

**HPTN 068**  
**Effects of cash transfer for the prevention of HIV in young South African women**  
**DAIDS ID: 11710**

**A Study of the HIV Prevention Trials Network  
Non-IND Study**

**Sponsored by:**

US National Institutes of Health:  
US National Institute of Mental Health  
US National Institute of Allergy and Infectious Diseases

**Protocol Chair:**

Audrey Pettifor, PhD, MPH  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina, USA

**Version 2.0**  
**Final Version**

**26 October 2012**

# HPTN 068

## TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS .....	iv
PROTOCOL TEAM ROSTER .....	v
PROTOCOL SUMMARY .....	ix
1.0 INTRODUCTION .....	1
1.1 Background .....	1
1.2 Preliminary Studies .....	3
1.3 Study Rationale .....	5
2.0 STUDY OBJECTIVES AND DESIGN .....	6
2.1 Primary Objectives .....	6
2.2 Secondary Objectives .....	6
2.3 Study Design .....	6
2.4 Theoretical Underpinnings .....	7
3.0 STUDY POPULATION .....	8
3.1 Eligibility Criteria .....	8
3.2 Recruitment and Screening .....	9
3.3 Randomization .....	10
3.4 Participant Retention .....	10
3.5 Participant Withdrawal .....	11
4.0 DESCRIPTION OF INTERVENTION .....	11
4.1 Conditional Cash Transfer Intervention .....	11
4.2 Distribution of the Conditional Cash Transfers .....	12
4.3 Monitoring School Attendance .....	12
5.0 STUDY PROCEDURES .....	12
5.1 CCT Study Visit Procedures – Parent/Legal Guardian .....	13
5.2 CCT Study Visit Procedures – Young Women .....	13
5.3 Qualitative Assessments .....	15
6.0 DATA ASSESSMENTS AND ADVERSE EVENTS .....	15
6.1 Quantitative Assessments .....	15
6.2 Qualitative Assessments .....	16
6.3 Process Evaluation .....	17
6.4 Language of Interviews .....	17
6.5 Quality Assurance .....	18
6.6 Data Extraction and Back-up .....	18
6.7 Adverse Events and Social Harms .....	18
7.0 STATISTICAL CONSIDERATIONS .....	19
7.1 General Design .....	19
7.2 Study Endpoints .....	19
7.3 Other Key Measures .....	20
7.4 Accrual .....	20
7.5 Sample Size and Power Calculations .....	21
7.6 Analysis Plan .....	22
7.7 Blinding .....	25
7.8 Data Safety Monitoring .....	25
8.0 HUMAN SUBJECTS CONSIDERATIONS .....	25
8.1 Ethical Review .....	25
8.2 Informed Consent .....	26
8.3 Risks and Measures to Minimize Risk .....	27
8.4 Benefits .....	29

8.5	Incentives .....	29
8.6	Confidentiality.....	29
8.7	Reports of Sexual Abuse .....	30
8.8	Study Discontinuation .....	31
9.0	LABORATORY TESTING AND SPECIMENS .....	31
9.1	Local Laboratory Testing .....	31
9.2	Network Laboratory Specimens .....	32
9.3	Quality Control and Quality Assurance Procedures.....	32
9.4	Specimen Storage .....	33
9.5	Biohazard Containment.....	33
9.6	Sample Shipping .....	33
10.0	ADMINISTRATIVE PROCEDURES .....	34
10.1	Protocol Registration.....	34
10.2	Study Activation.....	34
10.3	Study Coordination .....	34
10.4	Study Monitoring .....	35
10.5	Protocol Compliance .....	35
10.6	Investigator's Records .....	35
10.7	Use of Information and Publications .....	36
11.0	REFERENCES .....	37
	APPENDICES.....	39
I.	Schedule of Study Visits and Procedures	
A.	Schedule of Visits and Procedures – Conditional Cash Transfer (Parent/Legal Guardian)	
B.	Schedule of Visits and Procedures – Conditional Cash Transfer (Young Women)	
II.	Sample Informed Consents	
A.	Assent for young women less than 18 years of age	
B.	Consent for young women aged 18 years and over	
C.	Consent for parent/legal guardian for Young Woman	
D.	Assent for qualitative study for young men and women less than 18 years	
E.	Consent for qualitative study for young men and women 18 years and over	
F.	Parental consent for young men in focus group	
G.	Consent for focus groups and/or in-depth interviews among community members	
III.	Map of the AHDSS site	

## LIST OF ABBREVIATIONS AND ACRONYMS

ACASI	Audio Computer-Assisted Self Interviewing
AE	Adverse Event
AHDSS	Agincourt Health and Demographic Surveillance System
AIDS	Acquired Immunodeficiency Syndrome
AOR	Adjusted Odds Ratio
CAG	Community Advisory Group
CAPI	Computer Assisted Personal Interviewing
CCT	Conditional Cash Transfer
CDC	Center for Disease Control
CI	Confidence Interval
CRF	Case Report Form
DAIDS	Division of AIDS
DBS	Dried blood spots
DSMB	Data and Safety Monitoring Board
EC	Ethics Committee
EQA	External Quality Assurance
FGD	Focus Group Discussion
HDSS	Health and Demographic Surveillance System
HIV	Human Immunodeficiency Virus
HSV-2	Herpes Simplex Virus Type 2
HPTN	HIV Prevention Trials Network
IATA	International Air Transport Association
IDI	In-depth Interview
IOR	Investigator of Record
IRB	Institutional Review Board
LDMS	Laboratory Data Management System
LINC	Learning, Information Dissemination and Networking with the Community Office
LL	Local laboratory
NIAID	National Institutes of Allergy and Infectious Diseases
NIH	(US) National Institutes of Health
NIMH	(US) National Institute of Mental Health
NL	(HPTN) Network Laboratory
PSM	Project Site Manager
QA	Quality Assurance
QC	Quality Control
RR	Relative Risk
SAE	Serious Adverse Event
SDMC	(HPTN) Statistical and Data Management Center
SES	Socioeconomic Status
SOP	Standard Operating Procedure
SSP	Study-specific Procedures
STI	Sexually Transmitted Infection
UNC	University of North Carolina
U.S.	United States
WHO	World Health Organization
WRHI	Wits Reproductive Health and HIV Institute

## HPTN 068

### Effects of cash transfer for the prevention of HIV in young South African women

#### PROTOCOL TEAM ROSTER

##### Lead Investigators

Audrey Pettifor, PhD, MPH  
Assistant Professor  
University of North Carolina at Chapel Hill  
Department of Epidemiology  
McGavran Greenberg Bldg  
Campus Box 7435  
Chapel Hill, NC 27599  
Phone: 919-966-7439  
Fax: 919-966-2089  
Email: apettif@email.unc.edu

Xavier Gomez- Olive, MD  
HIV and Chronic Care Theme Leader, Adult Health  
and Wellbeing Theme Leader  
MRC/Wits Rural Public Health and Health  
Transitions Research Unit (Agincourt)  
Tintswalo Hospital  
Main Street, Acornhoek  
Bushbuckridge District  
Mpumalanga, 1360  
South Africa  
Phone: +27 13 795 5076 ext 128  
Fax +27 13 795 5076 (ask for fax)  
Email: xavier@agincourt.co.za

Catherine MacPhail, PhD  
Collaborative Research Network  
Room 261A Level 1 Botany Building S2  
University of New England  
Armidale 2350, NSW, Australia  
Phone: +61 (0)2 6773 3857  
Fax: +61 (0)2 6773 3283  
Email: cmacphai@une.edu.au

Kathleen Kahn, MD  
MRC/Wits Rural Public Health and Health  
Transitions Research Unit (Agincourt)  
School of Public Health,  
University of the Witwatersrand  
7 York Road, Parktown 2193, Johannesburg, South  
Africa  
Phone: +27 -11-717-2617  
Fax: +27-11-717-2084  
Email: kathleen.kahn@wits.ac.za

##### UNC

Suzanne Maman, PhD  
Assistant Professor  
University of North Carolina at Chapel Hill  
Gillings School of Global Public Health  
Department of Health Behavior and Health  
Education  
331 Rosenau Hall, CB 7440  
Chapel Hill, NC 27599  
Phone: 919-966-3901  
Fax: 919-966-2901  
Email: maman@email.unc.edu

Suchindran Chirayath, PhD  
Professor  
University of North Carolina at Chapel Hill  
Department of BioStatistics  
Carolina Population Center  
123 West Franklin Street  
Chapel Hill, NC 27516  
Phone: 919-966-1723  
Fax: 919-966-6638  
Email: suchi@bios.unc.edu

Harsha Thirumurthy, PhD  
Assistant Professor  
University of North Carolina at Chapel Hill  
Department of Health Policy and Management  
Carolina Population Center  
123 West Franklin Street  
Chapel Hill, NC 27516  
Phone: 919-966-7481  
Fax: 919-966-6638  
Email: harsha@unc.edu

Sudhanshu Handa, PhD  
Associate Professor  
University of North Carolina at Chapel Hill  
Department of Public Policy  
Carolina Population Center  
123 West Franklin Street  
Chapel Hill, NC 27516  
Phone: 919-843-4450  
Fax: 919-966-6638  
Email: shanda@email.unc.edu

Amanda Selin, MPH  
Project Manager  
University of North Carolina at Chapel Hill  
Carolina Population Center  
123 West Franklin Street  
Chapel Hill, NC 27516  
Phone: 919-966-2154  
Fax: 919-966-6638  
Email: aselin@unc.edu

Mary Jane Hill, MLIS  
Data Support/Programmer  
University of North Carolina at Chapel Hill  
Carolina Population Center  
123 West Franklin Street  
Chapel Hill, NC 27516  
Phone: 919-966-7004  
Fax: 919-966-6638  
Email: hill@unc.edu

### **WRHI**

Helen Rees, MD  
Executive Director  
Wits Reproductive Health and HIV Institute  
University of the Witwatersrand  
Johannesburg, South Africa  
Phone: +27-11-358-5300  
Fax : +27-11-358-5400  
Email: hrees@wrhi.co.za

Sinead Delany-Moretlwe  
Wits Reproductive Health and HIV Institute  
University of the Witwatersrand  
Johannesburg, South Africa  
Phone : +27-11-358-5300  
Fax : +27-11-358-5400  
Email : sdelany@wrhi.ac.za

### **NIH**

Susannah Allison, PhD  
Infant, Child, & Adolescent Research Programs  
Center for Mental Health Research on AIDS  
Div of AIDS & Health and Behavior Research, NIMH,  
NIH.  
6001 Executive Blvd, Rm 6206, MSC 9619  
Bethesda, MD 20892-9619  
Phone: 301-443-3952  
Fax: ~~301-401~~ 443-9719  
Email: allisonsu@mail.nih.gov

Paul Sato, MD  
DAIDS Medical Officer  
National Institute of Allergy and Infectious Diseases  
6700 B Rockledge Drive Rm. 5218  
Bethesda, MD 20892  
Phone: 301-435-3750  
Email: satop@niaid.nih.gov

### **MRC/Wits**

Stephen Tollman, MD  
Professor and Director  
MRC/Wits Rural Public Health and Health  
Transitions Research Unit (Agincourt)  
School of Public Health,  
University of the Witwatersrand  
7 York Road, Parktown 2193, Johannesburg, South  
Africa  
Phone: +27-11-717-2085  
Fax: +27 11 717 2084  
Email: stephen.tollman@wits.ac.za

Paul Mee  
Data Manager  
MRC/Wits Rural Public Health and Health  
Transitions Research Unit (Agincourt)  
Tintswalo Hospital  
Main Street, Acornhoek  
Bushbuckridge District  
Mpumalanga, 1360  
South Africa  
Phone: +27 13 795 5076  
Fax +27 13 795 5076 (ask for fax)  
Email: paul.mee@agincourt.co.za

Rhian Twine, MPH  
Community Liaison Officer  
MRC/Wits Rural Public Health and Health  
Transitions Research Unit (Agincourt)  
Tintswalo Hospital  
Main Street, Acornhoek  
Bushbuckridge District  
Mpumalanga, 1360  
South Africa  
Phone: +27-83-279-7573  
Fax +27 13 795 5076 (ask for fax)  
Email: rhian@agincourt.co.za

**LSHTM**

James Hargreaves, PhD  
Senior Lecturer  
Rm 409, Infectious Disease Epid. Unit  
London School of Hygiene and Tropical Medicine  
Keppel Street, London WC1E 7HT  
Phone : +44 20 7927 2955  
Skype: jameshargreaves7638  
Email: james.hargreaves@lshtm.ac.uk

**IFPRI**

Michelle Adato, PhD  
Senior Research Fellow  
Poverty, Health, and Nutrition Division  
International Food Policy Research Institute  
(IFPRI)  
2033 K St. N.W.  
Washington, D.C. 20006  
Phone: 202-494-0947  
Fax: 202-467-4439  
Email: m.adato@cgiar.org

**CORE**

Philip Andrew  
HPTN CORE, Sr, Research Clinician  
FHI 360, Science Facilitation Department  
Durham, NC 2713  
Phone: 919-544-7040, ext. 11213  
Fax: 919-544-0207  
Email: pandrew@fhi360.org

Deborah Hilgenberg, MPH  
HPTN CORE Protocol Specialist  
FHI 360, Science Facilitation Department  
2224 E NC Highway 54  
Durham, NC 27713  
Phone: 919-544-7040, ext. 11107  
Fax: 919-544-0207  
Email: dhilgenberg@fhi360.org

Erica Hamilton, MPH  
HPTN CORE Protocol Specialist  
FHI 360, Science Facilitation Department  
2224 E NC Highway 54  
Durham, NC 27713  
Phone: 919-544-7040, ext. 11295  
Fax: 919-544-0207  
Email: ehamilton@fhi360.org

**Network Laboratory**

Susan H. Eshleman, MD/PhD  
Professor, Pathology  
Director, HIV Genotyping Laboratory  
The Johns Hopkins Medical Institutions  
Ross Building 646  
720 Rutland Ave.  
Baltimore, MD 21205  
Phone: 410-614-4734  
Fax :410- 502-9244  
Email: seshlem@jhmi.edu

LeTanya Johnson-Lewis  
Johns Hopkins University  
600 N Wolfe Street  
Pathology Building Room 311C  
Baltimore, MD 21287  
Phone: 410-614-0638  
Fax: 410-614-6739  
Email: ljohns18@jhmi.edu

**SDMC**

Jim Hughes, PhD  
HPTN SDMC Statistician  
University of Washington  
Mailstop 359931  
Seattle, WA 98195  
Phone: 206-744-3633/206-616-2721  
Fax: 206-744-3693/206-616-2724  
Email: jphughes@u.washington.edu

Lynda Emel, PhD  
HPTN SDMC Project Manager  
SCHARP-FHCRC  
1100 Fairview Avenue N, LE-400  
PO Box 19024  
Seattle, WA 98109  
Phone: 206-667-5803  
Fax: 206-667-4812  
Email: lemel@scharp.org

Diana Lynn  
FHCRC-SCHARP  
1100 Fairview Avenue N, LE-400  
PO Box 19024  
Seattle, WA 98109-1024 USA  
Phone: 1-206-667-4980  
Fax: 1-206-667-4812  
E-mail: dlynn@scharp.org

## **HPTN 068**

### **Effects of cash transfer for the prevention of HIV in young South African women DAIDS ID: 11710**

**Final Version 2.0**

**26 October 2012**

### **A Study of the HIV Prevention Trials Network**

**Sponsored by:**

**US National Institute of Allergy and Infectious Diseases**

**US National Institute of Mental Health**

**US National Institutes of Health**

I, the Site Investigator of Record, agree to conduct this study in full accordance with the provisions of this protocol. I agree to maintain all study documentation for a minimum of three years from the end of the study, unless directed otherwise by the HIV Prevention Trials Network (HPTN) Coordinating and Operations Center (CORE). Publication of the results of this study will be governed by HPTN and DAIDS policies. Any presentation, abstract, or manuscript will be made available by the investigators to the HPTN Manuscript Review Committee and DAIDS for review prior to submission.

I have read and understand the information in this protocol and will ensure that all associates, colleagues, and employees assisting in the conduct of the study are informed about the obligations incurred by their contribution to the study.

---

Name of Site Investigator of Record

---

Signature of Site Investigator of Record

---

Date



## HPTN 068

# Effects of cash transfer for the prevention of HIV in young South African women

### PROTOCOL SUMMARY

<b>Purpose:</b>	The overall purpose of this study is to determine whether providing cash transfers to young women and their household, conditional on school attendance, reduces young women's risk of acquiring Human Immunodeficiency Virus (HIV). The overall goal of the Conditional Cash Transfer (CCT) intervention is to reduce structural barriers to education with the goal of increasing school attendance of young women, thereby decreasing their HIV risk.
<b>Design:</b>	A Phase III individually randomized design for assessing conditional cash transfers.
<b>Study Population:</b>	<ol style="list-style-type: none"><li>1) Conditional Cash Transfer:<ul style="list-style-type: none"><li>• Young women ages 13-20 years, living in approximately 24 villages in South Africa who are enrolled in high school grades 8, 9, 10 or 11 during recruitment.</li><li>• The parents/legal guardians of these young women in the CCT.</li></ul></li><li>2) Focus group discussions (FGDs), in-depth interviews (IDIs), and Case Studies:<ul style="list-style-type: none"><li>• Young women and young men in the same school grades of young women in the study.</li><li>• Teachers/educators, and community members living in the study villages.</li></ul></li></ol>
<b>Study Size:</b>	<ol style="list-style-type: none"><li>1) Approximately 2500 young women.</li><li>2) Approximately 2500 parents/legal guardians (only 1 parent/guardian) of the young women.</li><li>3) Qualitative data collection activities to occur annually or biannually.<ul style="list-style-type: none"><li>• Approximately 30 case studies with young women in study (both arms).</li><li>• Focus group discussions: approximately 12 groups of teachers/educators; approximately 18 groups of study girls; approximately 12 groups of young men in grades 8-11.</li></ul></li></ol>
<b>Intervention:</b>	In the intervention, young women and their households will be randomized in 1:1 ratio to receive monthly cash transfer payments, conditional on the young woman attending school, or to the control arm. Young women will be recruited at the beginning of grades 8 through 11 in the first year of the study.

FGDs and case studies with study participants, young men and teachers will add contextual data for understanding the acceptability and effectiveness of the intervention.

**Duration and Follow-up:** The study will last approximately 4 years. Assessments for the young women and parent/legal guardians will take place at baseline and at 12, 24, and 36 months post-baseline (except for young women who are in the 11<sup>th</sup> grade at enrollment who will be in the study for only two years). An additional assessment will be conducted near the end of the school year for young women who are graduating or at the end of the school year December 2014, whichever comes first. Young women whose most recent visit date is after September 30 will not have this additional Graduation Visit.

**Primary Objectives:** 1) To determine whether young women who are randomized to receive CCTs conditional on school attendance have a lower incidence of HIV infection over time compared to young women who are not randomized to receive cash transfers.

**Secondary Objectives:** 1) To determine whether young women who are randomized to receive CCTs conditional on school attendance have a lower incidence of Herpes Simplex Virus type 2 (HSV-2) infections over time compared to young women who are not randomized to receive cash transfers.

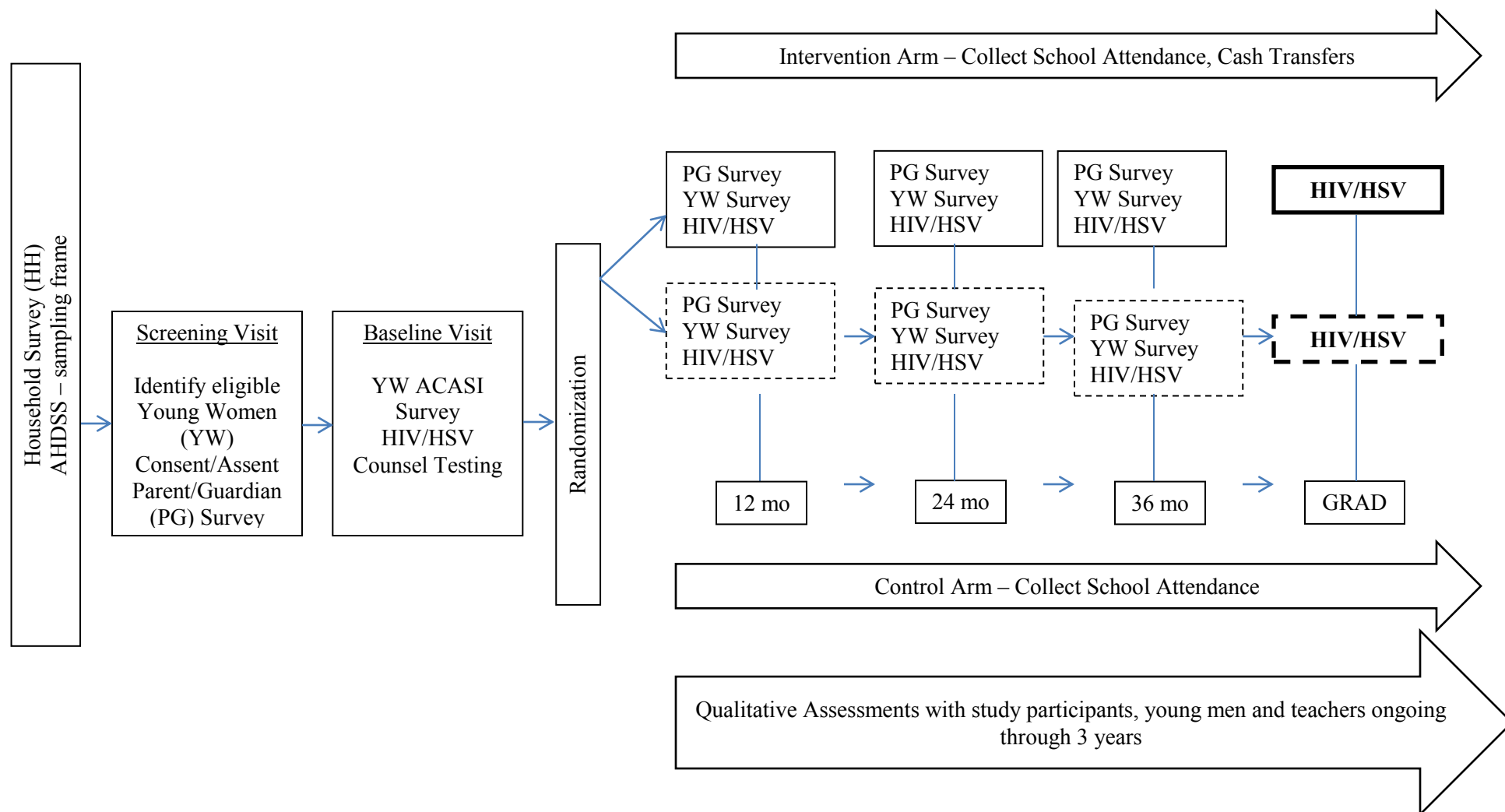
2) To determine whether young women who receive the CCTs report less unprotected sex, fewer number of sexual partners, younger male partners, an older age of coital debut, a lower incidence of self-reported pregnancy, and greater school attendance compared to young women who do not receive the cash transfers.

**Primary Endpoint:** HIV incidence

**Secondary Endpoints:**

- HSV-2 incidence
- Number of self-reported unprotected sex acts in past 3 months
- Number of sexual partners
- Age difference with partner
- Age of coital debut
- Self-reported pregnancy
- School attendance

## OVERVIEW OF STUDY DESIGN AND RANDOMIZATION SCHEME



## 1.0 INTRODUCTION

This protocol describes research to examine the effect of an innovative HIV prevention intervention that will address structural factors contributing to young women's increased vulnerability to HIV infection. The overall goal of this study is to determine whether providing cash transfers to young women and their households, conditional on school attendance, reduces the young women's risk of HIV acquisition.

### 1.1 Background

Throughout sub-Saharan Africa, young women are at extremely high risk of HIV acquisition; in many African countries more than 30% of young women are infected with HIV.<sup>1,2</sup> In South Africa, young women are infected with HIV at 3-4 times the rate of young men; by the time a woman reaches age 21, she has a 1 in 3 chance of being infected.<sup>1</sup> Preventing HIV infections in young women is essential to both stopping the cycle of new infections and dramatically reducing the cost of HIV treatment and its impact on society. Attention to structural factors, such as education and poverty are key to preventing transmission in young women.

School attendance can reduce young women's vulnerability to HIV infection. Among young women with one lifetime partner in South Africa, one of the strongest modifiable risk factors found to be associated with HIV infection is education; young women who did not complete high school are almost 4 times more likely to be HIV-infected compared to those who completed high school.<sup>3</sup> Investment in education is vital, because its impact extends beyond HIV infection to other critical health and development outcomes. Research has demonstrated that better educated women are more likely than their less educated peers to delay coital debut, to use condoms more often, to delay marriage and childbearing, to have fewer children and healthier babies, and to enjoy better earning potential.<sup>4</sup> Although much of the data on education and HIV is cross-sectional there are some emerging and seminal papers that have looked at the effects of education and HIV longitudinally. A recent systematic review by Hargreaves et al.<sup>5</sup> indicates a protective association between higher education and HIV infection, particularly as epidemics mature. In Zambia, young women with more education were less likely to be HIV infected than those with less education and declines in infection rates from 1995-2003 were greatest in young women with the most education.<sup>6</sup> Similarly in Uganda, HIV infection rates over a ten year period declined most rapidly in young women with a secondary school education.<sup>7</sup> Using Health and Demographic Surveillance System (HDSS) data from South Africa, Barnighausen et al also found that each additional year of education reduced the hazard of HIV infection by 7% adjusting for sex, age, wealth, household expenditure, rural vs. urban/periurban residence, migration status and partnership status.<sup>8</sup>

Nevertheless, girls and young women face numerous barriers to attending school.<sup>4</sup> For many poor families the costs associated with school make it an economic impossibility. In South Africa, 65% of young people who were not in school indicated that they did not have enough money to continue their education.<sup>4</sup> Poverty and its associated consequences erode the opportunities for youth to attend school, creating a vicious cycle of destitution by undermining the household's capacity to accumulate the human capital necessary to break the cycle of poverty.<sup>9</sup> In addition, young women are often taken out of school to find employment to support the family, to care for family members or because of unintended pregnancy.

Reducing economic barriers to school, through the provision of a cash stipend conditional on school attendance, increases school attendance. Children in South African households who receive government social welfare grants are more likely to attend school, and the observed effects are greater for young women than young men.<sup>10</sup> Cash transfers to families that are conditional upon engaging in behaviors deemed socially beneficial have been used in other regions to encourage children to stay in school. In Mexico, the Progres/Opportunidades program, which provides CCTs to poor families to send their children to school, has found that the program increases school enrollment, particularly for girls.<sup>11</sup> In South Africa, the greatest benefit of social welfare grants on educational outcomes appears to be for young women from the poorest households.<sup>10</sup> A study in Kenya found that reducing economic barriers to school attendance by paying for girls school uniforms reduced reported pregnancy levels among those girls.<sup>12</sup> There is limited experience with CCT programs in Africa, though they are being piloted, and almost no information on their effect on HIV risk.

Conditionality requires some degree of co-responsibility on the part of the recipient of the grant. These co-responsibilities may be enrolling a child in school and assuring that they maintain a certain attendance rate, participation in preventative health care clinic visits, e.g., for receiving childhood vaccinations, or attending growth monitoring. Cash transfers may also be unconditional, in which there are no requirements on the part of recipients, as is the case for South Africa's Child Support Grant (CSG). South Africa's CSG is currently available to families of young children based on means testing (economic need). Currently, eligibility for the CSG is limited to children aged up to 15 years, with plans to extend eligibility through 17 years by 2012. This year the South African government passed a new policy requiring CSG recipients to demonstrate that they are attending school, though there are no sanctions for non-attendance or drop-out. While many aspects of administering this schooling requirement are still being worked out, this change in policy has greatly increased the relevance and timeliness of our study, which has the potential to inform policy decisions and provide lessons about expansion of the CSG to older age groups and the addition of conditionality. For example, it will provide evidence on the feasibility of implementing school attendance monitoring in South African schools, which will be a key challenge to government efforts to add an attendance based conditionality to the payment.

Innovative approaches to HIV prevention for young women in high prevalence settings are urgently needed. HPTN 068 addresses this need in a number of ways: First, although CCTs have been used widely in the fields of economics and development and for improving other health outcomes, their use for HIV prevention is new. There is no published information on the impact of CCTs on HIV prevention. South Africa has a strong social welfare system and social grants are paid to millions of South Africans monthly. Paying young women (and their families) to stay in school is a positive development goal that has implications beyond HIV prevention. If such an intervention were found to be effective, South Africa has the means to implement such a policy nationally. Second, the randomized, controlled design of this study will strengthen the evidence for causality between the intervention and study outcomes; there are few examples of randomized trials of school attendance and HIV prevention, the majority of data available on the association between school attendance and HIV risk are based on cross-sectional data. Third, the process of collecting longitudinal data from young women as they age through one of the highest risk time periods will provide an opportunity to collect vital information on the frequency of young women's sexual activity, evaluation of causal relationships between risk and resilience factors and sexual risk outcomes. The study will allow researchers in the HIV Prevention Trials Network (HPTN) to ask important questions about the feasibility and acceptability of a variety of biomedical HIV prevention approaches to determine how these might change over time during this critical period.

## 1.2 Preliminary Studies

This protocol represents a collaboration between the University of North Carolina (UNC) at Chapel Hill and two South African institutions based at the University of the Witwatersrand in South Africa, the Wits Reproductive Health and HIV Institute (WRHI) based in Johannesburg and the Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (MRC/Wits Agincourt Unit) which has offices in both Johannesburg and rural Agincourt, Mpumalanga (northeastern South Africa). The research has evolved from the previous work of a multidisciplinary team of researchers who have conducted numerous epidemiological, behavioral, and HIV prevention interventions and research both domestically and internationally.

The protocol team has extensive experience conducting qualitative and quantitative research of HIV risk factors among South African youth. In 2002 and 2003, Drs. Pettifor and MacPhail conducted two large household surveys of HIV and sexual behavior among youth in South Africa; a nationally representative household survey (n=11,904) and a community based study (n=8,735).<sup>1, 13</sup> These studies have resulted in over 20 published, submitted or in-press manuscripts on HIV and sexual behavior among young people in South Africa. Key findings of this research are described below.

We found that young women were 3-4 times more likely to be HIV-infected than their male counterparts: HIV prevalence among 15-24-year-olds in the national survey was 15.5% among females, compared to only 4.8% among males.<sup>1</sup> Strikingly, we found that HIV prevalence increased rapidly among young women, from 4% among 15-year-old women to over 30% by the age of 21 years.<sup>1</sup> In addition, we have reported extremely high levels of HIV acquisition in young South African women with per-partnership HIV transmission probabilities approaching nearly 100%.<sup>14</sup>

We found that young South African women do not report engaging in high-risk sexual activity, despite the incredibly high incidence and prevalence of HIV among young women. The median age of first sex in our national sample of 15-24 year olds was 17 for young women and 16 for young men<sup>1</sup>; 7.8% of young women reported having sex before the age of 15. Condom use at last sex was reported by 48% of young women and 57% of young men. The mean number of lifetime partners reported was 2.3 among young women versus 4.9 among young men. Among sexually active young women, the mean and median age of first pregnancy was 18 years. Only 2% of young women reported ever having engaged in transactional sex. In a comparison of the sexual behaviors of young people from South Africa and the United States (U.S) using nationally representative household surveys, we found that young people, particularly young women, in the U.S. reported earlier ages of first sex, less condom use and more sex partners than their South African peers.<sup>15</sup>

**Table 1.** Association between school attendance and HIV awareness, sexual behavior and HIV infection among 3682 females aged 15-19 from South Africa, 2003

Variable	Currently Attending School		Dropped out or Never Attended		Unadjusted Model	Adjusted for age, province and urban/rural
	N	%	N	%	POR (95% CI)	aPOR (95% CI)
<b>Total N</b>	<b>2800</b>		<b>882</b>			
Knows ways to prevent HIV infection	2672	95.5	814	92.3	0.97 (0.93, 1.01)	0.97 (0.94, 1.00)
Lack of parental communication	1448	52.0	503	56.5	1.09 (0.92, 1.28)	1.02 (0.84, 1.23)
Not had an HIV test	2484	89.2	650	74.4	0.83 (0.75, 0.93)	0.85 (0.74, 0.96)
Ever had sex	1075	36.5	666	76.3	2.09 (1.83, 2.38)	1.47 (1.32, 1.62)
Unwanted sex at debut*	77	7.1	37	6.2	0.87 (0.46, 1.66)	0.93 (0.50, 1.73)
More than 1 partner during previous year*	161	17.0	94	11.6	0.68 (0.42, 1.12)	0.83 (0.55, 1.26)
Early debut*	159	13.2	115	16.3	1.24 (0.69, 2.24)	2.40 (1.66, 3.48)
Ever pregnant	207	17.6	351	54.1	3.07 (1.90, 4.96)	2.41 (1.70, 3.42)
Pregnant < 18	150	11.3	221	33.0	2.93 (1.28, 6.23)	3.19 (2.06, 4.96)
Partner age difference*	105	8.6	121	15.8	1.84 (1.28, 2.66)	1.68 (1.14, 2.49)
No condom use at least sex*	428	34.7	400	58.2	1.67 (1.22, 2.31)	1.38 (1.10, 1.72)
HIV-infected	180	5.8	121	11.4	1.97 (1.38, 2.80)	1.24 (0.83, 1.86)
*Among those who had previously had sex						

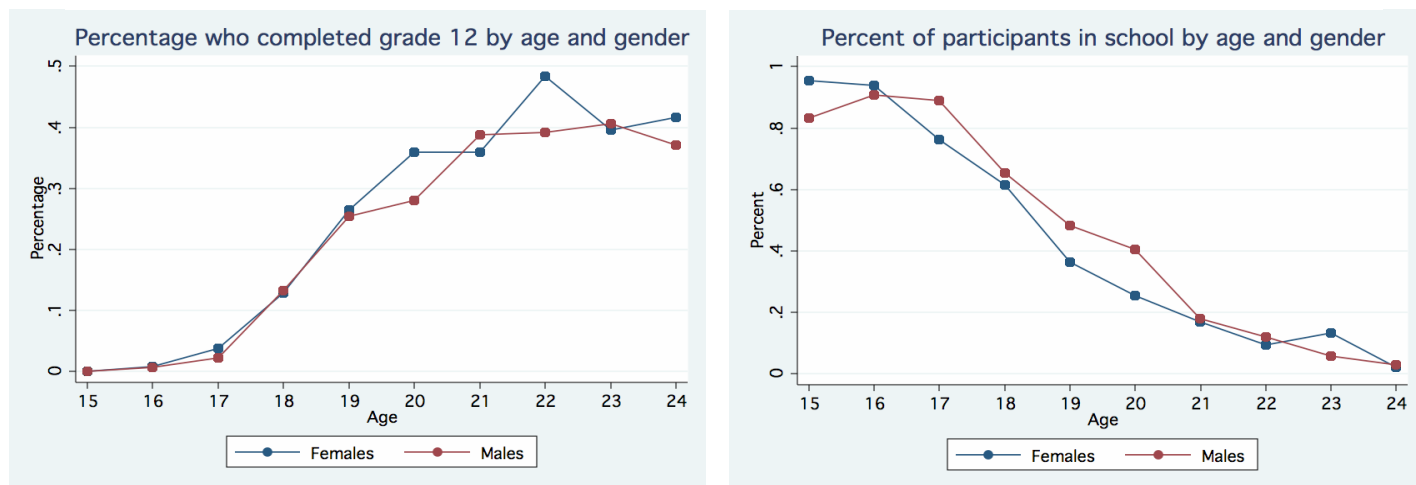
We found that structural risk factors are important in increasing HIV infection in young South African women. We have also conducted analyses to examine the effects of school attendance for 15-19 year olds using our national survey data. School attendance is associated with a number of behaviors that may reduce the risk of HIV infection for young women. Young women who were not in school were significantly more likely to have ever had sex, to report an early age of first sex, to have ever been pregnant, have been pregnant before the age of 18, to have an older partner, to not use condoms at last sex, and to be HIV-infected (Table 1). In a recent analysis of risk factors for HIV infection in young South African women with one reported lifetime sex partner, having not graduated from high school was the only factor that was significantly associated with HIV infection.<sup>3</sup> Young women who had not graduated from high school were four times more likely to be HIV-infected compared to young women who had completed high school.<sup>3</sup>

Our national survey data showed that school attendance declines rapidly with age; fewer than 80% of young women are still in school at age 17, and only about 60% of young women are in school by age 18 (Figure 1). Overall, 74% of young women ages 15-19 in our survey reported currently attending school (primary or secondary). School repetition is common in South Africa, so that more young people are in school at an older age than would be expected in the U.S. Importantly, only 40% of 20-24 year-old women had completed grade 12 (Figure 1).

We found that young women who reported having older male partners were at increased risk of HIV infection. Young women ages 15-19 years who had a partner 5 or more years older were at significantly increased risk of being HIV-infected, while for those ages 20-24 years who had partners

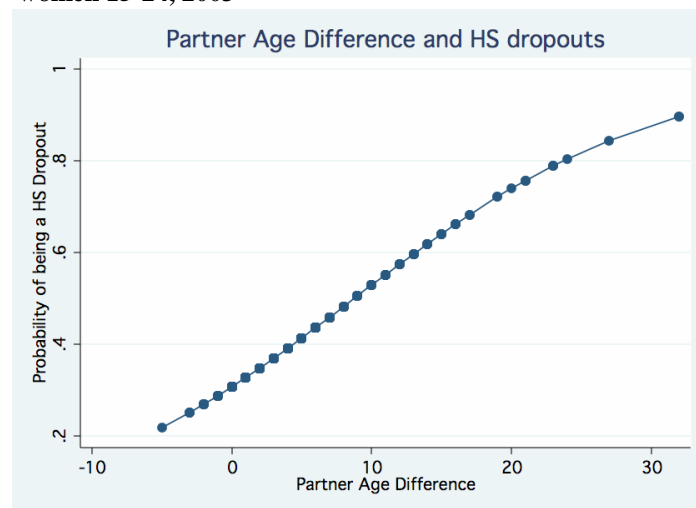
just 1-4 years older increased their risk.<sup>1</sup> This suggests that what is most important with regard to age differences and HIV risk for young women is having a sex partner in the age group with the highest HIV prevalence.

**Figure 1. School attendance and high school completion for young South African men and women, 2003**



We also found that young women ages 15-19 were significantly less likely to be in school if they had an older partner, and that as the age difference with the partner increased, the probability of being a high school dropout increased (see Figure 2).

**Figure 2. High school drop-out by partner age in South African women 15-24, 2003**



### 1.3 Study Rationale

An intervention that reduces HIV incidence among young women living in high prevalence areas has great potential to significantly alter the epidemic trajectory. It is estimated that there are 1500 new HIV infections in South Africa each day.<sup>16</sup> The vast majority (~90%) of new HIV infections among South African young people occur in women.<sup>16</sup> Preventing new infections in this population has the potential to stop the cycle of new infections and dramatically reduce the cost of HIV treatment and impact on society. Providing CCTs to families to help young women attend school and thus be more likely to complete their high school education not only has the potential to protect them from HIV infection, but also to provide them with important skills that will improve their economic prospects and future lives. The immediate opportunity costs of sending a young woman to school may prevent families from appreciating the longer-term benefits of education, but providing cash transfers conditional on school attendance provides an immediate, tangible benefit of school attendance. Further, providing cash transfers for school attendance may also provide young women with an incentive to succeed or stay safe in an environment where the long-term benefits of such outcomes may be outweighed by short-term benefits associated with dropping out of school or engaging in risky behavior.



We are sensitive to the need to develop interventions that can be brought to scale in South Africa if they are found to be effective. If CCTs reduce HIV risk, the intervention could be scaled up nationally through a change in policy. South Africa currently provides various monthly social welfare grants to over 5 million individuals and is looking for ways to expand the program—there is current policy discussion to consider the role of conditioning the child support grant on school attendance.<sup>10</sup> Conditioning is indeed mentioned in current policies, but such conditionalities have never been enforced.

## **2.0 STUDY OBJECTIVES AND DESIGN**

### **2.1 *Primary Objectives***

To determine whether young women who are randomized to receive cash transfers conditional on school attendance have a lower incidence of HIV infection over time compared to young women who are not randomized to receive cash transfers.

### **2.2 *Secondary Objectives***

- 1) To determine whether young women who are randomized to receive CCTs conditional on school attendance have a lower incidence of HSV-2 infections over time compared to young women who are not randomized to receive cash transfers.
- 2) To determine whether young women who receive the CCTs report less unprotected sex, fewer number of sexual partners, younger male partners, an older age of coital debut, a lower incidence of self-reported pregnancy, and greater school attendance compared to young women who do not receive the cash transfers.

### **2.3 *Study Design***

This protocol is a Phase III individually randomized design for assessing conditional cash transfers among young women in South Africa. The intervention involves individually randomizing the households of young women to receive a monthly cash transfer, conditional on the young woman attending school. This study will be situated in the Agincourt area of the rural Bushbuckridge Sub district of the Mpumalanga Province in South Africa. The MRC/Wits Agincourt Unit runs an Agincourt Health and Demographic Surveillance System (AHDSS) in this area. The Schematic on page *xi* provides an overview of the study design and flow.

Young women who are found to be HIV infected at baseline will not be excluded. This is due to a number of reasons: 1) excluding these young women would very likely disclose their status to family and community and potentially cause serious social harm; 2) these participants will contribute to some of our secondary endpoints (number of partners, acts of unprotected sex, self-reported pregnancy) and general knowledge of the sexual behavior of girls who are HIV positive; 3) we may discover that cash transfers will improve school attendance in this most vulnerable population; 4) by being enrolled in our study, the young women are more likely to be linked to care and treatment; and 5) if the South African government does adopt a policy of conditional cash transfer for school attendance, the policy will not exclude HIV infected individuals; so our intervention will likely mimic the future policy.

It is estimated from the 2009 AHDSS data that there are approximately 7421 young women ages 13-20 living in the AHDSS site and that 3677 young women may be in grades 8, 9, 10 or 11 at the beginning of 2011, based on reporting of school enrollment by household heads (note: this is likely an underestimate based on a survey conducted in the 22 high schools in the area by the study team in 2009 reporting that there are approximately 3700 girls in grades 8-10 alone). The MRC/Wits Agincourt Unit is already planning to expand the AHDSS into villages that border the site next year. This will allow for inclusion of more young women in the study grades if needed. We will use the AHDSS as the primary platform from which we will identify and recruit eligible households and young women; other sampling strategies may be used if needed (i.e., school enrollment rosters).

Those randomized to the CCT arm and their households will be provided a monthly cash transfer conditional on school attendance for 3 years or until the expected completion of high school (grade 12). NOTE: girls who are in the 11<sup>th</sup> grade at enrollment will be in the study only 2 years, regardless of school completion. To examine the effect of the CCTs, young women will be interviewed at baseline (prior to randomization) and then every 12 months until the end of the intervention and will be tested for HIV and HSV-2 infection at baseline (prior to randomization) and then every 12 months until the end of the intervention or until the first confirmed positive test. Additionally, all young women whose anniversary date of enrollment is prior to October 1 will have a Graduation Visit near the time of school completion, at which she will be tested for HIV and HSV-2. The head of household for each young woman will also be interviewed at baseline and then every 12 months until the end of the intervention (2-3 years post-baseline or completion of high school) to assess socioeconomic status (SES) and attitude to school attendance amongst other factors.

Finally, we will conduct case studies with young women and their households enrolled in the study and focus group discussions (FGD) with young women, teachers, and young men in the study villages to understand the context of the intervention and to document the process of program implementation and change.

## **2.4 Theoretical Underpinnings**

Our intervention is guided by both the social ecological theory of behavior and primary socialization theory.<sup>17</sup> The social ecological theoretical framework conceptualizes individual behavior as a result of the social contexts in which the individual is embedded. Therefore, HIV prevention interventions must take account of different levels of influence if they are to be successful in reducing the risk of HIV infection. An individual's ability to practice safer sex is influenced by multiple factors beyond the individual including the dyad/small group, the community, and the cultural/social. Therefore, interventions must take the influences of these factors into account.<sup>18-21</sup> Given our research findings on risk factors for HIV infection in young women, our intervention pays particular attention to risk factors at the household level (structural factors: poverty and education).

We hypothesize that the CCT will decrease HIV risk by keeping young women in school. Primary Socialization Theory<sup>22</sup> provides a developmental, theoretical framework for integrating three key socialization forces that influence HIV risk: school, peers (including partners), and family.

The interaction between these three factors is central to our proposed intervention, and guides hypothesis generation as illustrated below.

Our preliminary research supports the importance of school in reducing a number of HIV-related risk behaviors. Young people spend significant amounts of their time in school, where they gain skills and capacities (e.g., self-efficacy, one of our hypothesized mediators) to prepare them for the transition to adulthood<sup>23</sup>. We will measure a number of important elements related to school, including school attendance. In addition to direct effects through the transmission of values and the development of personal skills, school attendance increases the likelihood of exposure to prosocial peers.

Peers, including romantic/sex partners, play an important role in influencing young people's sexual behaviors through the transmission of norms (e.g., gender roles) and the provision of social rewards (e.g., status, popularity). We will measure peer norms for school attendance, HIV risk behaviors, and gender. We also believe that girls in school will have different partners than those not in school and this may influence HIV risk as well.

Families and parents/legal guardians are the third key socialization agent and are an important element of our intervention. The CCT arm will receive the cash transfers conditional on the young woman attending school. Given this, understanding the relationship between the family/parent/legal guardian and the young person attending school (or not) is key. We will administer a questionnaire with the parent/legal guardian in both study arms. We will measure important family level variables that may influence the young woman's school attendance (e.g., SES, parents' education) and sexual behavior (e.g., parental monitoring) during these interviews. We hypothesize that families who receive cash transfers will influence the young woman to attend school more than families who do not have a financial incentive for the young woman to attend school.

### **3.0 STUDY POPULATION**

We will conduct this study in the Agincourt catchment area of the rural Bushbuckridge Municipality in the Mpumalanga province of South Africa. The site is located about 500 km northeast of Johannesburg, near South Africa's border with Mozambique. There are approximately 21-22 secondary schools in the AHDSS catchment area. HIV prevalence based on antenatal clinic data in 2006 was 8% in 15-19 year olds, 21% in 20-24 year olds and over 40% among those ages 25-34.

#### **3.1 Eligibility Criteria**

##### **Inclusion criteria:**

- Female aged 13 to 20 years.
- Enrolled in grades 8, 9, 10 or 11 at the beginning of the study at schools in the AHDSS study site.
- Intending to continue to live in the study site until the end of the follow-up period.
- Be willing and able to consent/assent to all study procedures including HIV and HSV-2 testing.
- Able to read sufficiently to use ACASI.
- Have a bank or post office account or have documentation to be able to open a bank or post office account (i.e., birth certificate, South African National Identification Book, or passport and proof of residence). Post Office accounts will only be required for participants in the Intervention arm.
- Parent/Legal Guardian who lives with young woman, willing and able to consent to all study procedures including HIV and HSV-2 testing.

- Parent/Legal Guardian has a bank or post office account or has documentation to be able to open a bank or post office account (i.e. South African National Identification Book, or passport and proof of residence). Note that the account may be opened in the name of any adult who resides in the household with the young woman. Post office or bank accounts will only be required for participants in the Intervention arm.

#### **Exclusion criteria:**

- Pregnant by self-report at baseline.
- Married at baseline.
- No parent or legal guardian living in household.
- Any other reason that the staff feels would jeopardize the health or well-being of the participant or staff or would prevent proper conduct of the study.

NOTE: Young women who are HIV infected at baseline will **not** be excluded (see Section 2.3 above).

### ***3.2 Recruitment and Screening***

#### **Community Entry**

The MRC/Wits Agincourt Unit has an office responsible for community relations – the Learning, Information Dissemination and Networking with the Community Office (LINC). Prior to any field work starting, but after ethical clearance from all IRBs, this office will inform the host community about this study through the following:

1. Meetings with the local municipal offices and ward councilors.
2. Community meetings in each village.
3. Meetings with all education circuit offices.
4. Meetings with Head teachers and School governing bodies in all schools.

A brief presentation outlining the study will be presented at these meetings and the attendants will have an opportunity to raise concerns regarding the study. A soon to be established Community Advisory Group (CAG) will also screen the consent process and give advice to the team on recruitment strategies and possible concerns about the study. The study will also be presented to the Community Development Forums which have representation from each study village.

#### **Sample Selection**

We will use the AHDSS to identify households with young women who are in grades 8, 9, 10, or 11 at the start of recruitment (other means of recruitment may also be used as needed, such as recruiting directly from schools). Teams of fieldworkers will visit households to recruit study participants. The AHDSS has experienced field work teams that have been conducting household surveys for many years. These teams include a senior supervisor who oversees all data collection on a day-to-day basis.

The fieldworkers will approach households that have been identified from the AHDSS census database to inform them of the study and to recruit them for participation in the study. We will explain the study in detail to the parent/legal guardian and the young woman separately, and will obtain informed consent from the parent/legal guardian and consent/assent from the young woman. Both parental/legal guardian consent and young woman consent/assent will be required to participate. If a young woman

is under 18 years of age she will sign an assent form and if she is 18 or older she will sign a consent form. The young woman will be required to re-consent at age 18 if she is a minor at baseline. If after the consent procedure, the young woman or parent/legal guardian chooses not to participate, the refusal and reason for refusal will be recorded. Only one young woman per household may enroll in the study. If more than one eligible girl is in the household, girls in grades 9 will be selected first. If no young woman is in grade 9, then grade 8 is next selected, followed by grades 10 and 11 respectively. If there are more than 2 girls in the grades being used as the selection criterion, then young women will be randomly selected using the “next birthday” method.<sup>24</sup>

We will select one parent/legal guardian of each young woman to enroll in the CCT study. This person most likely will be the young woman’s mother or female legal guardian; this will be determined during the recruitment phase of the study. The parent/legal guardian must also provide consent and the household must have access to a bank account/post-office account or the necessary documentation to open an account.

If consent and consent/assent are obtained at household visit, young women will be given an appointment for a subsequent weekend for the baseline visit which will be conducted at a community venue.

### **3.3     *Randomization***

Once the young woman has completed the screening and baseline assessment, she will be randomized to the intervention or control arm using an algorithm developed by the statistical and data management center. Randomization will be stratified by village, with the goal of achieving a balanced randomization within each village. We will use an envelope system. Envelopes will be numbered sequentially and blocked so that balance is achieved within each block. In the pilot study girls indicated that they wanted to be able to choose their envelope (rather than take the next sequentially numbered envelope). Therefore, on each randomization day a subset of the envelopes that have been created for that village – corresponding to one or more blocks – will be offered to the participants. A participant may choose any of the envelopes offered. Any envelopes that remain unused at the end of the day will be included in the subset of envelopes offered on the next randomization day at that village. Thus, any imbalances that are created by allowing the girls to choose their envelope will be self-correcting. Site staff will be blind to the randomization assignment within each envelope; details will be included in the SSP.

### **3.4     *Participant Retention***

Contact information will be recorded for each enrolled young woman and the parent/legal guardian. This information will be updated at each visit. Study participants will be given a card listing the study’s telephone number should they need to inform study staff of a change of residence or if they have questions. With participant permission, reminder phone calls/text messages for follow-up interviews will be made. Every attempt must be made to locate participants who miss follow-up appointments. In situations when the participant cannot be reached by phone, project staff will attempt to locate them in person. Study staff will work closely with the AHDSS tracking teams who have excellent records on household movement and location.

The AHDSS, which has been running for more than 15 years, has a detailed sampling frame of all households in the study area and well-developed systems for contacting households, following the

study community, implementing household questionnaires, entering these questionnaires and associated quality assessments tools into databases, interacting with the community, and following standard operating procedures (SOPs), tracking forms, quality control (QC) forms and other necessary documents to ensure the quality and validity of the study. Given that the AHDSS has expertise in tracking all of the households in the study area, we expect that loss to follow up will be minimal.

### **3.5 Participant Withdrawal**

Young women will not be withdrawn from the study after enrollment if they drop out of school, get married, or become pregnant. Young women who drop out of school will be encouraged to continue participation with all follow-up visits. If she is in the intervention arm, neither the young woman nor the parent/legal guardian will receive cash transfers if the young woman drops out of school or gets married.

Participants may choose to withdraw from the study at any time. The Investigator of Record (IOR) also may withdraw participants from the study in order to protect their safety or staff safety.

Participants also may be withdrawn if the study sponsor, in-country or U.S. government or regulatory authorities, or site institutional review boards/ethics committees (IRBs/ECs) terminate the study prior to its planned end date.

Every reasonable effort will be made to complete a final assessment of participants who leave the study prior to the planned termination date. Study staff will record the reason(s) for all withdrawals from the study in participants' study records.

## **4.0 DESCRIPTION OF INTERVENTION**

### **4.1 Conditional Cash Transfer Intervention**

#### *Participants in the Intervention Arm*

Young women in the intervention arm will receive a cash stipend if they attend school. We will pay the households of young women a cash transfer of R200 per month (~USD 26) and the young woman will receive R100 per month (~USD 13), conditional on the young woman attending at least 80% of school days per month. Young women will be in the study for 3 years or until they finish 12th grade, whichever comes first, EXCEPT if they are in the 11th grade when they enroll. Eleventh graders will be in the study only two years. The female parent/legal guardian will receive the cash transfer when possible.

The value of the CCT was arrived at based on the South African Child Support Grant amount where R290 is paid per month to poor families. R300 is the amount the government might actually be able to support in the future IF this program were found to be effective. It was decided to give R100 to girls and R200 to the family because these girls are susceptible to reliance on male partners for cash. Thus, to reduce the girls' risk and to provide a personal incentive to attend school, and to encourage families to send the girl to school, the CCT has been divided. Another CCT program in Malawi conducted by the World Bank looking at CCTs for school attendance in young women is also providing cash to the girls and the family (personal correspondence, Berk Ozler).

Young women in the intervention arm will be required to attend school in order for them and their households to receive the payments. This means they must attend at least 80% of school days to get the payments. If a young woman misses more than 20% of the school days, she will not get the payment. For example, if there are 20 school days in March and a young woman misses more than four school days, she and her family will not receive the payment. In contrast, if she attends 80% or more of school days in a month, then she and her family will receive money about the middle of the following month (for attending in March they will be paid mid-April). If a young woman misses more than 20% of school days due to illness, we will allow her to still receive her payment if she can provide a doctor's note or clinic note to document that the additional missing days were due to illness. Free health clinics are within easy access to each village; if the girl brings a note to the study staff, it will be treated with the same confidentiality as a consent form and stored securely. The "excused" absence will be entered into the attendance database thereby allowing payment.

A young woman is eligible to receive R100 per month for a maximum of 36 months (or 24 months if 11<sup>th</sup> grade at enrollment) or until completion of the 12<sup>th</sup> grade, if she attends 80% or more of school days each month. Her parent/legal guardian is eligible to receive R200 per month if the young woman attends 80% or more of school days each month. Eleventh graders, and their guardians, will be in the study ONLY two years.

#### *Participants in the Control Arm*

Young women in the control arm will be asked to attend school like they normally would. We do not require them to do anything special with regard to attending school for this study. They will not be required to open a bank or post office account and they will not receive monthly cash transfers.

#### **4.2     *Distribution of the Conditional Cash Transfers***

Young women and their households in the intervention arm each will be required to set up post office or bank accounts if they do not already have them. Cash transfers will be paid monthly, conditional on school attendance. The cash transfer will occur sometime in approximately the first two weeks of the month following attendance collection (i.e., the cash transfer for March will be received within the first two weeks of April) once the research team has verified that the young women attended the required number of school days.

#### **4.3     *Monitoring School Attendance***

In the intervention arm, daily school attendance data will be collected and assessed monthly to determine a young woman's eligibility to receive the cash transfer. The study team will use these records, as well as records of young women in the control arm, to compare school attendance between the two groups. This daily school attendance data will be entered into an electronic password protected database that will be referenced for payment distribution.

### **5.0     STUDY PROCEDURES**

Study visits for young women will include a screening visit, an enrollment/baseline visit, followed by assessments at 12, 24, and 36 months (except for 11<sup>th</sup> graders, who will be followed only for maximum of 24 months) post-baseline or until the woman finishes 12<sup>th</sup> grade. Additionally, all young women whose anniversary date of enrollment is prior to October 1 will have a Graduation Visit near the time

of their graduation from school. Young women in both arms will be tested for HIV and HSV-2 infection at baseline and at follow-up assessment visits, and will complete a questionnaire on personal issues such as sexual behavior, HIV, and schooling at baseline and follow-up assessment visits. Questionnaire on personal issues will not be completed at the Graduation Visit.

The young woman's parent/legal guardian will have study visits at baseline and at 12, 24, and 36 months (except for parents of 11<sup>th</sup> graders, who will be followed only for maximum of 24 months) post-baseline where they will be asked to take part in a household questionnaire.

Detailed instruments to guide standard study procedures will be provided in the Study Specific Procedures (SSP) Manual, which will be provided to the site prior to study implementation. Presented below is additional detail on visit-specific study procedures.

## **5.1 CCT Study Visit Procedures – Parent/Legal Guardian**

### **5.1.1 Screening/Baseline Visit**

Location of this visit: Household

- Obtain parental consent.
- Verify parent/legal guardian has identification to open bank or post office account (valid documentation includes South African passport or National ID book and proof of residence certificate). Note that the account may be opened in the name of any adult who resides in the house with the girl. Post office or bank accounts will only be required for participants in the Intervention arm.
- Obtain locator information for parent/legal guardian.
- Complete household questionnaire using CAPI.

### **5.1.2 12, 24, and 36-month Follow-up Visit**

Location of this visit: Household

- Verify parent/legal guardian ongoing consent.
- Update locator information for parent/legal guardian.
- Complete household questionnaire using CAPI.

## **5.2 CCT Study Visit Procedures – Young Women**

### **5.2.1 Screening Visit**

Location of this visit: Household

- Confirm parental consent.
- Obtain assent if younger than 18 and consent if 18 and older.
- Verify young woman has identification to open bank or post office account (valid documentation includes birth certificate, South African passport, or National ID book and proof of residence). Post office or bank accounts will only be required for participants in the Intervention arm.
- Verify young woman meets all eligibility criteria, including no self-report of pregnancy.
- Collect locator information.
- Provide appointment for baseline visit.



### **5.2.2 Baseline Visit— within the first few weeks following screening visit**

Location of this visit: Community Venue

- Complete Young Woman Questionnaire using CAPI/ACASI.
- HIV risk-reduction pre-test counseling.
- Draw blood for HIV and HSV-2 testing.
- Perform HSV-2 testing.
- Perform HIV rapid testing (see section 9.1.1).
- Store plasma and dried blood spots.
  - If one or both of the HIV rapid tests is reactive, perform a CD4 cell count.
  - If one or both of the HIV rapid tests is reactive, perform a Western blot.
  - If the Western blot is positive (once the result is obtained), perform an HIV viral load assay using stored plasma.
- HIV risk-reduction post-test counseling.
- Randomization.
- If necessary, schedule follow-up visit for repeat blood draw.

### **5.2.3 12, 24, and 36 month Follow-up Visits**

Location of this visit: Community Venue

- Verify continuing assent/consent.
- Re-consent if young woman has turned 18 since previous study visit.
- Update Locator Information.
- Complete Young Woman Questionnaire (including social harms) using CAPI/ACASI.
- HIV risk-reduction pre-test counseling.
- Draw blood for HIV and HSV-2 testing.
- If HIV infection was not confirmed at the previous visit: (see section 9.1.1).
  - Perform HIV rapid testing
  - If one or both of the HIV rapid tests is reactive, perform a CD4 cell count.
  - If one or both of the HIV rapid tests is reactive, perform a Western blot.
  - If the Western blot is positive (once the result is obtained), perform an HIV viral load assay using stored plasma from this visit.
- Store plasma and dried blood spots (all participants, regardless of prior HIV testing results).
- Draw blood for CD4 cell count (HIV positive young women only)
- HIV risk-reduction post-test counseling.
- If necessary, schedule follow-up visit for repeat blood draw.

#### **5.2.3.1 Graduation Visit**

All young women whose anniversary date of enrollment is prior to October 1 will have a “graduation” visit near the time of their graduation from school. The following procedures will be performed:

- Verify continuing assent/consent.
- Re-consent if young woman has turned 18 since the previous study visit.
- HIV risk-reduction pre-test counseling.
- Draw blood for HIV and HSV-2 testing.
- If HIV infection was not confirmed at the previous visit: (see section 9.1.1).
  - Perform HIV rapid testing.
  - If one or both of the HIV rapid tests is reactive, perform a CD4 cell count.
  - If one or both of the HIV rapid tests is reactive, perform a Western blot.

- If the Western blot is positive (once the result is obtained), perform an HIV viral load assay using stored plasma from this visit.
- Draw blood for CD4 cell count (HIV positive young women only)
- Store plasma and dried blood spots (all participants, regardless of prior HIV testing results).
- HIV risk-reduction post-test counseling.
- If necessary, schedule follow-up visit for repeat blood draw.

#### **5.2.4 Locator Contacts**

Study staff will make phone calls, send text message or make house calls throughout the year. This will also be an opportunity to informally ask girls if there are problems with study participation. If social harms or other issues are discussed, staff will report to the Investigator or study manager for appropriate action.

### **5.3 Qualitative Assessments**

**Timing of visits:** throughout the duration of the intervention (annually or biannually).

**Location of this visit:** Household (case studies); school or other community venue for IDIs and FGDs.

- Obtain informed consent for data collection and recordings of in-depth interviews and focus group discussions:
- Conduct IDIs, FGDs and case studies

## **6.0 DATA ASSESSMENTS AND ADVERSE EVENTS**

This study will use both quantitative and qualitative methods to assess the impact of the study. We will closely document the process of the intervention implementation in order to better understand successes and failures and to facilitate replication if efforts are effective.

### **6.1 Quantitative Assessments**

A comprehensive computer questionnaire will be conducted with young women enrolled in the cash transfer intervention and the parents/legal guardians of young women enrolled in the intervention.

#### **6.1.1 ACASI**

The young woman's questionnaire will be programmed with an ACASI component. ACASI has been tested in multiple settings, including in sub-Saharan Africa where it was found to increase reporting of sensitive behaviors among youth.<sup>25-27</sup> The ACASI component allows the respondent to answer questions privately in conjunction with headphones that read out questions and answers. Once the questionnaire has been finalized, research staff will program the questionnaire. Test questions with known responses will be built into the program at the beginning, such as, "Are you a woman or a man?" to help ensure that individuals understand how to use the program. Training in using ACASI and in data management will be provided to local study staff by a UNC study member experienced in ACASI use. The team will also be provided with SOPs for use of ACASI including the importance of and procedures for data back-up.

### **6.1.2 Assessments for Conditional Cash Transfer Intervention – Household**

We will conduct a computer questionnaire with the parent/legal guardian at baseline and annually until the young woman has completed the study (three or four interviews) with only a CAPI component. The questionnaire will take place at the household. The following includes data we are collecting on the household questionnaire: household membership, household food consumption, household durable goods ownership, government grant receipt, household member health status, household member education status, and employment of household members.

### **6.1.3 Assessments for Conditional Cash Transfer Intervention – Young Women**

All randomized young women will take part in the questionnaire at baseline, and at 12, 24 and 36 months post-baseline, for a total of four assessments, except for young women who are 11<sup>th</sup> graders at enrollment who will be followed for a maximum of 24 months regardless of school completion. All questionnaires will use CAPI and ACASI components. These questionnaires will take place at community venues within the AHDSS. Questionnaires will be kept as short as possible but will likely be in the range of 1 hour to 1.5 hours. The baseline questionnaire will take place before the young woman completes the randomization process. The following includes data we are collecting on the young woman's questionnaire: educational history and satisfaction, HIV knowledge, health and fertility, sexual partner history, social networks and friends, and intimate partner violence.

We will also test all randomized young women for HIV and HSV-2 at baseline and at each annual follow-up visit. These tests will also take place at the community venue on the same day as the computer questionnaire, or in some cases, a few days later if circumstances require. Young women who have confirmed HIV infection or test positive for HSV-2 infection at any study visit will not be tested for that virus again, though blood samples will continue to be drawn. In all cases, Western Blots will be used to confirm HIV infection.

## **6.2 *Qualitative Assessments***

The qualitative assessments are a key part of the research strategy for investigating the pathways through which impacts take place, as well as the reasons for absence of impact. The overall study design of this project rests on a number of assumptions about relationships between cash, education, and sexual behavior. However, where we observe impacts, the quantitative data alone cannot explain the observed effects: the actual nature of these impact pathways are too complex to understand without detailed contextual data and in-depth interviews where participants explain in their own words, e.g., their reasons for their choices and behavior, the nature of their relationships (gender, intra-household, intergenerational, social networks) and experiences at school, home, and in the community. For example, some of the principle issues that the qualitative research will investigate include: the reasons that girls drop out of school so that we can understand the ways in which the intervention does or does not respond to these driving factors; how sexual, gender, and inter-generational power relations are negotiated and change when girls have access to their own cash; the effectiveness and adequacy of the cash incentive given to parents vs. girls for influencing schooling decisions; the relative importance of the cash vs. the conditionality; and the pathways through which education contributes to reduced HIV risk—disaggregating effects of social networks, prevention messages at school, hope for the future, and other potential explanations. Qualitative data on these questions will be important for explaining the quantitative research results, as well as yielding valuable insights in their own right.

Qualitative research will also pick up any unanticipated impacts such as influence of the intervention on the behavior of the control group, or social harm resulting from the intervention. The latter may include new hierarchies within school classrooms; jealousies, and bullying; or coercion or abuse inside the household. Other issues to be included are those related to program operations, including attendance monitoring, setting up post-office accounts, and the processes of research participation.

### **6.2.1 Case Studies for Conditional Cash Transfer Component**

We will recruit a total of 30 young women from both arms enrolled in the study to participate in qualitative case studies over the duration of the study. The sample will be determined both geographically and based on variables taken from the survey data, such as poverty status, household composition, and grade, for example. Half of these young women will be selected and interviewed at baseline, while the other half will be selected over the course of the study, based on observed outcomes such as drop outs (so that we can understand the reasons), and issues of interest identified in early rounds of data collection (e.g. such as becoming pregnant during the study). These will be household case studies, including the young women, their caregivers and other household members. These households will be followed over time, involving intensive interviewing with the young women and participant observation with other family members.

### **6.2.2 Focus Group Discussions for Conditional Cash Transfer Component**

We will conduct FGDs with teachers and school administrators ( $\approx n=12$  FGDs); with young women from the intervention and control arms ( $\approx n=18$  FGDs) and young men in the same grades as women in the study ( $\approx n=12$  FGDs) over the period of the study. The FGDs with young women and men are gender specific. For the FGDs we will assess perception of the CCT intervention, reaction to the CCT intervention activities, perceived changes, perceptions of community norms, and challenges with CCT intervention implementation.

Young women participants in case studies and FGDs will be selected from databases maintained by the study and from data collected at baseline and subsequent visits. Other participants who are not enrolled in the study (teachers and young men) will be contacted through school structures. They will be informed of the qualitative research and asked to indicate their interest in participation. A random sample will be taken from interested individuals.

## **6.3 *Process Evaluation***

As part of the study we will conduct ongoing monitoring and documentation of project activities and implementation to ensure that project activities are viable and pragmatic. Examples of process indicators that may be used to determine the feasibility and acceptability of the intervention include: 1) the ability to recruit young women and families, 2) retention and loss-to follow-up by study arm and time point, 3) time/effort required to recruit young women and retain participants and to deliver cash transfers, 4) school attendance levels in both arms, 5) ability to deliver the intervention (training, implementation, data collection), 6) number of adverse events/social harms that occur, and 7) acceptability of intervention format and content.

## **6.4 *Language of Interviews***

The predominant language in this area is Xitsonga (Shangaan). All questionnaires will be translated from English into Xitsonga (Shangaan) and then back-translated. Questionnaires will be available in both languages with appropriate voice files (for ACASI component). Qualitative interviews and FGDs will be conducted in Xitsonga (Shangaan).

## **6.5     *Quality Assurance***

The HPTN SDMC will be responsible for quality assurance and quality control for all data collected on case report forms (CRF). Other data, such as the ACASI questionnaire, will be the primary responsibility of the site and UNC staff. UNC staff will develop and set up a system to track all questionnaires and associated study forms; the local South Africa team will be trained in use of these systems. As the completed data arrive at UNC during each wave of data collection, quality assurance tests and data cleaning will occur in coordination with the South Africa data-collection staff. A unique study ID will be assigned to each study participant and used throughout the study. Questionnaire data from young women can be linked to questionnaire data from household. Young women and household questionnaire data can be linked to the AHDSS data. Importantly, the identification number will allow linking of the behavioral data and the biological (HIV/HSV-2) data.

## **6.6     *Data Extraction and Back-up***

Back-up procedures will ensure that data not sent to the SDMC, including databases, interview files, and source documents, are securely stored; electronic data will be stored in two or more locations at all times. All data will be stored in its original location (i.e., local laptop or desktop) until it is backed-up onto study. At set intervals throughout the week the data will be backed up to the local server and on an encrypted secure website dedicated to the project data. Once the data has been securely backed up to the latter locations, the data will be cleared from the original location and dedicated flash drive. The same processes will be used for back-up of digital voice files associated with the qualitative components of the study.

## **6.7     *Adverse Events and Social Harms***

Because this study includes no biomedical intervention or study product, standard adverse event (AE) reporting will not be undertaken and no AE data will be collected on CRFs for entry into the study database. However, in accordance with 45 CFR 46, unanticipated problems or serious AEs (SAEs) that are judged to be related or possibly related to study participation will be documented and reported to the IRB/ECs according to their individual requirements and to the DAIDS Medical Officer. This reporting will be performed according to the timelines and definitions included in pre-established written procedures, such as the SSP Manual, and the guidelines provided in the HPTN Manual of Procedures. SAEs will not be reported to the DAIDS Regulatory Support Center (RSC). In addition, the study will be monitored by the NIAID Data Safety and Monitoring Board (DSMB), as described in Section 7.8.

“Social harms” deemed to be caused by study participation will be reported on a case report form and monitored closely throughout the study. Social harm may include coercion, bullying, violence, or any other negative social reaction to participation in the study. There may be a risk to young women in the CCT intervention with regard to feeling coerced to attend school because their family pressures them to attend or feeling social pressure from other students who know they are in the intervention arm. While it is unreasonable to expect that other students in the school will not know about the study, we

will encourage young women in the CCT to not discuss to which arm they are randomized. We will ensure that both young women and their families independently provide consent to enroll in the intervention before enrolling, importantly that the young woman is comfortable with the terms of the study (i.e., attending school 80% of all school days for the study period). We will encourage young women to report any problems to the study staff if they experience undue coercion or are threatened or forced at any time. We will document any problems of this nature that are reported.

If a participant reports social harm, study staff will make every effort to provide appropriate care and counseling to the participant and offer referral to appropriate resources, as needed, for the participant's safety. Social harms that are judged by the IOR to be serious or unexpected will be reported to the responsible site's IRB/EC at least annually, or according to their individual requirements. The nature and frequency of these social impact reports will be monitored by the protocol team on a regular basis.

## **7.0 STATISTICAL CONSIDERATIONS**

### **7.1 *General Design***

This is a Phase III individually randomized design for assessing conditional cash transfer for preventing acquisition of HIV infection. Individual women in grades 8-11 will be randomized to the CCT intervention, or control. The primary endpoint will be incident HIV infection in the young women as measured over a follow-up period of approximately two (11<sup>th</sup> graders) or three (8-10<sup>th</sup> graders) years.

### **7.2 *Study Endpoints***

Data from the quantitative assessments will contribute to the primary and secondary endpoints.

#### **7.2.1 Primary Endpoints**

- HIV incidence: Incident cases of HIV will be determined as described in Section 9.1.1.

#### **7.2.2 Secondary Endpoints**

- HSV-2 incidence: Incident cases of HSV-2 will be determined as described in Section 9.1.2.
- Number of self-reported sex acts in past 3 months: The self-reported number of sex acts in the past 3 months and the number of unprotected acts in the past 3 months. Participants will be asked to report behaviors with primary sex partners as well as non-primary partners. They will also report on the number and type of sexual activities they engaged in, including unprotected and protected vaginal and anal sex.
- Number of sexual partners.
- Age difference with partner: Self-report of the age of the participant's most recent sex partner.
- Coital debut: Self-report of whether participants have ever had vaginal intercourse at baseline and at each 12-month follow-up visit. When participants first report being sexually active, they will also be asked the age of first intercourse.
- Pregnancy: Self-report of currently pregnant or any pregnancy since the last study visit.
- School attendance: Measured in both arms with school attendance records.

### 7.3 *Other Key Measures*

- Socio-economic status: To measure SES of the young woman's household before and after the intervention we will follow the structure of the World Bank's Living Standards Measurement Surveys (LSMS). The instrument begins with a household roster listing all members. For household members, information will be collected on hours worked over the previous week, labor and non-labor income over the previous 6 months, educational attainment, and school enrollment and attendance. The instrument will then collect detailed information at the household level on expenditures (including the value of home-produced food) for the prior week (for frequently consumed items like specific foods) or for the prior six months (for items such as clothing, health care, semi-durables). The instrument will also collect household-level information on ownership of assets such as land, livestock, and durable goods. Finally, detailed information on credit transactions (in and out of the household) as well as money transfers to and from non-co-resident family members will be added. Our general strategy will be to have multiple variables that capture the SES.
- HIV knowledge.
- Condom self-efficacy.
- Sexual history: Self-report of number of lifetime partners, and experiences with transactional sex.
- Partner concurrency: Using a partner grid, participants will be asked about characteristics of the last 5 partners, including the date of first and last sex. Overlapping dates will be considered concurrent partnerships.
- Intimate partner violence: Measured using a World Health Organization (WHO) questionnaire to ask men and women about experiences of women with violence and perpetration of violence by men; the WHO questionnaire has been also adapted in South Africa for use with men<sup>28</sup>.
- Education history (attendance, reasons for attending or not, performance (attainment, repetition)), sense of belonging at school, perception of teacher support, problem behaviors at school, educational aspirations.
- Fertility and contraceptive history.
- Employment and finances Consumption- Items purchased by girl and by family in last 30 days (this will also explore expenditure of cash transfer).
- Primary Caregiver Monitoring, involvement of primary caregiver in monitoring but also involvement in schooling (e.g. time spent on homework, discussing schooling), parental expectations related to education, perceptions of primary caregiver support/closeness to primary caregiver.
- Social Networks- social network grid- role of friends and perception of importance of various behaviors and values of friends, including those related to education and sex.
- Sexual Relationship Power Scale.
- Mental Health.
- Alcohol and Drug use.

### 7.4 *Accrual*

In order to successfully recruit 2,500 households we estimate needing to visit approximately 4000 households. This estimation was determined from the data collected during the pilot phase of the study. This is taking into consideration young women who may not meet the eligibility criteria or who may not be interested in the study. Therefore, it will be necessary to visit approximately 44 households per working weekday (4000/ (18 weekdays per month\*5 months)) to successfully recruit approximately 28 households per working weekday (2,500/ (18 weekdays per month\*5 months)). It will be necessary to successfully complete baseline procedures for approximately 63 young women per working weekend day (2,500/ (8 weekend days per month\*5 months)).

## 7.5 Sample Size and Power Calculations

### 7.5.1 HIV Endpoint Power Considerations

It is estimated that the baseline prevalence of HIV infection among 13-19 year olds in the study area is approximately 8%. Based on a national household survey we conducted in 2003, the prevalence of HIV infection among 15-19 year old females in this province was 6%, and the prevalence among 15-19 year olds at antenatal clinics in Mpumalanga in 2006 was 8%. There are no good current measures of HIV incidence in younger women; however, the estimated annual HIV incidence from other cohort studies of women in South Africa is around 4%. Given the age of our cohort, we anticipate that the HIV incidence will be closer to 3%; however, the true incidence in this population is unknown.

The number of HIV-uninfected young women needed at baseline for sufficient power is 2430 (see next paragraph). We will also enroll young women who are found to be HIV-infected at baseline. If we assume 4% HIV infection prevalence at baseline, we anticipate a total sample of approximately 2527.

Assuming that (1) 1822 young women in the 8 -10th grades enroll in the CCT study, (2) 608 young women in the 11<sup>th</sup> grade enroll, (3) follow-up continues until graduation or December 2014 (whichever comes first), (4) the loss-to-follow up rate is 5% per year, and (5) half of the young women are randomized to the control arm and half are randomized to the CCT arm, *Table 2* shows the power to detect various relative risks (RR) for control group incidence rates of 2-5% per year. With 4% HIV incidence, we will have 86% power to detect a 35% effect (RR = 0.65); with a 3% HIV incidence we will have 84% power to detect a 40% effect (RR = 0.6).

**Table 2** Power for various combinations of control arm incidence rate and RR for the CCT intervention assuming 1822 HIV-uninfected 8-10th graders with 3-year follow-up and 608 HIV-uninfected 11th graders with 2-year follow-up (yielding 5627 person-years before-after accounting for loss-to-follow-up at 5%/year and  $\alpha = 0.05$  (two-tailed)).

		RR		
		0.70	0.65	0.60
HIV Incidence (%/yr)	2%	0.39	0.53	0.68
	3%	0.54	0.71	0.84
	4%	0.67	0.82	0.93
	5%	0.76	0.90	0.97

### 7.5.4 HSV-2 Endpoint Power Considerations



The best information on HSV-2 prevalence and incidence is from the South African HPTN 039 sites. The baseline HSV-2 prevalence in the Soweto site among 18-19 year olds was ~28% (95% CI: 0.18 - 0.37) (personal communication, Guy de Bruyn). The HSV-2 incidence in the first year of the study in this age group/site was 8.5% and in year 2 was 4.8%. Given the older age of the HPTN 039 cohort and that all young women were sexually active; we anticipate the baseline prevalence will be lower in our study, perhaps 15%. We anticipate that the annual HSV-2 incidence will be high: between 5 and 8%. *Table 4* shows the power for detecting a change in HSV-2 incidence rates due to the CCT intervention, assuming annual incidence rates of 5 – 8% and assuming that 15% of the young women are HSV-2 positive at enrollment (and therefore not eligible for this analysis). In spite of this, the power is quite good for testing for an intervention effect on the HSV-2 endpoint.

<b>Table 3</b> Power for various combinations of control arm HSV-2 incidence rate and RR for the CCT intervention assuming 1550 HIV-uninfected, HSV-2 uninfected 8–10th graders with 3-year follow-up and 516 HIV-uninfected, HSV-2 uninfected 11th graders with 2-year follow-up (yielding 4783 person-years after accounting for loss to follow-up of 5%/year)-and $\alpha = 0.05$ (two-tailed).				
		<b>RR</b>		
		<b>0.70</b>	<b>0.65</b>	<b>0.60</b>
<b>HSV-2 Incidence (%/yr)</b>	<b>5%/yr</b>	0.69	0.84	0.94
	<b>6%/yr</b>	0.77	0.90	0.97
	<b>7%/yr</b>	0.83	0.94	0.99
	<b>8%/yr</b>	0.88	0.96	0.99

## 7.6 Analysis Plan

### 7.6.1 Quantitative Data Analysis

#### *Primary Objective*

The primary outcome for the study is the incidence of HIV infection. The HIV infection status will be measured at baseline/enrollment, and at 12, 24, 36 months and end of follow-up (5 times). For subjects with no infection at baseline, 3-year cumulative incidence rates will be calculated using survival analysis methods. We will test the hypothesis that the CCT group will demonstrate a statistically significant lower cumulative incidence compared to the group not receiving the cash transfer. The primary “intent-to-treat” analysis be based on a Cox model using “time to HIV detection” as the outcome, grade at entry into the study, and intervention arm. Although the underlying “time to infection” endpoint is interval-censored, simulations show that, for a rare event, the analysis of “time to HIV detection” gives an essentially unbiased estimate of the intervention effect provided the censoring process is non-differential (see below for further discussion of this issue). A Wald test will be used to test whether the survival rates differ in the two treatment groups

Additional issues that will be addressed include the drop out of subjects in the CCT program before the completion of HIV testing. Every effort will be made to retain all randomized subjects for HIV testing. If we cannot trace the drop outs before testing they will be treated as censored observations. In this case, we plan to conduct the analysis on an intent-to-treat basis (see above). It is also possible that the censoring time distribution differs by treatment group. To check this we will construct life tables with censoring as an event. If the two censoring distributions differ, we will do a weighted analysis of the time to HIV detection with weights being the inverse of censoring time probabilities (based on a logistic regression with baseline covariates as predictors) and we will compare these results to the

primary analysis described above. A bootstrap resampling technique will be used to obtain the standard errors of the cumulative incidence rates.<sup>29</sup>

Additional secondary analyses will include testing the effects of the cash transfer on HSV-2 acquisition, number of unprotected sex acts, school attendance, and timing of sexual debut, pregnancy and age difference with sexual partners. (See below)

### *Secondary Objectives*

**HSV-2:** To determine the effect of the CCT intervention on HSV-2 acquisition we will use a Cox model similar to that used for the primary analysis of HIV. Only individuals who are HSV-2 uninfected at enrollment will be included in this analysis.

**Number of Unprotected Sex Acts:** We will also examine the effect of the CCT intervention on number of unprotected sex act in last three months. Because the outcome variables are counts, we will use multi-level Poisson regression models to test the hypothesis. Without any loss of generality, we present here a three level model to test the study hypothesis. We assume that the counts  $Y_{ijk}$  follow a Poisson distribution with mean  $\lambda_{ijk}$  and,  $\log(\lambda_{ijk}) = X_{ijk}\beta + u_i + v_{ij}$  where  $Y_{ijk}$  represents the observation at the  $k^{\text{th}}$  time for the  $j^{\text{th}}$  individual within  $i^{\text{th}}$  the community. The covariates  $X_{ijk}$  include (at least) the exposure variables of interest (indicator of CCT, time (wave) and time\*CCT) and the control variables (Individual household and other community level variables, etc.). The  $u_i$  and  $v_{ij}$  denote the community level and subject level random effects. We assume that the random effects are independent and normally distributed. This assumption makes the interpretation of parameters more straight forward. (Other distributions such as log Gamma can be assumed).<sup>30</sup> For testing the hypothesis we will first conduct a joint hypothesis test that the regression coefficients for the term time\*CCT is significantly different from zero. The rejection of this hypothesis is an indication that the CCT effect varies over time. Graphing the predicted probabilities we will conduct a detailed analysis of this interaction.

We will drop these terms from the model and test the hypothesis that the cash transfer has a significant associated with the number of unprotected sex acts. We will use the SAS procedure GLIMMIX to fit the random effects Poisson regression models.

We will pay attention to a number of issues pertaining to the above models for further refinements. It is possible that the response to the number of unprotected sex acts will contain excessive zeros. Failure to account for these excessive zeros may result in biased parameter estimates and incorrect standard errors. If this phenomenon happens in our data we will model the data using a zero-inflated Poisson (ZIP) regression approach. An approach to multi-level zero-inflated Poisson regression modeling of correlated count data with excess zeros is described in a paper by Lee et al (2006)<sup>30</sup>. We plan to follow this approach in the proposed project. (Lee et al have implemented the procedure as a macro in S-Plus). A simple test is available to test the suitability of ZIP model against an ordinary random effects Poisson model. A second issue to be addressed is the handling of missing data. We will first examine the extent of the loss of data by individual, and community characteristics.

**Age Difference with Partner:** A test of partner age difference will be done by comparing the mean age differences and by constructing a random effect linear model with age difference as the dependent variable.

**Age of Coital Debut:** The timing of sexual debut will be analyzed using survival model. In this case, the dependent variable will be age at first sex. For those who have not initiated sexual activity by the end of the study, the age at the end of the study will be considered a censored observation of age at initiation of sex. SAS procedure PHREG will be used to fit a proportional hazards model. A significant negative regression coefficient for the CCT indicator would indicate postponement of sexual debut. An anticipated problem here is that many young women might have started their sexual debut before the beginning of the study. We plan to collect information on sexual debut at the baseline and examine the dynamics of early sexual debut. Girls who have already initiated sexual activity at baseline will not be included in the analysis of the intervention effect on this endpoint.

**Pregnancy:** We further postulate that the pregnancy rate among young women in the CCT group will be lower than that of the control group. A test of differences in the proportion of girls with at least one pregnancy (first pregnancy) by the end of study will be performed to test this hypothesis. A logistic regression model will be used to test the differences in the odds of getting pregnant in the CCT intervention groups vs. the control group.

**School Attendance:** The school attendance will be assessed annually for both study arms. We plan to analyze the data in two ways. The first analysis will compare the hazard ratios of school drop out of the two arms. The analysis will be based on the life table techniques and will be based on the timing of the first drop out. Mantel –Cox significance test will be used to compare the dropout rates of the two study arms. The available detailed data on school attendance will also provide information as to the total number of schooldays in a month and how many days the subject attended school for selected months throughout the study period. We will have such data for each of the three years unless dropped out early or graduated. The repeated proportions allow us to examine the proportion of dropouts by arm and year. We will use the SAS procedure PROC GLIMMIX to analyze these binomial counts and test the hypothesis of difference in the two arms.

### ***SES Status and CCT Effect***

It is also possible that the CCT effect on HIV/HSV-2 will depend on the SES status of the individual/household (i.e. SES is an effect modifier). To investigate this claim we will conduct regression analysis with CCT status, SES and the interaction CCT\*SES in the model. A significant interaction effect will support the hypothesis.

To examine some of the possible pathways through which education may reduce HIV risk, we will also examine whether young women who are in school report sex partners who are closer in age to themselves, compared to young women who are out of school. We will also examine whether young women who are in school report, for example, greater risk reduction, self-efficacy, and greater HIV knowledge or if their households have higher SES (adjusting for CCT) compared to young women who are not in school.

## **7.6.2 Qualitative Data Analysis**

All FGDs, IDIs, and case studies will be digitally-recorded, transcribed, and translated into English. Analysis will begin during data collection so that topics for further exploration can be noted and incorporated into ongoing fieldwork. Qualitative data analysis consists of searching for patterns in data and for conceptualizing ideas that help explain the presence of those patterns<sup>31</sup>. Analysis of textual data

will consist of 5 main steps: 1) Reading for content: Our analysis will begin with reading and re-reading transcripts until content becomes intimately familiar<sup>32</sup>. As data are reviewed, emergent themes will be noted; 2) Coding: A list of codes will be created based on identified themes and assigned to specific sections of text so that the text can be easily and meaningfully searched<sup>33</sup>. Code definitions will be documented in a code book and will include information about the code's central meaning and may also provide examples of text considered within and outside the code's parameters<sup>32</sup>. To ensure inter-coder reliability, a random sample of transcripts will be double-coded; 3) Displaying: Once transcripts have been coded, we will work within each code to identify principle sub-themes that reflect finer distinctions in the data. This entails taking an inventory of what is related to the given code, capturing the variation or richness of each theme and noting differences between individuals or among subgroups<sup>32</sup>; 4) Data Reduction: Matrices and tables that categorize and display data will be used to help the analysts understand the dimensions by which the data are categorized and facilitate comparisons<sup>33</sup>; 5) Interpretation: Once the text has been read, codes developed and refined, and themes and central ideas extracted, we will identify and explain the data's core meanings<sup>32</sup>. We will search for relationships among themes or concepts identified from the analysis and develop diagrams to map those relationships.

### **7.7     *Blinding***

Participants and site staff are not blinded due to the nature of the intervention. The counselors who do the HIV testing will be blinded unless the young woman discloses which arm she is in during their discussions. We will not inform teachers to which arm the girl is assigned, though they may learn through their interactions with the students or make assumptions. We will monitor differential treatment of girls by study arm through our case studies and focus groups. Most of the fieldworkers, however, will know to which arm the young woman is assigned due to the nature of the questions asked regarding expenditures of the cash transfer funds. Aggregate data on HIV incidence rates will not be provided to site staff or the protocol team (except for the unblinded statistician) as per the HPTN SOP.

### **7.8     *Data Safety Monitoring***

The study will be monitored by the NIAID DSMB. Administrative and safety/social harm data will be reviewed approximately annually. Primary and secondary endpoint data as well as safety data will be monitored at least annually. The NIAID DSMB also could provide a recommendation to terminate or alter the design or conduct of the trial if unacceptable safety results emerge or for futility reasons.

## **8.0     HUMAN SUBJECTS CONSIDERATIONS**

### **8.1     *Ethical Review***

This protocol, site-specific informed consent forms, participant education and recruitment materials, and other requested documents – and any subsequent modifications – will be reviewed and approved by the ethical review bodies responsible for oversight of research conducted at the study site. Subsequent to initial review and approval, the responsible IRBs/ECs will review the protocol at least annually. The Investigator will make progress reports to the IRBs/ECs at least annually, and within three months of study termination or completion. These reports will include the total number of participants enrolled in the study, the number of participants who completed the study, all changes in the research activity, and all unanticipated problems involving risks to human subjects or others.

## 8.2 *Informed Consent*

The consent process and final consent/assent forms will be approved by DAIDS, by UNC, the University of the Witwatersrand, and by the Mpumalanga Department of Health IRBs. All informed consent and assent forms will be written in English, translated into Xitsonga (Shangaan), back-translated and revised for accuracy, clarity and ease of comprehension.

### *Conditional Cash Transfer*

After initial contact, trained study staff will explain the study and criteria for participation to both the young woman and the parent/legal guardian. Written informed consent will be obtained prior to the initiation of study related activities. Both parties must separately agree to participate for the youth to take part. The parent/legal guardian will be providing consent for both themselves and the young woman, if the young woman is younger than 18. If the young woman is 18 or older she will sign her own consent form. The young woman will be required to re-consent at age 18 if she is a minor at baseline. Written informed consent will be obtained from each study participant for specimen storage and possible future testing beyond what is required for HPTN 068, although consent for this additional specimen storage will not be required for study participation.

The consent and assent templates are in Appendix II. They will detail all study procedures including potential risks and benefits, cash transfer details, and time spent participating in the research. Participants will read or have read to them the consents/assents before study procedures are begun. Participants will provide their signature on the assent and consent forms. Parents/legal guardians who are unable to read or sign their name can make a mark (e.g., a cross); a witness will sign the consent as well. Signed copies of the consent and assent forms will be given to the participants.

Parental notification of HIV test results is not required by law in South Africa (HIV notification in general is not a legal requirement). All HIV test results will be kept confidential although we will recommend that young women disclose test results to their parents as a source of support. Parents will not be notified of HIV or HSV-2 test results.

Potential study participants will be told that they are free at all times not to participate in the research and that refusal to participate will in no way affect the support or services they receive through the Agincourt Health and Population Unit or other local organizations. Participants will also be encouraged to share any concern they might have regarding their research participation.

### *Qualitative*

Given that not all study participants will be asked to also participate in the qualitative data collection components of the study, consent for qualitative components will be requested separately. The exception is the legal/parent guardian of the young women who will provide consent for any potential qualitative procedures at the time of original consent. Participants will be informed of the qualitative component of the study and consent will be requested. For young men and women parental consent will also be required. The consent forms will be available in English and Xitsonga (Shangaan); the template is available in Appendix II. The consent form will detail the reasons for the qualitative data collection including potential risks and benefits, and time spent participating in the requested activity. Participants will be told that they have the right to skip particular discussion points or to stop

participation completely at any time if they are uncomfortable. The research objectives, the procedures involved, and the telephone numbers of the project and the local Project Coordinator's contact information will be included in the consent form. A copy of signed consent will be provided to literate and illiterate participants (unless not desired by the participant). Participants will provide their signature on the consent forms.

The consent forms will allow two spaces for signature: one consenting to participation and the other to digital recording of the data collection. Additionally, participants in FGDs will be warned that the researchers are unable to ensure confidentiality of information shared in a group setting. These are requirements of the local IRB.

While assent/consent will be collected from young women participating in the case studies because they will participate in what essentially amounts to an in-depth interview, consent will not be collected from other household members. The household portion of the case study will be conducted using an ethnographic or participant observation methodology for which written consent is not collected (American Anthropological Association and FHI Qualitative Research Methods: A Data Collector's Field guide. Mack N, Woodsong C, MacQueen KM, Guest G, Namey E. 2005). A waiver on the collection of written consent does not remove the obligation on the researcher to conduct ethically sound research; for this reason fieldworkers will be transparent about their purpose in initiating any further discussion within the household and will be clear about each household member's right to refuse engagement in conversation.

### **8.3     *Risks and Measures to Minimize Risk***

In this study, the primary risk to participants may arise from the information obtained from the lab testing or as a result of the cash transfer intervention.

To prevent unintentional disclosure, HIV infection at baseline is not an exclusion criterion. For individuals who test positive for HIV or HSV-2 infection, appropriate referral to a local clinic will be made where treatment is available free of charge. We recognize that some young women may learn that they are HIV-infected through their involvement in this study and that this may cause them psychological distress. There is also the small chance that a diagnosis with HSV-2 and negative social outcomes associated with the trial may cause psychological distress. Young women participating in the study will be provided with a project identification card at the beginning of the study: this card will be used to document scheduled study visits and will have a phone number for local study staff whom young women can contact with any study-related problems (we will make use of the free 'Please call me' facility in case young women don't have funds for making calls). Young women also have the option of coming to the study office if they do not have access to a phone and wish to speak to someone in person. Using this mechanism and face-to-face contact with young women during data collection, psychological issues will be reported and referred through to local clinics in the study villages where we will be working. If any participants report severe psychological distress, the study staff will assist in making appointments for the young women at one of the nearby hospitals, Mapulaneng and Tintswalo hospitals. If needed, there is a clinical psychologist available at each hospital.

A further potential risk for participation in the study is negative outcomes associated with providing young women with access to cash. This may alter relationships between the young women and their

families or their sexual partners and, less likely, with others social contacts. All young women in the trial will be provided with the study contact information of the project site manager (PSM) and toll-free calls can be made to the PSM. In addition, young women can go directly to the study office at any time to report abuse/coercion. They will also be notified that they can report to their teacher or headmaster if this is happening and the teacher/headmaster can contact the PSM. Any reports of coercion/abuse will be immediately communicated to the PI. We will offer support to the young woman reporting coercion and will meet with her to determine the best course of action as a result of the reported coercion (e.g., study withdrawal, family meeting, etc.).

In addition, although various measures will be taken to prevent this, there remains a potential risk to participants of a loss of confidentiality in terms of information learned from laboratory test results, in interviews and when study staff conduct follow-up of study participants.

Steps will be implemented to protect research participants from any social harms or discomforts and to minimize risks that may be associated with the behavioral interview by ensuring that the study staff make every attempt to ensure a comfortable and secure environment in which to interact with participants. We anticipate that the use of ACASI may help reduce this discomfort. There will be specific questions in the ACASI that will inquire about experiences of social harm during the course of the study. All interviews will be conducted in a location in which discussions cannot be overheard by others. Additionally, all HIV/HSV-2 testing and post-counseling will take place in a secure, private room. All test results will be kept confidential and the participant's name will not be included on any documentation that contains a result.

We will monitor social harms through our qualitative research and local community forums.

Risks to subjects will be minimized by: 1) training of staff in the ethical conduct of research; 2) strict protection of confidentiality through detailed SOPs and on-site monitoring; 3) close monitoring of social harms with appropriate IRB reporting; and 4) referral to appropriate counseling and treatment services when necessary.

Risk of involvement in this study will be minimized by ensuring that all study staff members are trained to understand ethical research standards and by developing operating procedures to limit the likelihood of such risk. The intervention is designed to be supportive and non-confrontational and attempts will be made during administration of the intervention and research questions to minimize the discomfort of participants. If an individual is uncomfortable during the interview or intervention, they will be reminded that they can terminate the interview or withdraw from the intervention at any time. Participants will be provided access to referral services if needed (i.e., health services for health related concerns or mental health/social workers for psycho-social concerns). Consent and data forms will be kept in locked files at the main study offices in Agincourt. Identification information will be located in separate files and access limited to particular staff. All personal identifiers will be removed from study documents and recordings of interviews; each participant will be provided with a unique numeric identifier for the study. In accordance with Health Professionals Council of South Africa (HPCSA) guidelines, digital recordings of interviews and focus groups will be stored until 2 years after publication of results or for 6 years if no publications.

Parents/legal guardians will also be told that the results of all HIV and HSV-2 testing are confidential and that the study team cannot provide the young woman's test results to the parents/legal guardians.

### *Community level*

The LINC has regular meetings with both village leadership and the general community in each village. These meetings provide a forum at which any person can raise concerns about any study going on in the AHDSS site. Concerns raised at these meetings will be fed back immediately to the study coordinators and if necessary, plans made to address these concerns. In addition, the monthly CAG meetings allow an opportunity for community level concerns to be aired and attended to.

## **8.4 Benefits**

There may be no direct benefits for individuals who participate in the study, though they may benefit by learning their HIV or HSV-2 status and from learning more about HIV and HSV-2 prevention. HIV positive young women may benefit from knowing their CD4 cell count. A random selection of participants who take part in the CCT intervention will receive a monthly cash transfer to their family and the young woman conditional on the young woman attending school. It is hypothesized that the cash transfer intervention will reduce risk behaviors and improve the lives of the young women and households who receive the cash transfer through greater economic wellbeing and increased school attendance.

## **8.5 Incentives**

All young women enrolled in the study will receive a small gift equivalent to R30 (approximately 4 dollars). This gift is given to the young women in the CCT because of the blood draw. It is not customary to receive incentives for participating in other DSS research projects; therefore incentives will not be given to other study participants.

## **8.6 Confidentiality**

All study participants will be assigned a confidential study identification number and all study materials will be labeled only with this confidential study identification number. As necessary, project staff, including the field workers, will have the names of participants in order to identify the household, verify school attendance, and to make deposits into bank accounts.

In order to deposit the cash transfers, names of participants will be known to financial staff in the WRHI and the Wits Health Consortium. These individuals will not have access to other study data (i.e., behavioral data from assessments or HIV/HSV-2 results) and are based in Johannesburg which is about 500km away from the study site.

Consent and data forms will be kept in locked files at the main study offices in Agincourt. Identification information will be located in separate files and access limited to particular staff. All personal identifiers will be removed from study documents and recordings of interviews. Digital voice files of case studies and FGDs will be stored on password protected computers. The recorded case studies and FGDs will be stored on password protected computers according to HPCSA guidelines and transcripts (without identifiers) will be maintained on a computer with password protection for further analysis, if required. All data will be analyzed collectively so that information from any one participant will remain anonymous, and no subjects will be identified in any report or publication about this study.



A participant's study information will not be released without the written permission of the participant, except as required by law and as necessary for monitoring by the NIAID and/or its contractors, representatives of the HPTN CORE, SDMC, and/or Network Laboratory (NL), the University of Witwatersrand and the North Carolina IRBs/ECs, and/or other government and regulatory authorities.

Site staff members will receive Human Subjects Protection training. Training will emphasize the importance of protecting the confidentiality of study participants and the data collected about the participants. When conducting field visits, study staff must ensure that various follow-up methods are explained to each participant and they are able to choose the method most suitable for their circumstances. Study staff should ensure that reminders for follow-up avoid describing the content of the study in detail to ensure confidentiality should they be accessed by non-participants.

### **8.7 Reports of Sexual Abuse**

Given that the study aims to explore young women's sexual behavior, young women may report episodes of unwanted sexual experiences to the study staff. As some of these young women are minors, we have a legal obligation outlined in South African legislation to assist young women as far as is possible in reporting such abuse. Our overall goal is to protect the well being of the young woman; therefore if abuse is reported, we will ensure young women are referred to a local organization that deals with sexual abuse/violence so that the woman receives appropriate care. Two plans are in place to deal with sexual abuse.

#### *Young women not participating in the study*

We recognize that particularly in instances where abuse is occurring within the family, parents/legal guardians may not give consent for their daughter to participate in the study. In such instances we will not have the opportunity to talk to young women personally and will likely not know that abuse is taking place. We will, however, leave pamphlets at every house visited detailing local resources for assisting young women with reporting abuse. In addition, our community entry strategy will ensure that local community organizations and schools in which we work are informed of the resources available in the Bushbuckridge area.

#### *Young women participating in the study*

The informed consent documents for young women and their parents/legal guardians will inform them of the study staff's obligation to refer reports of sexual abuse to relevant organizations that can assist with the appropriate course of action, if the young woman is younger than 18 years of age. Young women will be informed that they should think carefully about the information that they disclose during the questionnaire if they are not willing for the abuse to be reported. We will be able to identify issues of abuse among young women participating in the study through two questions in the baseline and follow-up questionnaires.

If a young woman answers "yes" to specific questions on the questionnaire noting sexual abuse then the young woman will be approached at the end of the interview. Study staff will spend time with the young woman to establish the nature of the abuse and whether family members should be involved (we suggest involving mothers, grandmothers or older sisters unless the young women specifically asks that her family not be informed, possibly if abuse is within the family and already common knowledge). The project manager or a female staff who speaks the participant language will be available in person and telephonically for additional assistance with management of abuse if needed.

Study staff will link young women to local community organizations that work specifically on issues of sexual abuse and are tied to local South African Police Services. These organizations will assist the study and individual participants in reporting the abuse to the South African National Police and assisting with other psycho-social requirements.

## **8.8     *Study Discontinuation***

The study may be discontinued at any time by the sponsors DAIDS, the HPTN, site IRBs or other in-country and U.S. government or regulatory authorities.

## **9.0     LABORATORY TESTING AND SPECIMENS**

### **9.1     *Local Laboratory Testing***

As described in Section 5 blood specimens will be collected for the following testing at the local laboratories:

- HIV rapid testing.
- HIV confirmatory testing with a Western blot.
- CD4 cell count.
- HSV-2 testing.
- Plasma for storage.
- Dried blood spots for storage.

Each study site will adhere to standards of good laboratory practice, the HPTN Network Laboratory (NL) Manual, and local SOPs for proper collection, processing, labeling, transport, and storage of specimens to the local laboratories. Specimen collection, testing, and storage at the local laboratories will be documented using the HPTN Laboratory Data Management System (LDMS) as described in the SSP Manual.

All specimens will be shipped in accordance with International Air Transport Association (IATA) specimen shipping regulations. All shipments will be documented using the HPTN LDMS as described in the SSP Manual.

#### **9.1.1   HIV Testing**

Sites will first screen for HIV infection using two different HIV rapid tests performed in parallel; at least one of these tests must be FDA-approved. The Abbott Determine test is acceptable as a second, non-approved HIV rapid test. If both HIV rapid tests are non-reactive, no further testing will be done at that study visit. If one or both of the HIV rapid tests is reactive, a CD4 cell count will be performed, and confirmatory testing will be performed using an FDA-cleared Western blot test. The algorithm used for HIV diagnosis will be prepared in consultation with the NL, and will be validated before it is used for protocol testing.

If the Western blot is negative or indeterminate, the NL must be contacted to determine what additional testing is needed. If the Western blot is positive, a second Western blot should be performed using a new sample collected within 2 weeks. If a participant is confirmed to be HIV-infected (if both Western blots are positive, using samples from two different study visits), no further HIV testing will

be done at follow-up visits; however, plasma will still be stored at each study visit for retrospective evaluation related to the assessment of HIV incidence at enrollment (details will be provided by the NL at a later date). The participant will receive appropriate post-test counseling and will be referred for HIV care. HIV infection must be confirmed in all cases using two independent samples.

Note that whole blood collected by phlebotomy will be used for HIV rapid testing, rather than blood collected by fingerstick for two reasons: (1) collection of blood will be required for all participants for plasma storage and HSV-2 testing, even if HIV infection was documented at a prior study visit, and (2) if fingerstick testing were used for HIV rapid testing, there might be stigma associated with not having a fingerstick in participants who had HIV infection documented at a prior study visit.

### **9.1.2 CD4 Testing**

A CD4 cell count is performed at any visit where one or both of the HIV rapid tests are reactive. In cases where a reactive HIV rapid test is obtained, but HIV infection is not confirmed, the CD4 cell count testing should be repeated at the next visit where a reactive HIV rapid test is obtained, provided it is at least 6 months after the previous CD4 cell count was obtained. Additionally, all young women found to be HIV positive at enrollment or at any follow-up visit will receive CD4 testing at each annual follow-up visit and the Graduation visit.

### **9.1.3 HSV-2 Testing**

HSV-2 testing will be performed using the Kalon assay (Herpes Simplex Type 2 IgG ELISA, Kalon Biologics, Ltd.) with a cut-off of 1.5. This assay has been shown to have the best performance for HSV-2 detection in African populations<sup>34, 35</sup>. Additional confirmatory testing may be performed retrospectively by Western blot (performed at the University of Washington, coordinated by the NL). If the HSV-2 test is positive, no further HSV-2 testing will be done at follow-up visits; however, plasma will still be stored at subsequent study visits for QC testing and other assays.

## **9.2 Network Laboratory Specimens**

The HPTN NL will perform HIV viral load testing for all participants with confirmed HIV infection. The HPTN NL will also perform QC testing for selected samples to confirm the results of HIV testing performed on site, and will perform testing to determine HIV infection status in selected cases (e.g., indeterminate Western blot). The HPTN NL may also perform specialized assays to characterize HIV viruses and the host response to HIV infection in participants who become HIV-infected during the study (e.g., assays for HIV incidence, HIV genotyping, HIV phenotyping, HIV subtyping, minority variants assays, etc.). Some testing may be performed at an outside laboratory designated by the HPTN NL. Stored samples may also be used to confirm results of HSV-2 testing on site. DBS may be used by the NL for QC of HIV diagnostic tests and/or for validation of DBS-based methods for HSV-2 diagnosis. Results from testing performed at the HPTN NL and/or an HPTN NL-designated outside laboratory will not be returned to study sites or study participants.

## **9.3 Quality Control and Quality Assurance Procedures**

The clinical sites will document that their clinical laboratories participate in DAIDS sponsored External Quality Assurance (EQA) programs. NL staff will conduct periodic visits to each site to assess the implementation of on-site laboratory QC procedures, including proper maintenance of

laboratory testing equipment and use of appropriate reagents. NL staff will follow-up directly with site staff to resolve any QC or quality assurance (QA) problems identified through proficiency testing and/or on-site assessments. Throughout the course of the study, the HPTN NL will select a random sample of stored specimens to test for QA purposes. NL staff will follow-up directly with site staff to resolve any QA problems identified through this process.

### **9.3.1 QC for HIV diagnostic testing**

Before performing HIV diagnostic testing, all sites must validate their HIV testing algorithm, and the validation study must be approved by the HPTN NL. Local laboratories will perform testing for HIV diagnosis at screening, enrollment, and other scheduled visits. Algorithms for HIV diagnostic testing will be provided in the SSP Manual. The NL will perform QC testing on selected samples.

### **9.3.2 QC for CD4 cell count determination**

CD4 cell count testing will be performed at local laboratories for any subject with confirmed HIV infection. Additionally, all HIV-positive young women will receive CD4 cell count testing at each annual follow-up visit and the Graduation visit. Non-U.S. laboratories performing CD4 cell count testing must be enrolled in the UK NEQAS program through the DAIDS Immunology QA program.

## **9.4 Specimen Storage**

Study site staff will store all plasma and DBS samples collected in the study until all protocol-related testing has been completed, including QC testing and other testing performed at or coordinated by the HPTN NL. The study site will be informed by the HPTN Statistical Data Management Center (SDMC) when shipments to the NL are required, and will be instructed which samples to ship. At the discretion of the HPTN NL, samples may be transferred to a DAIDS-approved repository.

In addition, study participants will be asked to provide written informed consent for their specimens to be stored after the end of the study for possible future testing. The specimens of participants who do not consent to long term storage and additional testing will be destroyed at the end of the study.

## **9.5 Biohazard Containment**

As the transmission of HIV and other blood-borne pathogens can occur through contact with contaminated needles, blood, and blood products, appropriate blood and secretion precautions will be employed by all personnel in the drawing of blood and shipping and handling of all specimens for this study, as currently recommended by the U.S. Centers for Disease Control (CDC). All infectious specimens will be transported in accordance with U.S. regulations (42 CFR 72).

## **9.6 Sample Shipping**

All specimens will be shipped in accordance with the HPTN Manual of Laboratory Operations and IATA specimen shipping regulations. All shipments will be documented using the HPTN LDMS.

## **10.0 ADMINISTRATIVE PROCEDURES**

### ***10.1 Protocol Registration***

Prior to implementation of this protocol, and any subsequent full version amendments, each site must have the protocol and the protocol informed consent form(s) approved, as appropriate, by their local institutional review board (IRB)/ethics committee (EC) and any other applicable regulatory entity (RE). Upon receiving final approval, sites will submit all required protocol registration documents to the DAIDS Protocol Registration Office (DAIDS PRO) at the Regulatory Support Center (RSC). The DAIDS PRO will review the submitted protocol registration packet to ensure that all of the required documents have been received.

Site-specific informed consent forms (ICFs) *WILL* be reviewed and approved by the DAIDS PRO and sites will receive an Initial Registration Notification from the DAIDS PRO that indicates successful completion of the protocol registration process. A copy of the Initial Registration Notification should be retained in the site's regulatory files.

AMENDMENT REGISTRATION: Upon receiving final IRB/EC and any other applicable RE approval(s) for an amendment, sites should implement the amendment immediately. Sites are required to submit an amendment registration packet to the DAIDS PRO at the RSC. The DAIDS PRO will review the submitted protocol registration packet to ensure that all the required documents have been received. Site-specific ICF(s) *WILL NOT* be reviewed and approved by the DAIDS PRO and sites will receive an Amendment Registration Notification when the DAIDS PRO receives a complete registration packet. A copy of the Amendment Registration Notification should be retained in the site's regulatory files.

For additional information on the protocol registration process and specific documents required for initial and amendment registration, refer to the current version of the DAIDS Protocol Registration Manual.

### ***10.2 Study Activation***

Following ethical review and approval, the site will complete the DAIDS protocol registration process as described in the DAIDS Protocol Registration Manual. The HPTN CORE, SDMC and NL staff will work closely with the site to ensure completion of this and all other study-specific site activation requirements as detailed in the HPTN Manual of Operations and the SSP Manual. Upon successful protocol registration and completion of all other study-specific site activation requirements, the CORE will issue a study activation notice to the site. Implementation of the study may not proceed prior to receipt of this written notification.

### ***10.3 Study Coordination***

Study implementation will be directed by this protocol as well as the SSP Manual. The SSP Manual will outline procedures for conducting study visits, data and forms processing, and other study operations.

Study CRFs, quantitative and qualitative questionnaires will be developed by the study team. CRF data will be entered and cleaned by the SDMC data management system. QC reports and queries will

be routinely sent back to the site for verification and resolution. Qualitative (interviews and focus group) data will be the primary responsibility of the site data management and UNC investigators.

Close cooperation between the study Investigator, National Institutes of Allergy and Infectious Diseases (NIAID) Medical Officer, Protocol Specialist, Biostatistician, SDMC Data Managers, NL, and other study team members will be necessary in order to track study progress, respond to queries about proper study implementation, and address other issues in a timely manner. Rates of accrual, adherence, follow-up, and social harms will be monitored closely by the study team. These rates also will be evaluated by representatives of the HPTN CORE and SDMC on a regular basis.

#### **10.4 Study Monitoring**

On-site study monitoring will be performed in accordance with DAIDS policies. Study monitors will visit the site to:

- Verify compliance with human participants and other research regulations and guidelines.
- Assess adherence to the study protocol, SSP Manual, and local counseling practices.
- Confirm the quality and accuracy of information collected at the study site and entered into the study database.

Site investigators will allow study monitors to inspect study facilities and documentation (e.g., informed consent forms, clinic and laboratory records, other source documents, CRFs), as well as observe the performance of study procedures. Investigators also will allow inspection of all study-related documentation by authorized representatives of the HPTN CORE, SDMC, NL, NIAID, and U.S. local government and regulatory authorities. Acceptable source documentation for each site will be specified prior to study start. A site visit log will be maintained at the study site to document all visits.

#### **10.5 Protocol Compliance**

The study will be conducted in full compliance with the protocol. The protocol will not be amended without prior written approval by the Principal Investigator. All protocol amendments must be submitted to and approved by the relevant IRB(s)/EC(s) prior to implementing the amendment except when necessary to protect the safety, rights, or welfare of participants or to eliminate apparent immediate hazards to participants.

#### **10.6 Investigator's Records**

The study site investigator will maintain and store in a secure manner complete, accurate, and current study records throughout the study. The investigator will retain all study records for at least three years after the completion of the study, unless directed otherwise by the National Institutes of Health (NIH). Study records include administrative documentation, including site-registration documents and all reports and correspondence relating to the study, as well as documentation related to each participant screened and/or enrolled in the study, including informed consent forms, locator forms, CRFs, notations of all contacts with the participant, and all other source documents. Qualitative data collected from FGDs and case studies, including digital recordings, original transcripts, and English translations, will also be maintained along with other study records. Photographs of young women in

the CCT component will be used only for identification at follow-up visits; they will be destroyed when all study visits have been completed.

#### ***10.7 Use of Information and Publications***

Publication of the results of this study will be governed by HPTN policies. Any presentation, abstract, or manuscript will be submitted by the Investigator to the HPTN Manuscript Review Committee and DAIDS for review prior to submission.

## 11.0 REFERENCES

1. Pettifor A, Rees H, Kleinschmidt I, et al. Young people's sexual health in South Africa: HIV prevalence and sexual behaviours from a nationally representative household survey. *AIDS*. 2005;19:1525-1534.
2. UNAIDS. *Report on the Global AIDS Epidemic 2006*. Geneva: UNAIDS;2006.
3. Pettifor AE, Levandowski BA, Macphail C, Padian NS, Cohen MS, Rees HV. Keep them in school: the importance of education as a protective factor against HIV infection among young South African women. *Int J Epidemiol*. Jul 9 2008;37(6):1266-1273.
4. World Bank. *Education and HIV/AIDS a window of hope*. Washington D.C.: World Bank;2002.
5. Hargreaves JR, Morison LA, Kim JC, et al. The association between school attendance, HIV infection and sexual behaviour among young people in rural South Africa. *J Epidemiol Community Health*. Feb 2008;62(2):113-119.
6. Michelo C, Sandoy IF, Fylkesnes K. Marked HIV prevalence declines in higher educated young people: evidence from population-based surveys (1995-2003) in Zambia. *Aids*. Apr 24 2006;20(7):1031-1038.
7. de Walque D, Nakiyingi-Miir JS, Busingye J, Whitworth JA. Changing association between schooling levels and HIV-1 infection over 11 years in a rural population cohort in south-west Uganda. *Trop Med Int Health*. Oct 2005;10(10):993-1001.
8. Barnighausen T HV, Timaeus IM, Newell ML. The socioeconomic determinants of HIV incidence: evidence from a longitudinal, population-based study in rural South Africa. *AIDS*. 2007;7:S(Nov: 21):10.
9. Department of Education. *Monitoring and Evaluation Report on the Impact and Outcomes of the Education System on South Africa's Population: evidence from household surveys*. Pretoria: Department of Education;2006.
10. Samson M, Lee U, Ndlebe A, et al. *The Social and Economic Impact of South Africa's Social Security System*: Economics and Finance Directorate, Department of Social Development;2004.
11. Schultz T. *The Impact of PROGRESA on School Enrollments*. Washington D.C.: International Food Policy Research Institute 2000.
12. Duflo E, Dupas P, Kremer M, Sinei S. Education and HIV/AIDS Prevention: Evidence from a randomized evaluation in Western Kenya. *World Bank Policy Research Working Paper*. 2006.
13. Pettifor A, Kleinschmidt I, Levine J, et al. A community based study to examine the effect of a youth HIV prevention intervention on young people age 15-24 in South Africa: results of a baseline survey. *Tropical Medicine and International Health*. 2005;10(10):971-980.
14. Pettifor AE, Hudgens MG, Levandowski BA, Rees HV, Cohen MS. Highly efficient HIV transmission to young women in South Africa. *Aids*. Apr 23 2007;21(7):861-865.
15. Pettifor A, Levandowski B, MacPhail C, et al. Rethinking the sexual behaviors of adolescents in Africa: a comparison of US and South African adolescents. Paper presented at: CROI2007; Los Angeles.
16. Rehle T, Shisana O, Pillay V, Zuma K, Puren A, Parker W. National HIV incidence measures--new insights into the South African epidemic. *S Afr Med J*. Mar 2007;97(3):194-199.
17. Bronfenbrenner U. Toward an experimental ecology of human development. *American Psychologist*. 1977;32:513-531.
18. Brofenbrenner U. The ecology of human development. *American Psychologist*. 1979;32:513-531.
19. Waldo C, Coates T. Multiple levels of analysis and intervention in HIV prevention science: exemplars and directions for new research. *AIDS*. 2000;14:S18-S26.
20. Stokols D. Establishing and maintaining healthy environments: Toward a social ecology of health promotion. *American Psychologist*. 1992;47:6-22.
21. Moss H, Tarter R. Substance abuse, aggression and violence: What are the connections. *American Journal on Addictions*. 1993;2:149-159.
22. Oetting ER, Donnermeyer JF. Primary socialization theory: the etiology of drug use and deviance. I. *Subst Use Misuse*. Mar 1998;33(4):995-1026.
23. National Research Council (U.S.), Panel on Transitions to Adulthood in Developing Countries. *Growing up global : the changing transitions to adulthood in developing countries*. Washington D.C.: National Academies Press; 2005.
24. Salmon C, Nichols J. The next birthday method of respondent selection. *Public Opinion Quarterly*. 1983;47:270-276.



25. Waruru AK, Nduati R, Tylleskar T. Audio computer-assisted self-interviewing (ACASI) may avert socially desirable responses about infant feeding in the context of HIV. *BMC Med Inform Decis Mak*. 2005;5:24.
26. Mensch BS, Hewett PC, Erulkar AS. The reporting of sensitive behavior by adolescents: a methodological experiment in Kenya. *Demography*. May 2003;40(2):247-268.
27. Norris S, Richter L. HIV/AIDS risk research among young people: a methodological study of the reporting of sensitive issues among adolescents in the Birth to Twenty study, South Africa. Paper presented at: XVI International AIDS Conference 2006; Toronto.
28. Dunkle KL, Jewkes RK, Nduna M, et al. Perpetration of partner violence and HIV risk behaviour among young men in the rural Eastern Cape, South Africa. *Aids*. Oct 24 2006;20(16):2107-2114.
29. Mazumdar S, Houck PR, Liu KS, et al. Intent-to-treat analysis for clinical trials: Use of data collected after termination of treatment protocol. *Journal of Psychiatric Research* 2002;36(3):153-164.
30. Lee AH, Wang K, Scott JA, Yau KK, McLachlan GJ. Multi-level zero-inflated poisson regression modelling of correlated count data with excess zeros. *Stat Methods Med Res*. Feb 2006;15(1):47-61.
31. Bernard H. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Thousand Oaks, CA.: Sage Publications; 2000.
32. Ulin P, Robinson E, Tolley E. *Qualitative Methods in Public Health: A Field Guide for Applied Research*. San Francisco: Jossey-Bass; 2005.
33. Miles M, Huberman M. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd ed. London: Sage Publications; 1994.
34. Ng'afyo. *J Virol Methods* 2010;163:276-281.
35. Laeyendecker. *J Clin Micro* 2004;42:1794-1796.

## **APPENDICES**

### **I. Schedule of Study Visits and Procedures**

- A. Schedule of Visits and Procedures –Parent/Legal Guardian
- B. Schedule of Visits and Procedures –Young Women

### **II. Sample Informed Consent Forms**

- A. Assent for Young Women
- B. Consent for Young Women 18 years and older
- C. Consent for Parent/Legal Guardian for Young Woman
- D. Assent for Young Men and Women for Qualitative Study
- E. Consent for young Men and Women for Qualitative Study
- F. Parental consent for Young Men in focus group
- G. Consent for focus groups with teachers

### **III. Map of the AHDSS site**

## Appendix IA: Schedule of Visits and Procedures –Parent/Legal Guardian

<b>Administrative, Behavioral, and Regulatory Procedures</b>	<b>Screening/Baseline visit</b>	<b>12, 24, 36-month follow-up visit</b>
Verify parent/legal guardian eligibility	X	
Obtain parent/legal guardian consent	X	
Verify parent/legal guardian ongoing consent		X
Obtain/update locator information	X	X
Household questionnaire	X	X

## Appendix IB. Schedule of Visits and Procedures –Young Women

	Screening	Baseline/Enrollment	12-months	24-months	36-months	Graduation Visit
<b>Administrative, Behavioral, and Regulatory Procedures</b>						
Verify young woman meets all eligibility criteria	X					
Obtain young woman's consent/assent	X					
Verify young woman's ongoing consent/assent			X	X	X	X
Re-consent young woman if she has reached 18 years of age since last study visit			X	X	X	X
Obtain/update locator information	X		X	X	X	
Provide Appointment for Baseline Visit	X					
Young woman's questionnaire		X	X	X	X	
Pre and Post Risk Reduction Counseling		X	X	X	X	X
Schedule follow-up visit for repeat blood draw if necessary		X	X	X	X	X
Randomization		X				
<b>Laboratory Procedures *</b>						
Blood collection for:		X	X	X	X	X
HIV rapid testing (with confirmation if indicated) <sup>1</sup>		X	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>
HSV-2 testing		X	X <sup>3</sup>	X <sup>3</sup>	X <sup>3</sup>	X <sup>3</sup>
Plasma for storage <sup>4</sup>		X	X	X	X	X
DBS for storage <sup>4</sup>		X	X	X	X	X
WB <sup>1,5</sup>		X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>
CD4 <sup>1,6,7</sup>		X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>2</sup>

<sup>1</sup> HIV diagnostic testing must be performed at the indicated study visits according to the algorithms provided in the SSP Manual.

<sup>2</sup> No HIV testing is required if HIV infection was confirmed at a prior study visit. Confirmation of HIV infection requires documentation of two positive Western blots collected on different dates. The HPTN NL should be consulted in any case where HIV infection status is unclear.

<sup>3</sup> No HSV-2 testing is required if HSV-2 testing was positive at a prior study visit.

<sup>4</sup> Store samples regardless of HIV test results. Store samples at each visit for all participants (even if HIV testing is not performed). These samples should be stored on-site until a shipping request is

received from SCHARP. SCHARP will request shipment of selected samples for testing at the HPTN NL (for quality control testing, viral load testing, and other testing as indicated).

<sup>5</sup> Western blot is performed at any visit where one or both of the HIV rapid tests is reactive, and at visits where samples are drawn to confirm HIV infection.

<sup>6</sup> A CD4 cell count is performed at any visit where one or both of the HIV rapid tests are reactive. In cases where a reactive HIV rapid test is obtained, but HIV infection is not confirmed, the CD4 cell count testing should be repeated at the next visit where a reactive HIV rapid test is obtained, provided it is at least 6 months after the previous CD4 cell count was obtained. Additionally, all young women found to be HIV positive at enrollment or at any follow-up visit will receive CD4 testing at each annual follow-up visit.

<sup>7</sup> A CD4 cell count is drawn at each follow-up visit on all young women determined to be HIV-positive at enrollment or after any follow-up visit.

## Appendix IIA

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # Mxxxxxxx</b>	<b>IRB Study # 09-0239</b>
<b>Assent to Participate in a Research Study</b>	
<b>Young woman under 18 years of age</b>	

**Assent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail and Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** XXX-XXX-XXXX

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

You are being asked to take part in this research study because you are a learner. About 2500 young women and their parents or guardians will be part of the study. This research is being paid for by the National Institutes of Health in the United States.

This is an assent form. It gives you information about this study. The study staff will talk with you about this information. You are free to ask questions at any time. Both you and your parent/legal guardian need to agree to be in the study in order for either of you to join. You will be given a copy of this assent form to keep.

### **What is the purpose of this research?**

The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

There are two groups in this study. One group will receive a monthly cash payment if the young woman attends school. The other group will not receive the payment. At the end of the study, we will be able to see if there is a difference between the two groups.

If you and your parent/guardian agree to be in this study, we will ask you to take part in the activities that we describe below.

### **How long will you be in the research study?**

If you agree to be in the study, you will be in the study for 3 years or until you finish grade 12, whichever comes first, EXCEPT for 11<sup>th</sup> graders. If you are in the 11<sup>th</sup> grade now, you will be in the study only 2 years. You will have your first study visit in the next few weeks and then one visit each year until you complete the study (3 or 4 visits). Depending on when you come for your visits, you may also have an extra visit near the time of your graduation or the end of the school year 2014, whichever comes first. Each study visit will take about 3 or 4 hours and will be held at a community venue.

### **What are your rights as a research participant?**

- Taking part in this study is completely voluntary. You may choose not to take part or leave the study at any time. If you decide that you want to leave the study, we will ask that you allow us to draw a blood specimen for another HIV and HSV-2 test.
- You and your parent/guardian will both be treated the same no matter what you decide. You will not lose the rights to any other care or services that you might have in the community.
- If you or your parent/guardian decides not to be in the study, you can still join another research study later if one is available and you are eligible.
- We will tell you about new information from this or other studies that may affect your willingness to stay in this study.

### **What will you be asked to do for this research?**

- Complete a questionnaire every year for 3 years, for a total of 4 questionnaires. Eleventh graders will complete this questionnaire only 3 times. This will be done partly on a computer with an interviewer and partly on a computer by yourself. This will take place at a community place, like the school. Some of the questions are about school, sexual behavior, and your knowledge of HIV. You do not have to be sexually active to be in the study.
- Every year give a sample of blood from your arm so we can test it for HIV (the virus that causes AIDS) and another infection called herpes simplex virus, also called HSV-2 or herpes. If you are known to be HIV positive at enrollment or any follow-up visit, a CD4 cell count will be performed at each annual visit instead of an HIV test. CD4 cells help your body fight viruses. A CD4 cell count measures the number of cells in a small amount of blood to see how well your body is fighting a virus like HIV. CD4 cell counts are important to monitor your health and to help your doctor decide whether or not to start HIV medications, or see if HIV medications you are taking are working.
- At the Graduation Visit give a sample of blood from your arm so we can test it for HIV (the virus that causes AIDS) and HSV-2. We will draw a CD4 cell count at this visit instead of completing HIV testing, if you were found to be HIV positive a previous visit.
- 
- Allow us to contact you by phone or text to remind you of the next visit, and to see if there are any changes in school or other problems. If we cannot reach you by phone, we may visit your home.
- Allow us to take your picture for identification purposes at your first visit; your picture will be destroyed when all the study visits are completed.

- Give us your phone number and the name and phone numbers of one or two other people who can help us find you.
- You may be asked to participate in other activities such as case studies or focus group discussions at some point during the study. You will be asked to give assent separately for those activities.

### HIV and HSV-2 testing

At each visit, we will collect [insert number] tubes of blood, about [insert number] teaspoons from your arm, to do the HIV and HSV-2 tests. You will receive counseling before and after this test. You will know your HIV results immediately after the test. If the first test shows you might be infected, you will return 2 weeks later to do another test. If this second test confirms that you are HIV-infected, we will tell you the results of all the tests and where you can find the care you need at local public clinics.

Sometimes an HIV test is not clearly positive or negative. If this happens, we will test your blood again until we know the result. The counselor will talk with you about the test results. *This study does not provide care or treatment for HIV.* If you are found to be HIV positive at enrollment or any follow-up visit (including the Graduation Visit), a CD4 cell count test will be performed at each annual visit instead of an HIV test.

The test for HSV-2 has to be sent to a laboratory for testing. If this test shows that you are infected with HSV-2, we will tell you where you can find the care you need. *This study does not provide care or treatment for HSV-2.*

Even if your tests show that you are infected with HIV or HSV-2, you can still be in the study.

**We will not tell your parents or anyone else the results of either test unless you ask us to do so.**

### Blood samples

There might be some blood left over after we have done the study tests. We will ask permission to store your leftover blood for testing in future research studies. You can still enroll in this study if you decide not to have your blood stored for testing in future studies. Just let us know and we will destroy your left over blood. Some of your blood sample will be sent to the U.S. for other study-related testing.

### School Attendance

We will collect your school attendance records from your teachers. We will do this for 3 years or until you finish the study.

### **There are two study groups in this study**

The young women who are in this study will be divided into two groups. Both groups will do the same blood tests and questionnaires that we described above. But for one group, the young girls and their parents/guardians will receive monthly cash payments if the young girls attend school at least 80% of school days.

The other group will not receive any cash payments.



Neither the study staff nor you can choose which group you will be in. It is decided by chance, like playing Lotto. The decisions are made by a computer and put into an envelope. After the questionnaires and blood tests during the first study visit, you will choose one of the envelopes and inside it will say which group you are in. The staff does not know which group is in each envelope.

**What will you be asked to do if you ARE in the cash payment group?**

If you are in the cash payment group, you and your family will receive cash payments if you attend school. R100.00 will be paid to you directly and R200.00 to your family each month. To receive the payment, you must attend at least 80% of school days. If you miss more days than that, you and your family will not get the payment that month. For example, if there are 20 school days in a month, if you miss more than 4 school days you and your family will not receive the payment.

If you attend less than 80% of school days in a month due to illness, we will allow you to still receive your payment if you have a doctors/clinic note stating why you missed school.

Payments will be made into a post office or bank account at the middle of the following month (for example, for attending in March you will be paid mid-April). You must open a post-office or bank account in your name to receive your payment. Your parent/legal guardian or someone in the household must also open a post-office or bank account, if they do not have one already. You and your parent/guardian must provide us with your post-office or bank account number to get the payment.

If you stop attending school or get married, you and your family will not receive the monthly payment anymore. However, we will still ask you to return for the yearly visits for HIV and HSV-2 tests and the questionnaire.

We will ask you to return in a year to participate in the questionnaire and HIV/HSV-2 tests again.

We are only conducting this study in a select group of high schools. It is important to let us know if you move high schools to determine if you will still be eligible to receive the payment.

If you move households during the study the family member that receives the R200.00 and completes the household survey may change. It is important for you to let us know if you move households.

**What will you be asked to do if you are NOT in the cash payment group?**

You should attend school like you normally do. We will check your attendance at the school.

We will ask you to return in a year to participate in the questionnaire and HIV/HSV-2 tests again.

If you stop attending school, we will still ask you to continue the yearly study visits.

We are only conducting this study in a select group of high schools. It is important to let us know if you move high schools.

If you move households during the study the family member that completes the household survey may change. It is important for you to let us know if you move households.

**How will study staff keep in contact with you during the study?**

You will be asked to provide your phone number and one or two other phone numbers of people who will know how to reach you. The staff may visit you at your house or contact you by phone to remind you of the visits or if the staff has important information for you. If you are not willing to give us this information, you should not agree to be in this study.

### **What about Confidentiality?**

All efforts will be made to keep your personal information confidential. All of your research records will use a code number, not names. Research records are stored in a locked room. We will not tell your parents or anyone else the information that you share with us, unless you ask us to share it. However, we cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your name will never be used in any publication or presentation about the research study.

The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the University of the Witwatersrand or University of North Carolina IRB, study staff, and authorized representatives of these organizations. The names and account numbers of participants who receive cash payments will be reported to the financial staff at the University of Witwatersrand and the Wits Health Consortium so they can process your payments. This is the only information they will have about you.

The questionnaire that you complete will ask you some questions related to sexual violence and sexual abuse. **Because you are under 18 years old, if you decide to answer these questions and you report having experienced sexual violence or abuse we will be obliged to find help for you.** This includes having to report the sexual violence to the police because you are still a minor (<18 years).

If you choose not to answer the questions about sexual violence and abuse because you do not want us to refer you for help, you can still get help on your own. You can ask one of the study staff for help in finding another organization that helps young women. In addition, we will provide all young women with information on local organizations that can provide help.

### **What are the risks and discomforts?**

Some people feel discomfort when blood is drawn and may feel dizzy or even faint. You may have a bruise or swelling where the needle goes into you. Some people may develop an infection where the needle goes in, but this is very rare.

We will do everything we can to protect your privacy while you are in this study. However, it is possible that you could have problems if people learn that you took part in this study or if the information about you becomes known to others. You may be treated unfairly by others, including your family and community.

You may experience anger or distress if you learn that you are infected with HIV or HSV-2. We will refer you for care if you are infected with HIV or HSV-2.

Some of the visits could make you feel uncomfortable or embarrassed. You may refuse to answer any question and you can stop the questionnaire at any time. If any of the topics discussed in the questionnaire upset you, the study staff can help you find someone to talk to. Please ask the study staff and they will refer you.

**Will the research benefit you or the community?**

There may be no immediate benefits to participating in the study. But you may benefit from receiving HIV counseling and finding out if you are infected with HIV or HSV-2. HIV positive young women may benefit from knowing their CD4 cell count. Also, your community and other communities may benefit from this research in the future.

**Are there any costs or reimbursements with this research?**

There are no costs to you or your parents/guardian for taking part in this research. You will receive refreshments and a gift worth approximately R30.00 at each visit that we collect your blood.

**Reasons why you may be withdrawn from the study without your consent**

You may be removed from the study without your consent for the following reasons:

- The study is stopped or cancelled
- You move outside the study area
- Staying in the study would be harmful to you
- Other administrative reasons

**What other choices are there besides being in this research?**

You are free to choose not to be in the research. There may be other research in the area that you can be in. HIV testing is available free at local health clinics.

**Questions about your rights and this study**

You have the right to ask, and have answered, any questions you may have about this research at any time. If you have questions, or concerns, you should contact the researchers listed on the first page of this form.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee. If you have questions about this specific research project please call XXX at XXX-XXX-XXXX.

If you would like to learn more information about sex or HIV/AIDS, we can refer you to an organization that helps young women and their families. Additionally, if you would like pamphlets about these topics our study staff can provide these to you.

**What happens if you are injured by this research?**

If you are injured as a result of being in this research study, you will be given immediate treatment for your injuries. However, you may have to pay for this care. There is no program for compensation either through this institution or the study sponsor (the U.S. National Institutes of Health [NIH]). You will not give up any of your legal rights by signing this consent form.

**Verification of Consent**

Do you agree to take part in the research study?



---

## PARTICIPANT'S AGREEMENT TO TAKE PART

### Participant's Agreement:

I have read or had read to me the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

---

Signature of Research Participant

---

Date

---

Printed Name of Research Participant

---

Signature of Person Obtaining Assent

---

Date

---

Printed Name of Person Obtaining Assent

---

Signature of Witness (if appropriate)

---

Date

---

Printed Name of Witness

---

### **SPECIMEN STORAGE and TESTING IN FUTURE RESEARCH**

Please carefully read the statements below and think about your choice. No matter what you decide it will not affect whether you can be in this research study. You may also change your mind about using your leftover blood for future testing. You need to tell a study staff member if you do change your mind.

\_\_\_\_\_ (*participant initials*) I agree to have leftover samples of my blood stored and used for testing in future research related to HIV and HSV-2.

\_\_\_\_\_ (*participant initials*) I do not agree to have leftover samples of my blood stored and used for testing in future research related to HIV and HSV-2.

## Appendix IIB

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # Mxxxxxxx</b>	<b>IRB Study # 09-0239</b>
<b>Consent to Participate in a Research Study</b>	
<b>Young Women Participants (age 18 years and over)</b>	

**Consent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail and Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** XXX-XXX-XXXX

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

You are being asked to take part in this research study because you are a learner. About 2500 young women and their parents or guardians will be part of the study. This research is being paid for by the National Institutes of Health in the United States.

This is a consent form. It gives you information about this study. The study staff will talk with you about this information. You are free to ask questions at any time. Both you and your parent/legal guardian need to agree to be in the study in order for either of you to join. You will be given a copy of this consent form to keep.

### **What is the purpose of this research?**

The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

There are two groups in this study. One group will receive a monthly cash payment if the young woman attends school. The other group will not receive the payment. At the end of the study, we will be able to see if there is a difference between the two groups.

If you and your parent/guardian agree to be in this study, we will ask you to take part in the activities that we describe below.

### **How long will you be in the research study?**

If you agree to be in the study, you will be in the study for 3 years or until you finish grade 12, whichever comes first, except for 11<sup>th</sup> graders. If you are in the 11<sup>th</sup> grade now, you will be in the study only 2 years. You will have your first study visit in the next few weeks and then one visit each year until you complete the study (3 or 4 visits). Depending on when you enroll, you may also have an extra visit near the time of your graduation. Each study visit will take about 3 or 4 hours and will be held at a community venue.

### **What are your rights as a research participant?**

- Taking part in this study is completely voluntary. You may choose not to take part or leave the study at any time. If you decide that you want to leave the study, we will ask that you allow us to draw a blood specimen for another HIV and HSV-2 test.
- You and your parent/guardian will both be treated the same no matter what you decide. You will not lose the rights to any other care or services that you might have in the community.
- If you or your parent/guardian decides not to be in the study, you can still join another research study later if one is available and you are eligible.
- We will tell you about new information from this or other studies that may affect your willingness to stay in this study.

### **What will you be asked to do for this research?**

- Complete a questionnaire each year for 3 years, for a total of 4 questionnaires. Eleventh graders will complete this questionnaire only 3 times. This will be done partly on a computer with an interviewer and partly on a computer by yourself. This will take place at a community place, like the school. Some of the questions are about school, sexual behavior, and your knowledge of HIV. You do not need to be sexually active to be in the study.
- Every year give a sample of blood from your arm so we can test it for HIV (the virus that causes AIDS) and another infection called herpes simplex virus, also called HSV-2 or herpes. If you are found to be HIV positive at enrollment or any follow-up visit, a CD4 cell count will be performed at each annual visit instead of an HIV test. CD4 cells help your body fight viruses. A CD4 cell count measures the number of cells in a small amount of blood to see how well your body is fighting a virus like HIV. CD4 cell counts are important to monitor your health and to help your doctor decide whether or not to start HIV medications, or see if HIV medications you are taking are working.
- At the Graduation Visit give a sample of blood from your arm so we can test it for HIV (the virus that causes AIDS) and HSV-2. We will draw a CD4 cell count at this visit instead of completing HIV testing, if you were found to be HIV positive a previous visit.
- 
- Allow us to contact you by phone or text to remind you of the next visit, and to see if there are any changes in school or other problems. If we cannot reach you by phone, we may visit your home.
- Allow us to take your picture for identification purposes at your first visit; your picture will be destroyed when all the study visits are completed.
- Give us your phone number and the names and phone numbers of one or two other people who can help us find you.



- You may be asked to participate in other activities including case studies or focus group discussions at some point during the study. You will be asked to give consent separately for those activities.

### HIV and HSV-2 testing

At each visit, we will collect [insert number] tubes of blood, about [insert number] teaspoons from your arm to do the HIV and HSV-2 tests. You will receive counseling before and after each test. You will know your HIV results immediately after the test. If the first test shows you might be infected, you will return 2 weeks later to do another test. If this second test confirms that you are HIV-infected, we will tell you the results of all the blood tests and where you can find the care you need at local public clinics.

Sometimes an HIV test is not clearly positive or negative. If this happens, we will test your blood again until we know the result. The counselor will talk with you about the test results. *This study does not provide care or treatment for HIV.* If you are found to be HIV positive at enrollment or any follow-up visit (including the Graduation Visit), a CD4 cell count test will be performed at each annual visit instead of an HIV test.

The test for HSV-2 has to be sent to a laboratory for testing. If this test shows that you are infected with HSV-2, we will tell you where you can find the care you need. *This study does not provide care or treatment for HSV-2.*

Even if your tests show you are infected with HIV or HSV-2, you can still be in this study.

**We will not tell your parents or anyone else the results of either test unless you ask us to do so.**

### Blood samples

There might be some blood left over after we have done the study tests. We will ask permission to store your leftover blood for testing in future research studies. You can still enroll in this study if you decide not to have your blood stored for testing in future studies. Just let us know and we will destroy your left over blood. Some of your blood sample will be sent to the U.S. for other study-related testing.

### School Attendance

We will collect your school attendance records from your teachers. We will do this for 3 years or until you finish the study.

### **There are two study groups in this study**

The young women who are in this study will be divided into two groups. Both groups will do the same blood tests and questionnaires that we described above. But for one group, the young girls and their parents/guardians will receive monthly cash payments if the young girls attend school at least 80% of school days.

The other group will not receive any cash payments.

Neither the study staff nor you can choose which group you will be in. It is decided by chance, like playing Lotto. The decisions are made by a computer and put into an envelope. After the

questionnaires and blood tests during the first study visit, you will choose one of the envelopes and inside it will say which group you are in. The staff does not know which group is in each envelope.

**What will you be asked to do if you ARE in the cash payment group?**

If you are in the cash payment group, you and your family will receive cash payments if you attend school. R100.00 will be paid to you directly and R200.00 to your family each month. To receive the payment, you must attend at least 80% of school days. If you miss more days than that, you and your family will not get the payment that month. For example, if there are 20 school days in a month, if you miss more than 4 school days you and your family will not receive the payment.

If you attend less than 80% of school days in a month due to illness, we will allow you to still receive your payment if you have a doctors/clinic note stating why you missed school.

Payments will be made into a post office or bank account at the middle of the following month (for example, for attending in March you will be paid mid-April). You must open a post-office or bank account in your name to receive your payment. Your parent/legal guardian or someone in the household must also open a post-office or bank account, if they do not have one already. You and your parent/guardian must provide us with your post-office or bank account number to get the payment.

If you stop attending school or get married, you and your family will not receive the monthly payment anymore. However, we will still ask you to return for the yearly visits for HIV and HSV-2 tests and the questionnaire.

We will ask you to return in a year to participate in the questionnaire and HIV/HSV-2 tests again.

If you move households during the study the family member that receives the R200.00 and completes the household survey may change. It is important for you to let us know if you move households.

We are only conducting this study in a select group of high schools. It is important to let us know if you move high schools to determine if you will still be eligible to receive the payment.

**What will you be asked to do if you are NOT in the cash payment group?**

You should attend school like you normally do. We will check your attendance at the school. We will ask you to return in a year to participate in the questionnaire and HIV/HSV-2 tests again.

If you stop attending school, we will still ask you to continue the yearly study visits.

We are only conducting this study in a select group of high schools. It is important to let us know if you move high schools.

If you move households during the study the family member that completes the household survey may change. It is important for you to let us know if you move households.

**How will study staff keep in contact with you during the study?**

You will be asked to provide your phone number and one or two other phone numbers of people who will know how to reach you. The staff may visit you at your house or contact you by phone to remind

you of the visits or if the staff has important information for you. If you are not willing to give us this information, you should not agree to be in this study.

### **What about Confidentiality?**

All efforts will be made to keep your personal information confidential. All of your research records will use a code number, not names. Research records are stored in a locked room. We will not tell your parents or anyone else the information that you share with us, unless you ask us to share it. However, we cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your name will never be used in any publication or presentation about the research study.

The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the University of the Witwatersrand or University of North Carolina IRB, study staff, and authorized representatives of these organizations. The names and account numbers of participants who receive cash payments will be reported to the financial staff at the University of Witwatersrand and the Wits Health Consortium so they can process your payments. This is the only information they will have about you.

The questionnaire that you complete will ask you some questions related to sexual violence and sexual abuse. If you choose not to answer the questions about sexual violence and abuse, you can still get help on your own. You can ask one of the study staff for help in finding another organization that helps young women. In addition, we will provide all young women with information on local organizations that can provide help.

If you would like information about these topics you can ask one of the study staff for help in finding an organization that helps young women. In addition, we will provide all young women with information on local organizations that can provide help.

### **What are the risks and discomforts?**

Some people feel discomfort when blood is drawn and may feel dizzy or even faint. You may have a bruise or swelling where the needle goes into you. Some people may develop an infection where the needle goes in, but this is very rare.

We will do everything we can to protect your privacy while you are in this study. However, it is possible that you could have problems if people learn that you took part in this study or if the information about you becomes known to others. You may be treated unfairly by others, including your family and community.

You may experience anger or distress if you learn that you are infected with HIV or HSV-2. We will refer you for care if you are infected with HIV or HSV-2.

Some of the visits could make you feel uncomfortable or embarrassed. You may refuse to answer any question and you can stop the questionnaire at any time. If any of the topics discussed in the questionnaire upset you, the study staff can help you find someone to talk to. Please ask the study staff and they will refer you.

### **Will the research benefit you or the community?**

There may be no immediate benefits to participating in the study. But you may benefit from receiving HIV counseling and finding out if you are infected with HIV or HSV-2. HIV positive young women may benefit from knowing their CD4 cell count. Also, your community and other communities may benefit from this research in the future.

### **Are there any costs or reimbursements with this research?**

There are no costs to you or your parents/guardian for taking part in this research. You will receive refreshments and a gift worth approximately R30.00 at each visit that we collect your blood.

### **Reasons why you may be withdrawn from the study without your consent**

You may be removed from the study without your consent for the following reasons:

- The study is stopped or cancelled
- You move outside the study area
- Staying in the study would be harmful to you
- Other administrative reasons

### **What other choices are there besides being in this research?**

You are free to choose not to be in the research. There may be other research in the area that you can be in. HIV testing is available free at local health clinics.

### **Questions about your rights and this study**

You have the right to ask, and have answered, any questions you may have about this research at any time. If you have questions, or concerns, you should contact the researchers listed on the first page of this form.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee. If you have questions about this specific research project please call XXX at XXX-XXX-XXXX.

If you would like to learn more information about sex, HIV/AIDS we can refer you to an organization that helps young women and their families. Additionally, if you would like pamphlets about these topics our study staff can provide these to you.

### **What happens if you are injured by this research?**

If you are injured as a result of being in this research study, you will be given immediate treatment for your injuries. However, you may have to pay for this care. There is no program for compensation either through this institution or the study sponsor (the U.S. National Institutes of Health [NIH]). You will not give up any of your legal rights by signing this consent form.

### **Verification of Consent**

Do you agree to take part in the research study?

-----

## PARTICIPANT'S AGREEMENT TO TAKE PART

### Participant's Agreement:

I have read or had read to me the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

---

### **SPECIMEN STORAGE and TESTING IN FUTURE RESEARCH**

Please carefully read the statements below and think about your choice. No matter what you decide it will not affect whether you can be in the research study. You may also change your mind about using your leftover blood for future testing. You need to tell a study staff member if you do change your mind.

\_\_\_\_\_ (*participant initials*) I agree to have leftover samples of my blood stored and used for testing in future research related to HIV and HSV-2.

\_\_\_\_\_ (*participant initials*) I do not agree to have leftover samples of my blood stored and used for testing in future research related to HIV and HSV-2.

## Appendix IIC

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # Mxxxxxxx</b>	<b>IRB Study # 09-0239</b>
<b>Consent to Participate in a Research Study</b>	
<b>Adult Parent/Legal Guardian Participants</b>	

**Consent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail, Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** XXX-XXX-XXXX

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

You are being asked to take part in this research study because your daughter or the young woman in your care is a learner. About 2500 young women and their parents or guardians will be in the study. This research is being paid for by the National Institutes of Health in the United States.

This is a consent form. It gives you information about this study. The study staff will talk with you about this information. You are free to ask questions at any time. Both you and the young woman need to agree to be in the study in order for either of you to join. You will be given a copy of this consent form to keep.

### **What is the purpose of this research?**

The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

There are two groups in this study. One group will receive a monthly cash payment if the young woman attends school. The other group will not receive the payment. At the end of the study, we will see if the cash payment made a difference in whether or not girls stay in school and avoid getting infected with HIV.

If you and the young woman agree to be in this study, we will ask you to take part in the activities that we describe below.

### **How long will you be in the research study?**

If you join the study, you and the young woman will be in it for three years or until she finishes grade 12, whichever comes first, except for 11<sup>th</sup> graders. If the young woman is in the 11<sup>th</sup> grade now, you and she will be in the study only 2 years. You will have one study visit today and one each year. The young woman will have an initial visit, a baseline visit a few days later and then one each year. Depending on when the young woman enrolls, she may also have an extra visit near the time of her graduation. Each visit for you will take about 2 hours. Each visit for the young woman in your care will take 3-4 hours.

- You or the young woman may choose not to take part or leave the study at any time. If you decide that you want to leave the study, we will ask that you allow us to draw a blood specimen from the young woman for another HIV and HSV-2 test.
- You and the young woman will both be treated the same no matter what you decide. You will not lose the rights to any other care or services that you might have in the community.
- We will tell you about new information from this or other studies that may affect your willingness to stay in this study.

### **What will you be asked to do for this research?**

All parent/legal guardians in the study will be asked to:

- Take part in annual study visits. These visits will take place today if you agree and then in one year, two years, and three years from now. If the young woman is in the 11<sup>th</sup> grade, you will have only 3 visits. These visits will take place at your home.
- At these visits you will be asked to complete a questionnaire. Some of the questions will ask you about household income, work and how much money you spend. The questionnaire will take place on a computer, led by a trained interviewer. The questionnaire will take about two hours.

All young women in the study will be asked to:

- Complete a questionnaire each year for 2 or 3 years, depending on her grade level now. This will be done partly on a computer with an interviewer and partly on a computer by herself. This will take place at a community venue, such as the school. Some of the questions are about school, sexual behavior, and her knowledge of HIV. She does not need to be sexually active to be in the study. You will not be present during the interview.
- Every year give a sample of blood so we can test it for HIV (the virus that causes AIDS) and another infection called herpes simplex virus, also called HSV-2 or herpes. If the young woman is found to be HIV positive at enrollment or any follow-up visit, a CD4 cell count will be performed at each annual visit instead of an HIV test. CD4 cells help your body fight viruses. A CD4 cell count measures the number of cells in a small amount of blood to see how well your body is fighting a virus like HIV. CD4 cell counts are important to monitor your health and to help your doctor decide whether or not to start HIV medications, or see if HIV medications you are taking are working.
- At the Graduation Visit give a sample of blood from her arm so we can test it for HIV (the virus that causes AIDS) and HSV-2. We will draw a CD4 cell count at this visit instead of completing HIV testing, if she was found to be HIV positive a previous visit.
-



- Allow us to contact the young woman by phone or text to remind her of the next visit, and to see if there are any changes in school or other problems. If we cannot reach her by phone, we may visit your home.
- Allow us to take her picture for identification purposes at her first visit; her picture will be destroyed when all the study visits are completed.
- Give us her phone number and the names and phone numbers of one or two other people who can help us find her.
- Allow us to collect attendance data from her school.
- The young woman in your care may be asked to participate in other activities such as case studies or focus group discussions at some point during the study. She will be asked to give consent separately for those activities.

#### HIV and HSV-2 testing for the young woman

At each annual visit, we will collect [insert number] tubes of blood, about [insert number] teaspoons, from her arm to do the HIV and HSV-2 tests. She will receive counseling before and after each test. She will receive her HIV results immediately after the test. If we confirm that she is infected with HIV, we will tell her where she can go for care at local public clinics.

Sometimes an HIV test is not clearly positive or negative. If this happens, we will test her blood again until we know the result. The counselor will talk with the young woman about the test results. *This study does not provide care or treatment for HIV.* If the young woman is found to be HIV positive at enrollment or any follow-up visit (including the Graduation Visit), a CD4 cell count test will be performed at each annual visit instead of an HIV test.

The test for HSV-2 has to be sent to a laboratory for testing so we will contact her when the lab results are ready. If this test shows that she is infected with HSV-2, we will tell her where she can find the care she needs at local public clinics. *This study does not provide care or treatment for HSV-2.*

**We cannot by law tell you or anyone else the results of either test unless the young woman asks us to do so. We also cannot share with you any information the young woman provides to us unless she asks us to do so.**

#### Blood samples

There might be a small amount of blood left over after we have done the study tests. We will ask permission to store her leftover blood for testing in future studies. She can still enroll in this study if you or she decides not to have her blood stored for testing in future studies. Some of the blood samples will be sent to the U.S. to make sure the tests are accurate and to learn more about HIV and HSV-2 infection. If she does not want to have blood stored, we will destroy the left over blood.

#### School Attendance

We will collect information from the young woman's school on her school attendance until she finishes the study.

#### Group discussions or case study

Some young women will be asked to be in group discussions or an individual case study. Case studies allow us to spend time with you over a long time period. If the young woman is asked to be in a case study, we will ask to visit your home twice every year until she finishes the study. Each home visit will last 2-5 hours. We will discuss the study and attitudes and beliefs about school, sex, and HIV risk

behaviors in South Africa with the young women. Other family members might also want to discuss their involvement in the study at this time.

Group discussions will last approximately 2 hours, and will be with only girls present. If the young woman is asked to be in one of these discussions, we will also ask to record the discussion. These group discussions will be only with other young women.

### **There are two study groups in this research**

The young women who are enrolled in this study will be divided into two groups. Both groups will do the same questionnaires and blood tests described above. But one group will receive cash payments if the young woman attends school at least 80% of the school days.

The other group will not receive any cash payments.

Neither the study staff nor you can choose which group the young woman will be in. It is decided by chance, like playing Lotto. The decisions are made by a computer and put into an envelope. The staff does not know which group is in each envelope. The young woman will choose an envelope at her first study visit.

### **What will the young woman be asked to do if she IS in the cash payment group?**

If she is in the cash payment group, she must attend school in order for her and for her family to receive cash payments of R300.00 per month. R100.00 will be paid to her directly and R200.00 to her family. To receive the payment, she must attend at least 80% of school days. If she misses more days than that, she and her family will not get the payment that month. For example, if there are 20 school days in a month, if she misses more than 4 school days she and her family will not receive the payment.

If she attends school less than 80% of school days in a month due to illness, we will allow you and her to still get the payment with a doctors/clinic note stating why she missed school.

Payments will be made into a post office or bank account at the middle of the following month (for example, for attending in March you and the young woman will be paid mid-April). You and the young woman must each open a post-office or bank account in your names to receive your payment, if you do not have one open already. You and the young woman must provide us with your post-office or bank account number to get the payment.

If she stops attending school or gets married, neither of you will receive the monthly payment. However, we will still ask you and the young woman to complete the yearly study visits.

We will ask her to return in a year to participate in the questionnaire and HIV/HSV-2 tests again. She will be asked to return for a total of three years or until she finishes the study.

If the young woman moves households during the study the family member that receives the R200.00 and completes the household survey may change. It is important for you to let us know if she moves to another household.

We are only conducting this study in a select group of high schools. It is important for the young woman to let us know if she moves high schools to determine if she will still be eligible to receive the payment.

**What will the young woman be asked to do if she is NOT in the cash payment group?**

She should attend school like she normally does. We will collect school attendance information from her school/teacher. We will ask her to return in a year to participate in the questionnaire and HIV/HSV-2 tests again.

If she stops attending school, we will still ask you and the young woman to continue the yearly study visits.

We are only conducting this study in a select group of high schools. It is important for the young woman to let us know if she moves high schools.

If the young woman moves households during the study the family member that completes the household survey may change. It is important for you to let us know if she moves households.

**How will study staff keep in contact with you during the study?**

You and the young woman will be asked to provide your phone numbers and one or two other phone numbers of people who will know how to find you. It is possible that the staff may visit you and the young woman at your house or contact you by phone to schedule a visit or if the staff has important information for you or the young woman. If you are not willing to give us this information, you should not agree to be in this study.

**What about Confidentiality?**

All efforts will be made to keep your personal information confidential. All of your research records and those of the young woman will use a code number, not names. Research records are stored in a locked room. However, we cannot guarantee absolute confidentiality. Your or the young woman's personal information may be disclosed if required by law. Your name and the name of the young woman will never be used in any publication or presentation about the research study.

The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, University of Witwatersrand and the North Carolina IRB/Ethics Committees, study staff, and authorized representatives of these organizations. The names and account numbers of participants who receive cash payments will be reported to the financial staff at the University of Witwatersrand and the Wits Health Consortium so they can process your payments. This is the only information they will have about you or the young woman.

The questionnaire that the young woman completes will ask her to answer some questions related to sexual violence and sexual abuse. **If she is under 18 years old and decides to answer these questions and she reports having experienced sexual violence or abuse we will be obliged to find help for her.** This includes having to report the sexual violence to the police because she is still a minor (<18 years).

If she chooses not to answer the questions about sexual violence and abuse because she does not want us to refer her for help, she can still get help. She can ask one of the study staff for help in finding another organization that helps young women. In addition, we will provide all young women with information on local organizations that can provide help.

The young woman may be asked to take part in a case study or group discussion and, if you and she agree, an exact record of what she says will be recorded. The name of the young woman will not be on the recording. The recording will be kept on a password protected computer for two years if the information is published and for 6 years if it is not published. If the young woman is asked to be part of a discussion group we cannot guarantee that the information she shares in the group will be kept confidential, although we will ask all the other participants in the group to respect one another's confidentiality. We will remind her of this before the group begins.

### **What are the risks or discomforts?**

Some people feel discomfort when blood is drawn and may feel dizzy or even faint. There may be a bruise or swelling where the needle goes into the young woman's arm. Some people may develop an infection where the needle goes in, but this is very rare.

We will make every effort to protect the privacy and confidentiality of you and the young woman while you are in this study. However, it is possible that you and the young woman could have problems if people learn that you took part in this study or if the information about you becomes known to others. You and the young woman may be treated unfairly by others, including your family and community.

The young woman may experience anger or distress if she learns that she is infected with HIV or HSV-2. We will refer her for care if she is infected with HIV or HSV-2.

Some of the visits or interviews could make you and the young woman feel uncomfortable or embarrassed. You and the young woman may refuse to answer any question, she may leave the focus group and you can stop the interview at any time. If any of the topics discussed in the session or interview upset you or the young woman, we can refer you to a counselor with whom you can talk further. Please ask the study staff and they will refer you.

### **Will this research benefit you or the community?**

There may not be any immediate benefits to being in the study. However, the young woman may benefit from receiving HIV counseling and finding out if she is infected with HIV or HSV-2. HIV positive young women may benefit from knowing their CD4 cell count. Also, your community and other communities may benefit from this research in the future.

### **Are there any costs or reimbursements with this research?**

There are no costs to you for taking part in this research. All young women will receive refreshments at their study visits and a gift worth approximately R30.00 when we collect blood. If the young woman is chosen to be in a case study or group discussion she will be provided with refreshments as well.

### **Reasons Why You or the Young Woman May Be Withdrawn from the Study without Your Consent**

You and the young woman may be removed from the study without your consent for the following reasons:

- The study is stopped or cancelled
- Staying in the study would be harmful to you or the young woman
- The young woman moves outside the study area
- Other administrative reasons

### **What other choices are there besides being in this research?**

You and the young woman are free to choose not to join. There may be other research in the area that you can join. HIV testing is available free at local health clinics.

### **Questions about your rights and this study**

You and the young woman have the right to ask, and have answered, any questions you may have about this research at any time. If you or the young woman has questions, or concerns, you should contact the researchers listed on the first page of this form.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you or the young woman have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee. If you have questions about this specific research project please call XXX at XXX-XXX-XXXX.

If you would like to learn more information about sex, HIV/AIDS, and/or communicating with the young woman in your care about these topics we can refer you to another organization that helps young people and their families. Additionally, if you would like pamphlets about these topics our study staff can provide these to you.

### **What happens if you or the young woman is injured?**

If you or the young woman is injured as a result of being in this research study, you will be given immediate treatment for your injuries. However, you may have to pay for this care. There is no program for compensation either through this institution or the study sponsor (the US National Institutes of Health [NIH]). You will not give up any of your legal rights by signing this consent form.

### **Verification of Consent**

Do you agree to take part in the research study and agree for the young woman in your care to take part in the research study?

---

## PARTICIPANT'S AGREEMENT TO TAKE PART

### Participant's Agreement:

I have read or had read to me the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

---

Signature of Research Participant

---

Date

---

Printed Name of Research Participant

---

Signature of Person Obtaining Consent

---

Date

---

Printed Name of Person Obtaining Consent

---

Signature of Witness (if appropriate)

---

Date

---

Printed Name of Witness

-----

**PARTICIPANT'S AGREEMENT FOR MINOR TO TAKE PART**

I voluntarily agree to allow my daughter/the young women to whom I am legal guardian to be in this research study.

\_\_\_\_\_  
Signature of Parent/Legal Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

---

### **SPECIMEN STORAGE and TESTING IN FUTURE RESEARCH**

Please carefully read the statements below and think about your choice. No matter what you decide it will not affect whether you or the young woman can be in the research study. You may also change your mind about using the leftover blood for future testing. You need to tell a study staff member if you do change your mind.

\_\_\_\_\_ (*participant initials*) I agree to have leftover samples of the young woman's blood stored and used for testing in future research related to HIV and HSV-2.

\_\_\_\_\_ (*participant initials*) I do not agree to have leftover samples of the young woman's blood stored and used for testing in future research related to HIV and HSV-2.



---

## AGREEMENT TO RECORDING

\_\_\_\_\_ (*participant initials*) I agree to allow any focus groups or case studies the young woman may participate in to be recorded.

\_\_\_\_\_ (*participant initials*) I do not agree to allow any focus groups or case studies the young woman may participate in to be recorded.

\_\_\_\_\_  
Signature of Parent/Legal Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

## Appendix IID

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # xxxxxxx</b>	<b>IRB Study #09-0239</b>
<b>Assent to Participate in a Research Study</b>	
<b>Assent Qualitative Young Woman and Young Man</b>	

**Assent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail, Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** xxx-xxx-xxxx

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

We are conducting a research study in your village and in the surrounding Agincourt sub-district. Research is a way to find answers to scientific questions. We will ask approximately 300 young people to join this part of the research.

This research is being paid for by the National Institutes of Health in the United States.

This is a consent form. It gives you information about this research. You are free to ask questions at any time. Both you and your parent/legal guardian need to agree to be in the study in order for you to join. You will be given a copy of this consent form to keep.

### **What is the purpose of this research?**

The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

One part of this research is talking with young people about the study. We will also talk about attitudes and beliefs about schooling, sex and HIV risk behavior among young people in South Africa.

### **Do you have to be in this research?**

- You do not have to be in this research if you do not want to. Just tell us if you do not want to join.
- You can change your mind at any time and leave the study. You and your family will be treated the same no matter what you decide.

### **What will you be asked to do for this research?**

There are two different ways that you might be asked to be involved in this research: one is to participate in a focus group discussion and the other is to participate in a case study.

*Case Study:* If you choose to take part in the case study, you will be asked to allow an interviewer to spend some time with you alone and with your family at home talking about your life and experiences in this study. This will happen twice each year until you finish the study.

*Focus Group:* If you choose to take part in the focus group, you will have a discussion with a group of other participants of the same gender and an interviewer. The discussion will be recorded so we have an exact record of what everyone says as there is too much information to write down during the discussion. If you are not willing to be recorded you should not agree to participate in a focus group.

You may be asked information about some personal issues such as sexual behavior, attitudes and beliefs about relationships, sex, and HIV knowledge. Also, you may be asked questions about your experiences living in communities where these research activities are taking place.

### **How long will you be in this study?**

If you choose to take part in the case study, an interviewer will spend time with you and with your family at home talking about your life. This will happen twice each year for 3 years. Each visit may take up to 5 hours though not all this time will be spent answering questions.

If you are asked to be in a *focus group* it will last about 2 hours. Over the 3 years of the study you may be asked to participate in a focus group more than once – if this happens you will sign a separate consent form for each group in which you take part.

### **What about privacy?**

We will do everything we can to keep your research information private. The research records will be kept in a locked room. Your research records will use a code number, not your name. However, we cannot promise absolute confidentiality. The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the Human Research Ethics Committee (HREC) of the University of the Witwatersrand in South Africa, or the Institutional Review Board of the University of North Carolina at Chapel Hill, study staff and authorized representatives of these organizations.

An exact record of what you say during the focus group or case study will be recorded. Your name will not be on the recording. If you are asked to be part of a discussion group, we will remind everyone to keep the information they hear private. The recorded case studies and group discussions will be stored for 2 years after the data is published or 6 years if the data is not published.

**What are the risks and discomforts of the study?**

The case study or group discussion could make you feel uncomfortable or embarrassed. You may refuse to answer any question and you can stop at any time. If any of the topics discussed upset you, we can refer you to a counselor with whom you can talk further.

If you take part in a *focus group* we cannot promise that other members of the group discussions will keep the discussion private. You should remember this before deciding to discuss issues you feel are very personal and private. If it would make you feel more comfortable during the discussion, you can make up a name to be used while we are talking in the group.

If you would like to learn more information about sex, HIV/AIDS, and/or communicating with others about these topics we can refer you to another organization that helps young people. Additionally, if you would like pamphlets about these topics our study staff can give these to you.

**Will this research benefit you or your community?**

There are no immediate benefits to being in the study. However, your community and other communities may benefit from this research in the future.

**Are there any costs?**

There will be no costs for being in the study. You will be given refreshments at the time of your study activity.

**What happens if you are injured by this research?**

Because this activity only involves answering questions, it is very unlikely that you could be injured. However, if you are injured as a result of participating in the case study or focus group, you will be given immediate treatment for your injuries. You may have to pay for this care. There is no program for compensation either through this institution or the US National Institutes of Health (NIH). You will not be giving up any of your legal rights by signing this consent form.

**What if you have more questions?**

You can ask any question you want about this research now. If you have questions later you can call, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee.

Or you can call XXX at XXX-XXX-XXXX who is in charge of this research.

If you would like to learn more information about sex, HIV/AIDS, and/or communicating with your parent/guardian about these topics we can refer you to a clinic where you can learn more information.

**Verification of Consent**

Do you agree to take part in the research study?

---

## PARTICIPANT'S AGREEMENT TO TAKE PART

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to be in:

\_\_\_\_\_ (*participant initials*) A single focus group discussion

\_\_\_\_\_ (*participant initials*) The case study part of the research (2 visits each year for the duration of study participation)

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Assent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Assent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

-----

**PARTICIPANT'S AGREEMENT TO RECORDING**

I agree to allow any focus groups or case studies to be recorded.

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Assent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Assent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

## Appendix IIE

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # xxxxxxx</b>	<b>IRB Study #09-0239</b>
<b>Consent to Participate in a Research Study</b>	
<b>Consent Qualitative Young Woman and Young Man</b>	

**Consent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail, Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** xxx-xxx-xxxx

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

We are conducting a research study in your village and in the surrounding Agincourt sub-district. Research is a way to find answers to scientific questions. We will ask approximately 300 young people to join this part of the research.

This research is being paid for by the National Institutes of Health in the United States.

This is a consent form. It gives you information about this research. You are free to ask questions at any time. You will be given a copy of this consent form to keep.

### **What is the purpose of this research?**

The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

One part of this research is talking with young people about the study. We will also talk about attitudes and beliefs about schooling, sex and HIV risk behavior among young people in South Africa.

### **How long will you be in this study?**

There are two different ways that you might be asked to be involved in this research: one is to participate in a focus group discussion and the other is to participate in a case study.

If you are asked to be in a *focus group* it will last about 2 hours. Over the 3 years of the study you may be asked to participate in a focus group more than once – if this happens you will sign a separate consent form for each group that you take part in. There will be separate focus groups for males and females.

If you are asked to be in a *case study* we will ask to visit your home twice every year until you finish the study. Each visit will be up to 5 hours, although not all of this time will be spent answering questions. Case studies allow us to spend time with you over a long time period. If we ask you to take part in a case study, you will only be asked to sign this consent form once to give consent for all visits.

### **Do you have to be in this research?**

- You do not have to be in this research if you do not want to. Just tell us if you do not want to join.
- You can change your mind at any time and leave the study. You and your family will be treated the same no matter what you decide.

### **What will you be asked to do for this research?**

*Case Study:* If you choose to take part in the case study, you will be asked to allow an interviewer spend some time with you alone and with your family at home talking about your life and experiences in this study. This will happen twice each year until you finish the study.

*Focus Group:* If you choose to take part in the focus group, you will have a discussion with a group of other participants of the same gender and an interviewer. The discussion will be recorded so we have an exact record of what everyone says as there is too much information to write down during the discussion. If you are not willing to be recorded you should not agree to participate in a focus group.

You may be asked information about some personal issues such as sexual behavior, attitudes and beliefs about relationships, sex, and HIV knowledge. Also, you may be asked questions about your experiences living in communities where these research activities are taking place.

### **What about privacy?**

We will do everything we can to keep your research information private. The research records will be kept in a locked room. Your research records will use a code number, not your name. However, we cannot promise absolute confidentiality. The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the Human Research Ethics Committee (HREC) of the University of the Witwatersrand in South Africa, or the Institutional Review Board of the University of North Carolina at Chapel Hill, study staff and authorized representatives of these organizations.

An exact record of what you say during the focus group or case study will be recorded. Your name will not be on the recording. If you are asked to be part of a discussion group, we will remind everyone to keep the information they hear private. The recorded case studies and group discussions will be stored for 2 years after the data is published or 6 years if the data is not published.

### **What are the risks and discomforts of the study?**

The case study or group discussion could make you feel uncomfortable or embarrassed. You may refuse to answer any question and you can stop at any time. If any of the topics discussed upset you, we can refer you to a counselor with whom you can talk further.



If you take part in a *focus group* we cannot promise that other members of the group discussions will keep the discussion private. You should remember this before deciding to discuss issues you feel are very personal and private. If it would make you feel more comfortable during the discussion, you can make up a name to be used while we are talking in the group.

If you would like to learn more information about sex, HIV/AIDS, and/or communicating with others about these topics we can refer you to another organization that helps young people. Additionally, if you would like pamphlets about these topics our study staff can give these to you.

**Will this research help you or your community?**

There are no immediate benefits to being in the study. However, your community and other communities may benefit from this research in the future.

**Are there any costs?**

There will be no costs for being in the study. You will be given refreshments at the time of your study activity.

**What happens if you are injured by this research?**

Because this activity only involves answering questions, it is very unlikely that you could be injured. However, if you are injured as a result of participating in the case study or focus group, you will be given immediate treatment for your injuries. You may have to pay for this care. There is no program for compensation either through this institution or the US National Institutes of Health (NIH). You will not be giving up any of your legal rights by signing this consent form.

**What if you have more questions?**

You can ask any question you want about this research now. If you have questions later you can call, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee.

Or you can call XXX at XXX-XXX-XXXX who is in charge of this research.

If you would like to learn more information about sex, HIV/AIDS, and/or communicating with your parent/guardian about these topics we can refer you to a clinic where you can learn more information.

**Verification of Consent**

Do you agree to take part in the research study?

---

## PARTICIPANT'S AGREEMENT TO TAKE PART

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to be in:

\_\_\_\_\_ (*participant initials*) A single focus group discussion

\_\_\_\_\_ (*participant initials*) The case study part of the research (2 visits each year for the duration of study participation)

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

-----

## PARTICIPANT'S AGREEMENT TO RECORDING

Participant's Agreement:

I agree to allow any focus groups or case studies to be recorded.

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

## Appendix IIF

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # xxxxxxxx</b>	<b>IRB Study #09-0239</b>
<b>Consent to Participate in a Research Study</b>	
<b>Qualitative Parent/Legal Guardian of Young Man</b>	

**Consent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail, Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** xxx-xxx-xxxx

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

We are conducting a research study in your village and in the surrounding Agincourt sub-district. We will ask approximately 300 young people who live in these villages to join this part of the research.

This research is being paid for by the National Institutes of Health in the United States.

This is a consent form. It gives you information about this research. You are free to ask questions at any time. Because the young man is under 18 years of age, you both must agree before he can be in the research. You will be given a copy of this consent form to keep.

### **What is the purpose of this research?**

This study is part of a larger study that is being conducted in this area. The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa.

We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

We are asking young women and men, their families and community members living in the study area to talk about the research study. We are asking the young man to take part in this group discussion with other young men to discuss their thoughts about the study we are conducting. We may also talk

about attitudes and beliefs about schooling, sex and HIV risk behavior among young people in South Africa. This discussion will last about 2 hours. This discussion will be with young men only.

### **What are the rights of a research participant?**

- The decision to join this research is entirely voluntary.
- The young man may decide not to take part in this research or to leave at any time without losing the care or services he may be receiving in the community. You and he will be treated the same no matter what he decides.
- If the young man decides not to join, he can still join another research study later if one is available and he is eligible.

### **What will he be asked to do for this research?**

If the young man chooses to take part in this research he will be asked to answer questions with a group of other young men. He may be asked information about some personal issues such as sexual behavior, attitudes and beliefs about relationships, sex, and HIV knowledge. Additionally, he may be asked questions about his experiences living in communities where these research activities are taking place. This discussion will be recorded so we have an exact record of what everyone says. You should not agree to his participation if you will not agree to having the discussion recorded.

### **What about confidentiality?**

All efforts will be made to keep research records confidential. All of the research records will use a code number, not names. Research records are stored in a locked room. His name will never be used in any publication or presentation about the research study. However, we cannot guarantee absolute confidentiality.

The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the Human Research Ethics Committee (HREC) of the University of the Witwatersrand in South Africa, or the Institutional Review Board of the University of North Carolina at Chapel Hill, study staff and authorized representatives of these organizations.

An exact record of what the young man says during the focus group will be recorded. His name will not be on the recording. We cannot guarantee that the information he shares in the group will be kept confidential, although we will ask all the other participants in the group to keep the information private. The recorded group discussions will be stored for 2 years after the data is published or 6 years if the data is not published.

### **What are the risks and/or discomforts of the study?**

The discussion could make the young man feel uncomfortable or embarrassed. He may refuse to answer any question and he can stop at any time. If any of the topics discussed upset him, we can refer him to a counselor with whom he can talk further. We cannot promise that other members of the group will keep the discussion private. He should remember this before deciding to discuss issues he feels are very personal and private. If it would make him feel more comfortable during the discussion, he can make up a name to be used while we are talking in the group.

If the young man or you would like to learn more information about sex, HIV/AIDS, and/or communicating with others about these topics we can refer him or you to another organization that

helps young people. Additionally, if he would like pamphlets about these topics our study staff can provide these to him.

**Will this research benefit him or the community?**

There are no immediate benefits to being in the study. However, his community and other communities may benefit from this research in the future.

**Are there costs and reimbursements?**

There will be no costs for being in the study. The young man will be given refreshments at the time of his study activity.

**What happens if there is a research related injury?**

Because this activity only involves discussion, it is very unlikely that the young man could be injured. However, if he is injured as a result of this activity, he will be given immediate treatment for his injuries. You may have to pay for this care. There is no program for compensation either through this institution or the U.S. National Institutes of Health (NIH). You will not be giving up any of your legal rights by signing this consent form.

**What if you have other questions?**

You or the young man have the right to ask, and have answered, any questions you may have about this research. If you or the young man has questions, or concerns, you should contact the researchers listed on the first page of this form. The young man will be given an opportunity to ask any questions before the focus group begins.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you or the young man have questions or concerns about his rights as a research subject you may contact, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee. If you have questions about this specific research project please call XXX at XXX-XXX-XXXX.

**Verification of Consent**

Do you agree to allow the young man in your care to take part in the research study?

-----

**PARTICIPANT'S AGREEMENT FOR MINOR TO TAKE PART**

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree for the young man in my care to take part in this focus group.

\_\_\_\_\_  
Signature of Parent/Legal Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

---

## **PARTICIPANT'S AGREEMENT TO RECORDING**

I agree to allow any focus groups the young man participates in to be recorded.

---

Signature of Parent/Legal Guardian

---

Date

---

Printed Name of Research Participant

---

Signature of Person Obtaining Consent

---

Date

---

Printed Name of Person Obtaining Consent

---

Signature of Witness (if appropriate)

---

Date

---

Printed Name of Witness



## Appendix IIG

<b>Wits Reproductive Health and HIV Institute</b>	<b>University of North Carolina-Chapel Hill</b>
<b>HREC # xxxxxxxx</b>	<b>IRB Study #09-0239</b>
<b>Consent to Participate in a Research Study</b>	
<b>Qualitative Teacher</b>	

**Consent Form Version Date:** 26 October 2012

**Title of Study:** Effects of cash transfer for the prevention of HIV in young South African women

**Principal Investigator at MRC/Wits Agincourt, South Africa:** Xavier Gómez-Olivé, MD

**Principal Investigator:** Audrey Pettifor PhD

**UNC-Chapel Hill Department:** Epidemiology

**UNC-Chapel Hill Phone number:** 001 (919) 966-7439

**Email Address:** apettif@email.unc.edu

**Co-Investigators:** Dr Catherine MacPhail, Dr Kathleen Kahn

**Funding Source:** National Institutes of Health

**Study Contact telephone number:** xxx-xxx-xxxx

**Study Contact email:** xavier@agincourt.co.za

---

### **Introduction:**

Hello. My name is \_\_\_\_\_ and I am working for the University of the Witwatersrand and the University of North Carolina on a project with young women, their families and communities. We would like to invite you to participate in a study that we are doing in this area. I will tell you more about the study before you make up your mind.

We are conducting a research study in your village and in the surrounding Agincourt sub-district. We will ask approximately 120 teachers who work in schools in these villages to join this research.

This research is being paid for by the National Institutes of Health in the United States.

This is a consent form. It gives you information about this research. You are free to ask questions at any time. You will be given a copy of this consent form to keep.

### **What is the purpose of this research?**

This study is part of a larger study that is being conducted in this area. The main purpose of this research study is to find ways to reduce the spread of HIV (the virus that causes AIDS) among young women in South Africa. We are not sure why HIV is spreading so fast among young South African women, but one idea is that education provides some protection against getting infected. This research will study the effects of paying young women to go to school.

We are asking young women and men, their families and teachers to talk about the research study. We may also talk about attitudes and beliefs about schooling, sex and HIV risk behavior among young people in South Africa. These discussions will last about 2 hours. These discussions will be with only same genders.

### **Do you have to be in this research?**

- You do not have to be in this research if you do not want to. Just tell us if you do not want to join.
- You can change your mind at any time and leave the study. You and your family will be treated the same no matter what you decide.

### **What are your rights as a research participant?**

- Your participation in this research is entirely voluntary.
- You may decide not to take part in this research or to leave at any time without losing any of the care or other services you may be receiving in the community. You will be treated the same no matter what you decide.
- If you decide not to join, you can still join another research study later if one is available and you are eligible.

### **What will you be asked to do for this research?**

If you choose to take part in this research you will be asked to answer questions with a group of other participants (focus group discussion). You may be asked information about changes in behavior among young women participating in our study, changes in relationships between the young women in your class, any negative consequences of the study and the impact of the study on your daily responsibilities in the classroom. If you participate in a focus group, the discussion will be recorded so we have an exact record of what is said. If you do not want to be recorded you should not agree to participate in a focus group discussion. If you are in a focus group, the group will include both men and women together.

### **What about confidentiality?**

All efforts will be made to keep your personal information confidential. All of your research records will use a code number, not names. Research records are stored in a locked room. Your name will never be used in any publication or presentation about the research study. However, we cannot guarantee absolute confidentiality.

The research records may be reviewed by the U.S. National Institutes of Health (NIH), other government and regulatory authorities, the University of Witwatersrand and the University of North Carolina IRB/Ethics Committees, study staff, and authorized representatives of these organizations.

An exact record of what you say during the focus group will be recorded. Your name will not be on the recording. In the discussion group we cannot guarantee that the information you share in the group will be kept confidential, although we will ask all the other participants in the group to keep the information they hear private. The recorded group discussions will be stored for 2 years after the data is published and or 6 years if the data is not published.

### **What are the risks and/or discomforts?**

The discussion could make you feel uncomfortable or embarrassed. You may refuse to answer any question and you can stop at any time. If any of the topics discussed upset you, we can refer you to a counselor with whom you can talk further. We cannot promise that other members of focus groups do not discuss what they have heard outside of the group. You should remember this before talking about things you feel are very personal and private. If it would make you feel more comfortable during the discussion, you can make up a name to be used while we are talking in the group.

**Will this research benefit you or the community?**

There are no immediate benefits to being in the study. However, your community and other communities may benefit from this research in the future.

**Are there costs or reimbursements?**

There will be no costs for being in the study. You will be given refreshments at the time of your study activity.

**What happens if there is a research related injury?**

Because this activity only involves discussion, it is very unlikely that you could be injured. However, if you are injured as a result of this activity, you will be given immediate treatment for your injuries. You may have to pay for this care. There is no program for compensation either through this institution or the US National Institutes of Health (NIH). You will not be giving up any of your legal rights by signing this consent form.

**What if you have other questions?**

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researchers listed on the first page of this form. You will be given an opportunity to ask any questions before the interview or discussion begins.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the University of the Witwatersrand Human Research Ethics Committee. Please phone 011-717-1234 to be directed to one of the chairpersons of the committee. If you have questions about this specific research project please call XXX at XXX-XXX-XXXX.

**Verification of Consent**

Do you agree to take part in the research study?

-----

## PARTICIPANT'S AGREEMENT TO TAKE PART

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to be in:

\_\_\_\_\_ (*participant initials*) A single focus group discussion

\_\_\_\_\_ (*participant initials*) A single interview

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

---

**PARTICIPANT'S AGREEMENT TO RECORDING**

I agree to allow for the focus group I participate in to be recorded.

\_\_\_\_\_  
Signature of Research Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Witness (if appropriate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Witness

## Appendix III

## Map of Agincourt Sub-District

