school) or 400 (secondary school). Have risen over time.						
Malawi	Malawi Diffusion and Ideational Change Project (MDICP)	CCT	HIV testing			Females and males, 15+ years of age		*Pilot*	Pettifor et al., 2012	Demographic Research
Malawi	The Zomba Cash Transfer Programme	CCT/UCT	Attend school (80% attendance)	$10 USD on average (approx. 10% of HH expenditure)	2008-2009	Never married young women aged 13-22 years	3,796 girls (2009)	*Pilot*	Peterman et al., 2017; Bastagli et al., 2016; Khan et al., 2016; Taaffe, Cheikh & Wilson, 2016; Remme et al., 2014; Forget, Peden & Strobel, 2013; Heise et al., 2013; McQueston, Silverman & Glassman, 2013; Pettifor et al., 2012	Development Pathways
Malawi	Sexual health incentive study	CCT	Maintain HIV status (payment not tied to remaining HIV negative)	$32 USD per year	2006-2007	Individuals taking an HIV test	1,307 individuals (2007)	Pilot	Bastagli et al., 2016; Ranganathan & Lagarde, 2012	
Niger	Prospective study with Forum Santé Niger and Médecins Sans Frontières	CCT, UCT			2011		3,524 children (2011)	Pilot	Bastagli et al., 2016	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Niger	Zinder Project	UCT		1000 FCFA (~$2 USD) per day, max. 25000 FCFA per month	2011			*Pilot*	Gentilini, 2015	World Food Programme
Niger	Concern Worldwide drought-response unconditional transfer	UCT	N/A		2010-2011		10,000 households (2010)	Pilot	Bastagli et al., 2016	
Nigeria	Subsidy Reinvestment and Empowerment Programme (SURE-P)	CCT	4 visits of pre- and post-natal care; birth in a healthcare facility	Up to 5000 naira (US$30)	2013-present			*National*	Hunter et al., 2017	The World Bank
South Africa	Old-Age Pension	Social pension (UCT)	N/A	R370 per month (1993 Rands)	1993 (became fully racially non-discriminatory)	Women > 60, Men > 65	3.1 million individuals (2015)	National	de Groot et al, 2017.; Bastagli et al., 2016; Manley, Gitter & Slavchevska, 2012; Narayanan, 2011	
South Africa	Child Support Grant and Foster Grant	UCT	N/A	$25-35 USD per month per child	Child Support Grant 1998-present Foster Grant 1996-present	Poor households with children	11.9 million and 533,000 beneficiaries respectively (2015)	National	Gibbs et al., 2017; de Groot et al., 2017; Peterman et al., 2017; Bastagli et al., 2016; Khan et al., 2016; Fernald et al., 2012; Manley, Gitter & Slavchevska, 2012; Narayanan, 2011	
South Africa	CAPRISA 007 Trial	CCT	Combination of any four conditionalities, e.g. life skills education program, academic achievement, HIV testing, a community project report	Up to R1,750		In KwaZulu-Natal, rural high school students, grades 9 and 10.	14 schools	Pilot	Taaffe et al., 2017; Taaffe, Cheikh & Wilson, 2016; Pettifor et al., 2012	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
South Africa	HPTN 068 trial	CCT	Attend school (80% attendance)	R300 (~$30 USD), monthly, split between children (1/3) and parents (2/3). Approx. 16% of HH expenditure.		Young women age 13-20, never previously married or pregnant, grade 8-11		Pilot	Peterman et al., 2017; Taaffe et al., 2017; Taaffe, Cheikh & Wilson, 2016; Pettifor et al., 2012	
Tanzania	RESPECT (Rewarding STD Prevention and Control in Tanzania)	CCT	Negative test results for curable STIs	Received 1$10-$20 USD for testing negative for STIs, every 4 months		Men and women, 18-30	10 villages	Pilot	Taaffe et al., 2017; Taaffe, Cheikh & Wilson, 2016; Heise et al., 2013; Ranganathan & Lagarde, 2012	
Tanzania	Tanzania Social Action Fund (TSAF)	UCT/CCT	Attend school (80% attendance) and health check-ups for pregnant women and children	UCT: $8.5 USD per month per child CCT: $23 USD per month per household	2010-present	Households below the food poverty line	259,716 households (2015)	Pilot	Peterman et al., 2017; Bastagli et al., 2016	
Tanzania	Iringa Combination HIV Prevention Trial	UCT	N/A			Females, 15-24		*Pilot*	Pettifor et al., 2012	Johns Hopkins Bloomber School of Public Health
Tanzania	Kwa Wazee Project	UCT	N/A			Grandmothers who care for AIDS orphans		Regional (Kagera)	Richter, 2010	
Uganda	WFP Karamoja cash transfer	CCT		$12 USD per child every six weeks	2011-2012		2,972 children (2011)	Pilot	Bastagli et al., 2016	
Uganda	Youth Opportunities Programme (YOP)	Enterprise grant			2008		2,675 individuals (2008)	Pilot	Bastagli et al., 2016	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Uganda	Social Assistance Grants for Empowerment (SAGE)	UCT	N/A		2011-present		64,113 households (2014)	Pilot	Bastagli et al., 2016	
Uganda	Women's Income Generating Support (WINGS)	Enterprise grant			2009		1,800 individuals (2009)	Pilot	Bastagli et al., 2016	
Uganda	Senior Citizen Grant (SCG)			UGX 24000 per month per individual ($8.70 USD)	2011	People over 65 (and over 60 in rural areas)	~60,000 individuals	*Pilot*	Samuels & Stavropoulou, 2016	Overseas Development Institute
Zambia	Monze Cash Transfer Pilot (CTP)	UCT	N/A		2007-2010		2,069 households (2010 expected)	Pilot	Bastagli et al., 2016	
Zambia	Child Grant Programme	UCT	N/A	60 kwacha (US$12) every 2 months	2010-2013	Women and children living in districts with highest rates of child mortality/morbidity	20,000 households with young children (2013)	Pilot	de Groot et al., 2017; Hunter et al., 2017; Bastagli et al., 2016; Khan et al., 2016; Daidone et al., 2015	
Zambia	Zambia Vulnerability Grant (MCTG)	UCT	N/A	60 kwacha per household per month	2011-2014	Females and males, 13-17; poor female-headed households or households with OVC	17,700 households (2014)	*Pilot/ Regional (Zambezi, Serenje, and Luwingu districts)*	Pettifor et al., 2012	UNICEF
Zimbabwe	Manicaland HIV/STD Prevention Project	CCT	Children < 5 keep vaccinations up to date; health clinic visits 2x/year	$18 USD per household plus additional $4 per child up to $12 USD	2009	Poor households with >1 orphan under 18		*Pilot*	Owusu-Addo & Cross, 2014	Manicaland Centre for Public Health Research
Middle East and North Africa										

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Morocco	Tayssir	UCT/CCT			2008-2010		3,595 households (2008)	Pilot	Bastagli et al., 2016	
Yemen	Social Welfare Fund (SWF)	UCT		Max benefit is YET 4000 ($20 USD) for a family of six, delivered quarterly	1996-?	Vulnerable groups (e.g., orphans, female-headed households, families below poverty line)	1.5 million individuals	*National*	Samuels & Stavropoulou, 2016;	Overseas Development Institute
Europe and Central Asia										
Albania	Ndhima Ekonomike	UCT	N/A		1993-present		80,000 households (2016)	*National*	Bastagli et al., 2016	Open Knowledge Repository
Kazakhstan	BOTA programme	CCT		$24 USD per month per pre-school beneficiary	2009-2014		95,000 households (2014)	*Regional*	Bastagli et al., 2016	International Policy Centre for Inclusive Growth
Turkey	Social Risk Mitigation Project	CCT			2004-2007		2.6 million children (2007)	*National*	Bastagli et al., 2016; Murray et al., 2014	Taylor & Francis Online
South Asia										
Bangladesh	Primary education stipend	CCT	Attend school (85% attendance rate)	Tk 100 per month for one child, Tk 125 per month for more than one child.	2002--?			National	de Groot et al., 2017; Manley, Gitter & Slavchevska, 2012	
Bangladesh	Shombhob	CCT	School attendance		2012-2013		14,125 households (2012)	Pilot	Bastagli et al., 2016	
Bangladesh	Transfer Modality Research Initiative	UCT	N/A	1500 Taka (~$ 18 USD) per month		Ultra-poor HHs with >1 children		*Pilot*	Peterman et al., 2017	IFPRI-Bangladesh
Bangladesh	Food Security Vulnerable Group Development Programme (FSVGD)	CCT	Must save 32 Tk each month; skill development and awareness training	150 Tk per month	2001-2006	Women	109,379 women and their dependents in 2005-06	Regional (57 of 460 upazilas)	Manley, Gitter & Slavchevska, 2012	IFPRI

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
Bangladesh	Rural Maintenance Program (RMP)	CCT	Work maintaining rural roads; mandatory savings of Tk 10 per day (or 300 Tk per month); receive counselling to help women understand their rights and improve health/nutrition of family	$30 USD per month	2006	Women	41,540 women in 2006	*National*	Gentilini, 2015; Manley, Gitter & Slavchevska, 2012	IFPRI
Bangladesh	Maternal Health Voucher Scheme	CCT	Give birth in a public health facility	$24 USD	2006-to publication date (2012)	Mothers with 2 or fewer children	46 of 493 upazilas nationwide	Regional	Jehan et al., 2012	
India	Apni Beti Apna Dhan	UCT/CCT	Daughter remains unmarried at age 18 to collect sum, other human capital building behaviors benefiting daughters	UCT: 500 rupees at birth of daughter (~$11 USD) CCT: redeem security when daughter turns 18 for 25,000 rupees (~$550 USD); bonus 5000 rupees for primary education; extra 1000 rupees for up to grade 8 education	1994--?			Regional (Haryana State)	de Groot et al., 2017; Manley, Gitter & Slavchevska, 2012	
India	Janani Suraksha Yojana	CCT	Give birth in a public health facility, pre-natal care visits	Up to 1400 rupees (US$32)	2005-present	Pregnant women in poor households	9.5 million women	National	Hunter et al., 2017; Murray et al., 2014; Glassman et al., 2013; Ma°lqvist et al., 2013; Fernald et al., 2012; Jehan et al., 2012; Ranganathan & Lagarde, 2012; Narayanan, 2011	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
India	Dr. Muthulakshmi Reddy Memorial Assistance Scheme	UCT	N/A	$68 USD paid twice during pregnancy		Poor pregnant women	441,095 pregnant women (1989-2009)	*National*	Murray et al., 2014	National Center for Biotechnology Information
Nepal	Aama Surakshya Karyakram (formerly Safe Delivery Incentive Program)	CCT	Give birth in a public health facility	Up to 1,500 NRs (US$23) (30-50% of transport cost to health facility)	2005-present	Pregnant women	100,000 women	National	Hunter et al., 2017; Murray et al., 2014; Glassman et al., 2013; Fernald et al., 2012; Jehan et al., 2012; Ranganathan & Lagarde, 2012	
Pakistan	The Punjab Female School Stipend Programme	CCT	School attendance	$10 USD per student per quarter	2003-present	Middle school girls (grades 6-8)	393,000 girls (2014)	Regional (Punjab)	Bastagli et al., 2016; McQueston, Silverman & Glassman, 2013	
Pakistan	Learning and education achievement	CCT	School attendance		2000-?	Secondary school-age girls in rural areas		*Pilot*	Kabeer & Waddington, 2015	Learning and Educational Achievement in Punjab Schools
Pakistan	Benazir Income Support Programme (BISP)	UCT	N/A		2008-present		4.7 million households (2014)	*National*	Bastagli et al., 2016	Benazir Income Support Programme
Sri Lanka	Samurdhi Program	CCT	Work requirment of 4-5 days to community projects	365.10 rupees per month (25% of monthly per capita HH income)	1995			National	de Groot et al., 2017; Manley, Gitter & Slavchevska, 2012; Narayanan, 2011	
Sri Lanka	CTPP	UCT	N/A	$2.44 USD per week	2005	Tsunami-affected individuals		*Pilot*	Gentilini, 2015	Overseas Development Institute
East Asia and Pacific										
Cambodia	CESSP Scholarship Programme (CSP)	CCT	Attend school (80% attendance)	$5 USD per month; $60 USD per year	2005-2011			Pilot	Bastagli et al., 2016; Gentilini, 2015	
Cambodia	Japan Fund for Poverty Reduction	CCT			2004-2006		~4,185 girls (2004)	*Pilot*	Bastagli et al., 2016	The World Bank

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
	(JFPR) scholarship program									
China	Junior High School Randomised Controlled Trial	CCT			2009-2010		142 children (2009)	Pilot	Bastagli et al., 2016	
China	CHIMACA programme	CCT	Ante-natal healthcare visits	Up to 20 RMB (US$3)	2007-2009			*Pilot*	Hunter et al., 2017	Maternal and Child Health Journal
Indonesia	Program Keluarga Harapan (PKH)	CCT	Health visits for pregnant mothers and children	$28 USD per quarter	2007-present	Households with pregnant or lactating mothers	3.2 million households (2014)	Pilot	Bastagli et al., 2016; Hunter et al., 2016; Murray et al., 2014	
Indonesia	Temporary UCT	UCT	N/A		2005-2006		19 million households (2005)	Pilot	Bastagli et al., 2016	
Indonesia	Bantuan Siswa Miskin (BSM) cash transfer for poor students	CCT			2008-present		11.1 million children (2013)	*National*	Bastagli et al., 2016	The World Bank
Phillipines	Pantawid	CCT						*National*	de Groot et al., 2017	Asian Development Bank
North America										
USA	Yo Puedo	CCT	Meeting educatinal and reproductive health wellness goals as defined by program participant			Females and males, 16-21		Pilot	Gibbs et al., 2017; Pettifor et al., 2012	
USA	Alaska Permanent Fund Dividend	UCT	N/A		1976-present	Alaska residents		Regional (Alaska)	Ruckert et al., 2017; Forget, Peden & Strobel, 2013	
USA	Dollar-a-Day Program	CCT	Remaining not pregnant and particpation in peer support group sessions			Females, 18 and younger		Pilot	Pettifor et al., 2012	
Canada	Manitoba income	UCT	N/A	67% of low-income cutoff	1974-1979		12,500 individuals	Pilot	Ruckert et al., 2017; Forget, Peden & Strobel, 2013	

Country	Program	Type of Program	Conditions	Transfer Size	Years of Operation	Target Population	Coverage at Latest Count	Program Scale (national/ regional/ pilot)	Source(s) Reporting on this Cash Transfer Program	Website
	(MINCOME) experiment			($16500 for a family of four in 2013 dollars)						

Note: Table layout adapted from Bastagli et al. (2016). Programs drawn from reviews included in the current report. All information included in the table is drawn from the reviews, with the excepted of italicized information on program scale, which was found from the websites linked in the last column. When the same cash transfer program was included in multiple studies and information on coverage or scale differed, we used the information included in the most recent study.

Appendix C. Overview of Findings From Systematic Reviews

Table C.1. Summary of headline conclusions on impacts from systematic reviews

Reference	Summary of review's main conclusions regarding impacts
Baird et al. (2013)	• Participation in UCTs and CCTs improve odds of being enrolled in and attending school compared to no participation. • Effect sizes always larger (but not significant) for CCT programmes than UCT programmes. However, when categorized on strength of conditions and enforcement, is a significant difference. • Effectiveness on improving test scores 'small at best'.
Banks et al. (2016)	• Benefits from participation are mostly limited to maintaining minimum living standards and do not appear to fulfil the potential of long-term individual and societal social and economic development.
Gaarder et al. (2010)	• CCTs increase utilization of services upon which the transfer is conditioned, as long as beneficiaries have knowledge about the programme requirements. • There is a more mixed picture with regard to final health and nutrition outcomes (e.g. nutritional status and morbidity and mortality). • Limited evidence from Mexico suggests CCTs may affect health in other ways than through increased service utilization and beyond improved food consumption. Specifically, poverty alleviation may affect mental health and lifestyle choices.
IEG (2014)	• Outcomes for the household and its members differ depending on sex of recipient. • Women receiving CCTs are on average less likely to experience domestic violence. • Little or no evidence of increased fertility or ability of women to decide on contraception. • CCTs generally effective in increasing likelihood of having more prenatal visits and giving birth in an institutional facility with larger positive impacts tended to be found where baseline levels were low, though UCTs were not similarly effective (unclear whether due to conditionality). • Transfers can support investments in productive assets even if they were not designed to do so, with women found to invest in livestock and agricultural tools as much or more than men, but invest in different types of assets. • Cash transfers have not caused a reduction in labor supply for men or women in most countries. • Impacts on enrolment and attendance are higher in secondary school (where attendance is lower) and in several cases the most disadvantaged group at baseline experienced the largest gains. • There is very little evidence on the impacts on quality of education and learning.
Kabeer et al. (2012)	• Strong evidence that CCTs can lead to a rise in overall household consumption and investment in productive assets, increase in school attendance and reduction in child labor. • Mixed evidence on the impacts of adult labor; increases in market work in some contexts and increases in leisure and domestic work in others. • 'Persuasive evidence' that CCTs protect household consumption and educational patterns during times of crisis. • 'Limited evidence that CCTs have spillover effects within communities in terms of poverty reduction, increased loans and transfers and household behaviour.' • 'No evidence that CCTs lead to inflationary pressure in the local economy.'

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Lagarde et al. (2009)	• CCT programmes appear to be effective in increasing the uptake of preventative health services and encourage some preventative behaviors. In some cases programmes have noted improvement of health and nutrition outcomes (e.g. positive impact on mother's reports of children's ill health, child height, and mixed evidence on height-for-age and anemia). • It is unclear what components lead to this positive effect.
Saavedra and Garcia (2012)	• Average effect sizes for enrolment, attendance and drop-out in both primary and secondary schooling are statistically different from zero. • Average effect sizes for secondary enrolment, attendance and drop-out are larger than those for primary. • Programmes with more generous transfers have larger primary and secondary enrolment effects. • Programmes that condition benefit receipt on achievement and pay transfers less frequently than monthly show larger enrolment and attendance effects. • Find evidence in support of publication bias and selective reporting. • Considerable heterogeneity in effect sizes for all outcomes and schooling levels.
Yoong et al. (2012)	• Gender of the transfer recipient affects outcomes of some programmes but increasing female control of transfers does not guarantee positive outcomes. • Targeting transfers to women can improve children's wellbeing (particularly through investments in health and education).

Source: Adapted from Bastagli et al. (2016), Table 3.2

Appendix D. Evidence of Impacts of Cash Transfer Programs in the United States

Social welfare programs in the United States encompass a broad number of initiatives and services targeting the poor and designed to improve a variety of outcomes in areas including nutrition, health, housing, and employment. These programs can be divided into two types: cash transfer programs and in-kind transfer programs (Butcher, 2017). Cash transfer programs like the Temporary Assistance to Needy Families (TANF) give cash directly to eligible low-income recipients without any restrictions on its use. In-kind transfer programs such as the Supplemental Nutrition Assistance Program (SNAP), housing vouchers, or Medicaid/Medicare provide money for a certain specified use to help families with basic necessities (*ibid.*).

In-kind transfer programs have historically enjoyed more popularity among politicians and taxpayers alike due to the certainty that the money will be spent on goods and services that society generally deems basic needs, especially when considering outcomes for recipients' children (Aizer, 2016). Still, a variety of cash transfer programs have been implemented in the United States, beginning with pension programs such as the Veterans Pension (extended to all surviving veterans in 1818) and the Mother's Pension Program (1911-1935), and ending most recently with the Opportunity NYC—Family Rewards CCT program which ran from 2007-2010. Table 1 provides an overview of cash transfer programs in the United States. Most programs have taken the form of UCTs, with relatively few CCTs, but Alaska and some Native American tribes have implemented UBI program providing cash transfers to their populations.

Table 1. Overview of cash transfer programs in the United States

Program Name	Type of Cash Transfer	Eligibility	Dates
Veterans Pension	UCT	Veteran must have at least 90 days of active duty service, with at least one day during a wartime period and age 65 or older, OR totally and permanently disabled, OR a patient in a nursing home receiving skilled nursing care, OR receiving Social Security Disability Insurance, OR receiving Supplemental Security Income.	1818
Mothers' Pension Program	UCT	States' discretion (child under 14/15/16, no father present, low-income)	1911-1935
Unemployment Insurance (UI)	CCT	Workers who are unemployed through no fault of their own; In most states, those who quit work, are fired, or refuse suitable work are disqualified from receiving benefits	Adopted on a state-by-state basis from 1932-1937
Social Security	UCT	Individuals who have worked at least 10 years and are over 62 (benefits are also conferred to children under 18, spouses, and, in some cases, grandchildren and ex-spouses)	1935
Aid to Dependent Children (ADC)	UCT	States' discretion (children, no father present, low-income)	1935-1962
Social Security Disability Insurance (SSDI)	UCT	Low-income disabled adults who have earned a certain number of work credits	1955
Aid to Families with Dependent Children (AFDC)	UCT	Low-income families with children under 18, deprived of financial support of at least one parent (by death, abandonment, unemployment)	1962-1996
Negative Income Tax experiments • **New Jersey & Pennsylvania** • **North Carolina & Iowa**	UBI	Volunteer low- to middle-income families	1968-1974

• **Seattle & Denver (SIME/DIME)** • **Gary, Indiana**			
Supplemental Security Income (SSI)	UCT	Aged, blind, or low-income disabled children and adults	1974
Earned Income Tax Credit (EITC)	UCT	Low-income families; more generous to families with children; maximum eligible income for married filing jointly family with 3 children $53,505 for 2016	1975
Alaska Permanent Fund (PFD)	UBI	All residents of the state of Alaska	Est. 1976, recipients received the first dividends in 1981
New Hope Project	UCT	Low-income individuals willing to work full-time in Milwaukee, WI	1994-1998
Temporary Assistance for Needy Families (TANF)	UCT	Children in low-income families; Lifetime cap of 60 months on payments to adults with Federal funds; Work requirements that vary by single/two-parent status and age of youngest child	1996
Native American tribes casino dividend payments • **Example: Eastern Band of Cherokee Indians**	UBI	Members of the Eastern Band of Cherokee Indians (adults and children)	1996
Child Tax Credit (CTC)	UCT	Families with children under 17 are co-resident; Reductions in size of credit begin at $110K adjusted gross income for married filing jointly	1997
Opportunity NYC—Family Rewards	CCT	Families in one of six New York community districts with one or more school-aged children (in the fourth, seventh, or ninth grade) and incomes at 130% or less of the federal poverty level	2007-2010
Y Combinator Basic Income Study	UBI	Large-scale randomized controlled trial, analyzing 3,000 randomly selected individuals across two US states.	2017-2022

Sources: Partially adapted from Butcher (2017), table 1 (p. 12).
Note 1: Programs and studies classified as UBIs in this table possess most, but not all of the attributes of a "full UBI" as defined in Marinescu, 2017, p. 7.
Note 2: Many Native American tribes pay casino dividends to their members; the Eastern Band of Cherokee Indians dividend payments have been the most extensively studied.

Long-Term Effects of Cash Transfer Programs in the United States

Price & Song (2016) identify several difficulties associated with studying the long-term impacts of cash transfer programs in the United States, and note that there is considerably less research done on the subject than on short-term effects. The authors argue that some programs (like TANF) are simply still too young to be able to evaluate their long-term effects. Furthermore, they highlight the problematic issue of identifying a control group, as families who receive cash benefits are typically different from those who do not.

In spite of these challenges, we identified thirteen recent studies reporting on long-term effects of cash transfer programs in the United States, though just one is a review of multiple programs. The other studies all report on the impacts of a single program. We summarize key findings from the review study and from five studies with a particular focus on long-term impacts of different cash transfer programs: the Mother's Pension

Program, the Negative Tax Income Experiments, the Alaska Permanent Fund, and casino disbursements to the Eastern Band of Cherokee Indians (the latter two are considered partial UBIs).

A recent working paper by Butcher (2017) reviews the available literature on the impacts of various cash transfer programs in the United States. While programs like the Temporary Assistance to Needy Families (TANF) are too recent to be able to study the long-term impacts on outcomes like adult mortality, the author notes that short-term effects of the TANF program on children's health are "mixed at best" (Butcher, p. 13).

Butcher (2017) cites several studies that find positive impacts on different outcomes associated with child well-being, including child poverty (Nicholas & Rothstein, 2016), health and educational achievement (Hoynes et al., 2015), and academic achievement (Manoli & Turner, 2014; Michelmore, 2013;Dahl & Lochner, 2012; Chetty et al. 2011). Butcher's review (2017) also includes Supplemental Security Income (SSI), a cash transfer program that provides support for low-income disabled individuals. Butcher cites several studies that report that SSI reduces poverty (Duggan and Kearney, 2007), and food insecurity (Schmidt et al., 2013).

Azier et al. (2016) investigate the long-term impacts of cash transfers on four outcomes for low-income boys: longevity, educational attainment, nutritional health, and income in adulthood. The study uses data from the Mother's Pension (MP) program, the first government sponsored welfare program in the United States (1911-1935). The MP program was specifically designed for low-income mothers and their dependents in households with no male adult present, and recipients typically received monthly payments until the pension was revoked (a median duration of three years for the data surveyed).

Azier et al. (2016) collected data on over 16,000 boys from 11 states whose families applied to the MP program. The authors then compared outcomes for boys whose families were enrolled in the program to outcomes for boys whose families were initially judged eligible for the program but were later rejected. The results report that acceptance in the MP program "increased educational attainment by .34 years, reduced the probability of being underweight by half, and increased income in early adulthood by 14%" (p. 937). In addition, the receipt of cash transfers increased longevity by one year for the overall sample, and 1.5 years for the boys from the poorest families in the study. Although the authors acknowledge key limitations of the study—they were unable to study outcomes for women (due to the prevalence of changing last names upon marriage) or African Americans (due to poor representation in the data)—they cite their research as the "first study to document cash transfers to mothers of poor children substantially increase longevity" (p. 967).

Price & Song (2016) use data from the Seattle-Denver Income Maintenance Experiment (SIME/DIME), which began in 1970, to measure long-term impacts on participants across five outcomes. Income Maintenance Experiments (IMEs) originated in the 1960s, and are cited by the authors as the "first large-scale social science randomized controlled trials" (p. 32). SIME/DIME enrolled 4,800 low- to middle-income families in the program, and guaranteed half of those a minimum annual income of $25,900 for three to five years, resulting in an average of an additional $2,700 of yearly benefits for "treated" families. Price & Song (2016) measure the long-term effects of cash transfers on "treated" individuals as compared to "non-treated" individuals across five outcomes: probability of working in a given year, annual earned income from 1978-2013, applications for disability benefits, awards of disability benefits, and mortality.

For their sample of 3,400 families out of the 4,800 enrolled in the program, Price & Song (2016) report that individuals who received extra government assistance were less likely to work in a given year by a margin of 6.3%, showed decreased annual earnings, and were 6.3% more likely to apply for disability benefits compared to "non-treated" individuals. These differences increased with age—although there was no difference on earned income between the two groups two years after SIME/DIME, the authors find a $2,000 greater effect on earned income after age 50, with non-treated individuals earning more annually. However, both groups showed

similar rates of receiving disability benefits and of mortality, and the authors report no significant effects for children for any of the outcomes they examined.

The authors proffer several hypotheses as to why these differences exist, including the accumulation of wealth for "treated" individuals, a decline in human capital and future wages for "treated" individuals due to more time spent out of the labor force, and a shift in the way that individuals perceive government assistance and leisure. However, the authors state that there is insufficient information to make any claims about mechanisms explaining the effects of their study.

Hollister et al. (2005) provide a retrospective of the Negative Tax income experiments including a brief review of the evidence of long-term effects categorized by state. The authors report that overall there was a 13% reduction in work effort (in greater proportion from female earners and tertiary household earners). In North Carolina they note positive effects in school attendance, test scores, and teacher rating. The study in New Jersey had positive effects on school drop-out rate and an increased rate of homeownership. The study in Gary, Indiana had positive effects on male student test scores. Finally, in Seattle, the authors report positive effects on continuing education for adults.

We identified two studies on programs in the United States that are considered partial basic income programs. Akee et al. (2010) use data from the Great Smoky Mountains Study of youth (GSMS), a longitudinal study of child mental health in North Carolina, to examine the effects of indefinite bi-annual casino disbursements (totaling $8,000 per year) to members of the Eastern Band of Cherokee Indians on young adult outcomes. The authors find that children whose families received disbursements attained a higher level of education in young adulthood, committed fewer minor crimes, and self-reported lower rates of drug dealing. The study also notes that while parents did not reduce working time, parent-child interactions improved with disbursements.

Chung et al. examine the effect of annual disbursements from the Alaska Permanent Fund (APFD), on birth weight. The results report that the APFD increases birth weight by 34.8 g and leads to a significant decrease in incidence of low birth weight. These effects are more pronounced among less educated mothers.

References*

Akee, R.K., Copeland, W.E., Keeler, G.,Angold, A., Costello, E. J., (2010). Parents' Incomes and Children's Outcomes: A Quasi-Experiment. *American Economic Journal: Applied Economics*, *2(1)*, 86-115.

Azier, A., Eli, S., Ferrie, J., Lleras-Muney, A. (2016). The Long-Run Impact of Cash Transfers to Poor Families. *American Economic Review, 106(4*), 935-971.

Butcher, K., (2017). *Assessing the Long-Run Benefits of Transfers to Low-Income Families* (Hutchins Center on Fiscal and Monetary Policy Working Paper #26). Brookings Institution. Retrieved 23 September 2017 from https://www.brookings.edu/wp-content/uploads/2017/01/wp26_butcher_transfers_final.pdf

Chung, W., Ha, H., Kim, B., (2016). Money Transfer and Birth Weight: Evidence from the Alaska Permanent Fund Dividend. *Economic Inquiry, 54(1)*, 576-590.

Hollister, R., Levine, R., O'Connor, A., Watts, H., Williams, W., Widerquist, K. (2005). A Retrospective on the Negative Income Tax Experiments: Looking Back at the Most Innovate Field Studies in Social Policy. In K. Widerquist, M.A. Lewis, S. Pressman (Eds.), *The Ethics and Economics of the Basic Income Guarantee* (pp. 95-106). New York, NY: Ashgate.

Marinescu, I. (2017). *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer Programs*. Roosevelt Institute. Retrieved 27 September 2017 from https://www.scribd.com/document/347464787/No-Strings-Attached-The-Behavioral-Effects-of-U-S-Unconditional-Cash-Transfer-Programs#

Price, D.J., Song, J., (2016). *The Long-Term Effects of Cash Assistance* (Job Market Paper, Stanford University). Retrieved 23 September 2017 from http://web.stanford.edu/~djprice/papers/djprice_jmp.pdf

*****Note. These sources, with the exception of Price & Song (2016), are not included in the main report, and are only referenced in this Appendix.

Additional Studies of Impacts of U.S. Cash Transfer Programs

Arno, P.S., Wicks-Lim, J., (2016). Improving Population Health by Reducing Poverty: New York's Earned Income Tax Credit. *SSM – Population Health (3)*, 373-381. Retrieved 27 September 2017 from http://www.sciencedirect.com/science/article/pii/S2352827316300829

Cook, J.A., Burke-Miller, J.K., Roessel, E., (2016). Long-Term Effects of Evidence-Based Supported Employment on Earnings and on SSI and SSDI Participation Among Individuals with Psychiatric Disabilities. *American Journal of Psychiatry, 173(10):* 1007-1014.

Hamad, R., Rehkopf, D. H., (2015). Poverty and Child Development: A Longitudinal Study of the Impact of the Earned Income Tax Credit. *American Journal of Epidemiology, 183(9),* 775-784.

Marinescu, I. (2017). *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer Programs*. Roosevelt Institute. Retrieved 27 September 2017 from https://www.scribd.com/document/347464787/No-Strings-Attached-The-Behavioral-Effects-of-U-S-Unconditional-Cash-Transfer-Programs#

Maxfield, M., (2013). *The Effects of the Earned Income Tax Credit on Child Achievement and Long-Term Educational Attainment* (Job Market Paper, Michigan State University). Retrieved 26 September 2017 from https://msu.edu/~maxfiel7/20131114%20Maxfield%20EITC%20Child%20Education.pdf

McNamara, J. M., Vartanian, T.P. (2004). The Welfare Myth: Disentangling the Long-Term Effects of Poverty and Welfare Receipt for Young Single Mothers. *The Journal of Sociology and Social Welfare, 31(4),* 105-140.

Appendix E. Findings on Impacts of UBI Programs

1. UBI Reviews Included in Review of Evidence on Long-Term Impacts of Cash Transfer Programs

1. Colombino, U. (2015). Is unconditional basic income a viable alternative to other social welfare measures? IZA World of Labor 2015: 128 doi: 10.15185/izawol.128

   The author briefly reviews economic reasoning and emerging empirical evidence on unconditional and universal transfers. The author reviews and summarizes evidence from five studies of programs from across North America, Africa, and Asia, but does not specify which particular programs were evaluated by the five studies.

   - Key Findings – Advantages of UBI
     - Several studies suggest UBI can redistribute benefits from automation and globalization.
     - Economic theory and empirical analyses suggest that, since it is not conditional on income, UBI does not create "poverty traps."
     - UBI can be simple and transparent, with relatively low administrative costs.
     - Initial experimental evidence suggests UBI may positively impact labor supply, education, and occupation choices.
   - Key Findings – Disadvantages of UBI
     - UBI is costly to implement and may require higher taxes to finance it.
     - Microsimulation studies suggest UBI may reduce labor supply.
     - UBI may lead to a reduction in effort, motivation, and autonomy, though the author reports initial studies in India, Namibia, and Uganda do not support this theory.
     - Perception that UBI also benefits the "undeserving", though the author reports that this is a "false perception" (pg. 5).

2. Ruckert, A., Huynh, C., & Labonte, R. (2017) Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1–5.

   The authors review the available evidence on the impacts of UBI programs on health outcomes, including birth outcomes, educational attainment, housing, and health. The authors review and summarize evidence from 11 studies of seven UBI programs from North America, Africa, and Asia. The authors acknowledge the need for more research to systematically assess and test the impacts of UBIs within different contexts and countries.

   - Key Findings – Advantages of UBI
     - Basic income support has a significantly positive effect on birth weight.
     - Basic income support is associated with improved literacy scores, reduced dropout rates, and improved grades.
     - Initial research suggests income security (and, by extension, UBIs) is a key factor in protecting mental health.
     - Initial research suggests UBIs can encourage moves to higher income neighborhoods, which are associated with improved health outcomes,
     - Initial research suggest UBIs can have positive impact on healthcare utilization.
   - Key Findings – Disadvantages of UBI
     - UBI could lead to a dismantling of other aspects of the welfare state infrastructure, such as universally accessible publicly provided or subsidized services (e.g. healthcare, education, transportation).
     - UBI might create disincentives to work (although review of North American UBI experiments from the 1970s found very few participants withdrew from the labor market after qualifying for UBI, and overall work efforts did not diminish significantly).
     - UBI might reinforce traditional gender roles in the household.

- UBI is costly to implement, although authors suggest several ways in which UBIs do have potential be revenue neutral, including by reducing administrative expenses and eliminating social welfare programs that would become redundant with a UBI.

2. UBI Reviews Referenced in Appendix D. Evidence of Impacts of Cash Transfer Programs in the United States

1. Akee, R.K., Copeland, W.E., Keeler, G., Angold, A., Costello, E. J., (2010). Parents' Incomes and Children's Outcomes: A Quasi-Experiment. *American Economic Journal: Applied Economics, 2(1),* 86 115.

   The authors use data from the Great Smoky Mountains Study of Youth (GSMS), a longitudinal study of child mental health in North Carolina, including both native and non-native participants. The paper examines the effects of indefinite bi-annual casino disbursements to members of the Eastern Band of Cherokee Indians on young adult outcomes. The average total disbursement for a year for this program is $8000 and it may therefore be considered a partial basic income program.

   - Key Findings:
     - Children from households that received casino disbursements attained a higher level of education in young adulthood and a "lower incidence of criminality from minor offenses" (pg. 1).
     - $4,000 per year for poorest households increases educational attainment by one year at age 21, and reduces having ever committed a minor crime by 22% at ages 16-17.
     - Children from households receiving disbursements self-report lower rates of dealing drugs.
     - Disbursements improved parent-child interactions.
     - Parents did not reduce working time.

2. Chung, W., Ha, H., Kim, B., (2016). Money Transfer and Birth Weight: Evidence from the Alaska Permanent Fund Dividend. *Economic Inquiry, 54(1)*, 576-590.

   The Alaska Permanent Fund (APFD) redistributes a portion of the state's oil revenues to the general population through an annual disbursement, and is considered a partial basic income program. The authors examine the effect of the APFD disbursements on birth weight, and find that the AFPD has led to "a significant positive, but modest effect on birth weight" (p. 576).

   - Key Findings:
     - The APFD increases birth weight by 34.8 g.
     - The APFD "leads to a substantial decrease" in incidence of low birth weight.
     - The effect of the AFPD on birth weight is higher among less educated mothers.

3. Hollister, R., Levine, R., O'Connor, A., Watts, H., Williams, W., Widerquist, K. (2005). A Retrospective on the Negative Income Tax Experiments: Looking Back at the Most Innovate Field Studies in Social Policy. In K. Widerquist, M.A. Lewis, S. Pressman (Eds.), *The Ethics and Economics of the Basic Income Guarantee* (pp. 95-106). New York, NY: Ashgate.

   The authors review evidence from the U.S. Negative Tax Income experiments, a progressive income tax system piloted in four different trials where people earning below a certain amount received supplemental pay from the government to guarantee a basic level of income.

   - Overall: 13% reduction in work effort, in greater proportion from female earners and tertiary household earners
   - North Carolina: Positive effects in grades 2-8 on attendance, teacher rating, and test scores

- New Jersey: Significant positive effects on school drop-out rate; Increased rates of homeownership
- Gary, Indiana: Positive effects in test scores for males grades 4-6; Increased rates of homeownership in first year of study; Reduced low birth weight "in the most at-risk categories"
- Seattle/Denver: Positive effects in continuing education for adults

4. Price, D. J., & Song, J. (2016). *The Long-Term Effects of Cash Assistance*. Working Paper, Stanford University.

   The authors report on long-term impacts for beneficiaries of a cash assistance program in Seattle and Denver, one of the Negative Tax Income experiments. The authors examine the impacts of a randomized experiment where some beneficiaries received thousands of extra dollars per year in government benefits for three to five years. The impacts are measured four decades after the end of the experiment.

   - No significant impact found two years after end of program
   - Long-term impacts (40 years after end of program)
     - Individuals who received extra benefits were 3.3 percentage points less likely to work in a given year.
     - Beneficiaries earned on average $1,800 less per year.
     - Beneficiaries were 6.3 percentage points more likely to apply for disability benefits, but not more likely to receive disability benefits.
     - There is no impact on marriage or death.
     - There is no significant impact on earnings or application to disability benefits among children of beneficiaries.

3. UBI Reviews Not Included in Our Body of Evidence

Table 1 summarizes evidence of UBI programs from sources found during our initial search, but excluded from our review because they were not reviews or did not focus on long-term impacts.

Table 1. Findings of UBI programs from sources screened from review.

Country	Program	Type of study	Outcomes	Evidence of long-term impacts	Key Findings	Source
Canada	Manitoba Basic Annual Income Experiment (Mincome)	Quasi-experimental	• Labor market participation	Study takes place over 5 years	• Reduced labor force participation among beneficiaries of UBI • Higher reduction in labor force participation among single-headed households and young individuals • Qualitative explanations for work reduction included care work, disability and illness, uneven employment, or educational investment	Calnitsky, D., & Latner, J. P. (2017). Basic Income in a Small Town: Understanding the Elusive Effects on Work. *Social Problems*, spw040.
Namibia, India	Two pilot programs, one in Namibia and one in India	Meta-analysis	• Investment • Labor market	Long-term impacts not mentioned	• Increased labor force participation • Shift from wage labor to self-employed labor • Increased investment in income generating activities • Increased productive income • Increased school attendance • Increased health infrastructure (sanitation)	Eskelinen, T., & Perkiö, J. Micro-investment perspective and the potential of the universal basic income. *Development Policy Review*.
Canada	Manitoba Basic Annual Income Experiment (Mincome)	Quasi-experimental	• Health • Reproductive health • Education	Study takes place over 5 years	• Reduced hospitalization rate • Reduced mental health visits • Increased educational attainment • No impact on fertility	Forget, E. L. (2011). The town with no poverty: the health effects of a Canadian guaranteed annual

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					• No impact on birth outcomes	income field experiment. *Canadian Public Policy*, 37(3), 283-305.
India	Madhya Pradesh Unconditional Cash Transfer (MPUCT), Tribal Village Unconditional Cash Transfer (TVUCT)	Experimental, Quasi-experimental	• Health • Education • Labor market	Long-term impacts not mentioned: programs began in 2011	Preliminary Findings • Improved child weight-for-age z-scores (WAZ), especially for girls • Increased dietary diversity (increased intake of fruits and vegetables) • Increased food consumption • Reduced morbidity (common illnesses) • Increase in health insurance • Increased school enrollment • Increased school attendance/performance • Increase in labor participation • Shift from wage labor to self-employed labor • Increase in new businesses or productive activities • Reduction in debt • Increase in savings	Standing, G. (n.d.). Unconditional Basic Income: Two pilots in Madhya Pradesh. Retrieved October 5, 2017, from https://www.guystanding.com/files/documents/Basic_Income_Pilots_in_India_note_for_inaugural.pdf

4. Overview of Global UBI Programs and Pilots

Table 2 presents an overview of major global UBI programs and pilots, including currently proposed pilot programs, and notes whether we report findings from specific programs in this appendix (programs that have not yet been implemented or evaluated are marked "N/A").

Table 2. Major Global UBI Programs and Pilots

Program Name	Country	Description	Dates	Selected Studies/Sources	Findings Included in Appendix?
North America					
Negative Income Tax experiments • New Jersey & Pennsylvania • North Carolina & Iowa • Seattle & Denver (SIME/DIME) • Gary, Indiana	United States	Four UBI experiments were conducted New Jersey and Pennsylvania, North Carolina and Iowa, Indiana, and Seattle and Denver. The pilot programs focused on issues of labor supply, family composition, education, and health.	1968-1974	Price, D. J., & Song, J. (2016). The Long-Term Effects of Cash Assistance. Working Paper, Stanford University. Hollister, R., Levine, R., O'Connor, A., Watts, H., Williams, W., Widerquist, K. (2005). A Retrospective on the Negative Income Tax Experiments: Looking Back at the Most Innovate Field Studies in Social Policy. In K. Widerquist, M.A. Lewis, S. Pressman (Eds.), *The Ethics and Economics of the Basic Income Guarantee* (pp. 95-106). New York, NY: Ashgate. Ruckert, A., Huynh, C., & Labonte, R. (2017) Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1-5.	Y
Alaska Permanent Fund	United States	All residents of the state of Alaska receive an annual disbursement funded by state oil revenues.	Est. 1976, recipients received the first dividends in 1981-Present	Chung, W., Ha, H., Kim, B., (2016). Money Transfer and Birth Weight: Evidence from the Alaska Permanent Fund Dividend. *Economic Inquiry, 54(1)*, 576-590. Ruckert, A., Huynh, C., & Labonte, R. (2017) Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1-5.	Y
Native American tribes casino dividend payments • Example: Eastern Band of Cherokee Indians	United States	All adult members of the Eastern Band of Cherokee Indians receive an annual disbursement funded by casino revenue.	1996-Present	Akee, R.K., Copeland, W.E., Keeler, G., Angold, A., Costello, E. J., (2010). Parents' Incomes and Children's Outcomes: A Quasi-Experiment. *American Economic Journal: Applied Economics, 2(1)*, 86 115.	N
Y Combinator Basic Income Study	United States	Large-scale randomized controlled trial, analyzing 3,000	2017-2022	Y Combinator Website	N/A

Program Name	Country	Description	Dates	Selected Studies/Sources	Findings Included in Appendix?
		randomly selected individuals across two US states.			
Manitoba "Mincome"	Canada	A randomized control trial experiment wherein families in three cities were given an income guarantee according to family size.	1974-1979	Pasma, C. (2014). Basic Income Programs and Pilots. Ottawa: Basic Income Canada Network. Forget, E. L. (2011). The town with no poverty: the health effects of a Canadian guaranteed annual income field experiment. *Canadian Public Policy*, 37(3), 283-305. Calnitsky, D., & Latner, J. P. (2017). Basic Income in a Small Town: Understanding the Elusive Effects on Work. *Social Problems*, spw040. Ruckert, A., Huynh, C., & Labonte, R. (2017) Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1-5.	Y
Ontario Basic Income Pilot	Canada	A three-year pilot project that will guarantee a basic income of $17,000 CDN to low-income residents in three cities in Ontario.	2017-2020	Ontario Basic Income Pilot Website	N/A
Latin America					
Quatinga Velho Pilot Project	Brazil	Basic income pilot project in a small town named Quatinga Velho. The project is funded through private donations. Began with $13.60 monthly payments to 27 people, expanded to 100.	2008-Present	Pasma, C. (2014). Basic Income Programs and Pilots. Ottawa: Basic Income Canada Network.	N
Asia & Middle East					
Madhya Pradesh Unconditional Cash Transfer	India	Year-and-a-half-long pilot project studied 20 villages: eight where unconditional cash payments were made monthly to every individual, and 12 control villages where no payments were made. A follow-up study was also conducted in two remote tribal villages; one received payments and the other did not.	2011-2013	Eskelinen, T., & Perkiö, J. Micro-investment perspective and the potential of the universal basic income. *Development Policy Review*. Ruckert, A., Huynh, C., & Labonte, R. (2017) Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1-5. Standing, G. (n.d.). Unconditional Basic Income: Two pilots in Madhya Pradesh. Retrieved October 5, 2017, from https://www.guystan	Y

Program Name	Country	Description	Dates	Selected Studies/Sources	Findings Included in Appendix?
				ing.com/files/documents/Basic_Income_Pilots_in_India_note_for_inaugural.pdf	
Iran Targeted Subsidy Plan	Iran	National basic income of $45 USD per month distributed to all citizens and replacing subsidies of petrol, fuel, and other goods.	2010-Present	Tabatabai, H. (2011). The basic income road to reforming Iran's price subsidies. Basic Income Studies, 6(1).	N
Africa					
Basic Income Grant Pilot Project	Namibia	Pilot project each person under age of 60 received $13.50 every month.	2008, 2009	Eskelinen, T., & Perkiö, J. Micro-investment perspective and the potential of the universal basic income. *Development Policy Review*. Ruckert, A., Huynh, C., & Labonte, R. (2017) Reducing health inequities: is universal basic income the way forward? *Journal of Public Health*, 1-5.	Y
GiveDirectly Basic Income Experiment	Kenya	Randomized control trial comparing 4 groups of villages. 6,000 people will receive $0.75 daily for 12 years.	In planning stages	GiveDirectly Website	N/A
Uganda Study	Uganda	Two-year pilot program targeting 50 households, offering $18.25 for adults and $9.13 for children. Aims to evaluate the effects of UBI in four areas: education participation of girls and women, access to healthcare, engagement in democratic institutions and local economic development.	2017-2019	Eight Website	N/A
Europe					
Kela Basic Income Experiment	Finland	Two-year experiment involving 2,000 unemployed citizens aged 25-28 selected at random and paid a basic income of €560 per month.	2017-2018	Kela Website	N/A
Wetten wat werkt ("See What Works") Study	Netherlands	Social assistance claimants will receive monthly stipends and be divided into groups. One group will have no conditions, the others will have conditions.	Currently in planning phase (was meant to start March 2017, but	University of Utrecht Website	N/A

Program Name	Country	Description	Dates	Selected Studies/Sources	Findings Included in Appendix?
			has been delayed)		
Livorno Pilot Study	Italy	Italian city of Livorno pilot program, initially granting 100 families (later expaned to 200 families) $537.	2016-Present	Basic Income Earth Network - No official sources found.	N

Note 1: Some of the programs and studies classified as UBIs in this table possess most, but not all of the attributes of a "full UBI" as defined in Marinescu, 2017, p. 7. Many programs were identified from the following source: Pasma, C. (2014). Basic Income Programs and Pilots. Ottawa: Basic Income Canada Network.
Note 2: Colombino (2015) did not specify which UBI programs are included in their analysis.