Pursuing Youth-Powered, Transdisciplinary Programming for Contraceptive Service Delivery across Three Countries:

The Case of *Kuwa Mjanja* in Tanzania

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In the past three decades, global health programs aiming to improve adolescent and youth sexual and reproductive health (AYSRH) have yielded a number of notable successes.[1] As the field of AYSRH evolves, however, questions remain about how best to design and implement programming so that it is youth-powered and youth-owned, demonstrably responding to the needs and experiences of youth—and ultimately enabling their meaningful advancement in health, livelihood, and development. In 2016, with funding from the Bill and Melinda Gates Foundation and the Children's Investment Fund Foundation, PSI launched Adolescents 360 (A360), a 4.5-year program that works directly with young people to develop and deliver interventions that aim to increase demand for, and voluntary uptake of, modern contraception among girls aged 15-19 in Ethiopia, Nigeria, and Tanzania.

Through a transdisciplinary approach integrating public health, adolescent developmental science, cultural anthropology, human-centered design (HCD), and social marketing, the program recognizes and taps into the power of young people throughout the research, design, and implementation process.

This technical brief analyzes A360's strategy and lessons learned to date, presenting a case study of the A360 experience in Tanzania, and offering considerations for similar AYSRH implementation in future settings.

Context

Adolescence—the stage of life between the ages of 10 and 19—is a complex developmental period. During this time, young people undergo significant cognitive, social, emotional, and physical changes, the results of which can significantly influence health, safety, and stability. Young people must also navigate the shifting social expectations placed on them—including those of their families, communities, and peers—as they take on growing responsibilities and shoulder increasing levels of independence.

Physically, the greatest time of biological transition in adolescence occurs during puberty, which brings with it changes to the developing body and brain.[2] These biological and neurological transitions contribute to shifts in motivations and behavior that can exacerbate young people's vulnerability to negative health outcomes, but that can also increase flexibility in learning and openness to new ideas.[3] As such, adolescence represents a paradoxical period in which foundational healthy patterns of behavior are learned and established, while also being a time of heightened vulnerability to adverse outcomes.

One of the primary markers of puberty is sexual maturation, which includes both physical and behavioral changes that influence social relationships. Although sexual development is positive and normative, these changes introduce adolescents to new risks and uncertainties. As romantic relationships are new, and at times expose adolescents not only to voluntary but also to coercive sexual engagement, adolescents often experience uncertainty about how to integrate this new social dynamic into their lives, introducing confusion and emotional and psychological impacts.

Moreover, adolescents face a wide range of social, systemic, economic, and political barriers that often prevent them from accessing the sexual and reproductive health (SRH) services they need at this crucial time. These include: a restrictive legal environment; community-specific social and cultural beliefs that constrain candid conversations about AYSRH; barriers at the health facility level, such as provider bias, siloed health services, and commodity stockouts; and stigma and lack of SRH knowledge within communities and among adolescents themselves.[4] These barriers are compounded by widespread myths and misconceptions about contraception, most notably the false belief that contraceptive use compromises future fertility.

As a result, adolescents are at risk for a range of negative SRH outcomes, especially in low- and middle-income countries (LMICs) which are home to nearly all (95%) of the 16 million girls aged 15-19 who give birth each year.[5] High rates of unintended pregnancy lead to some 3 million girls in this demographic to seek an unsafe abortion annually, and complications associated with pregnancy and childbirth remains the leading cause of death among girls aged 15-19 in LMICs.[6] Infants born to young mothers (under the age of 20) face greater risk for preterm birth and low birthweight.[7] Girls and young women are also at higher risk for HIV than their male counterparts, with girls aged 15-19 accounting for 16% of all new adult HIV infections and two-thirds of infections among adolescents.[8] In addition, early childbearing significantly impacts girls' life trajectories, often leading to early marriage, limited educational attainment, diminished economic opportunity, and social isolation.[9] Too often, this leads to a cycle of poverty, as young mothers become unable to provide for the economic, nutritional, and schooling needs of their own children.

Designing A360

Taken together with social norms and influence, this landscape paints a complex picture for girls' reproductive lives. Though global evidence powerfully demonstrates the adverse health risks posed by too early and too frequent childbearing—risks which contraceptive use can mitigate—girls' desires and reproductive goals may not always align. At the time of A360's start, across Ethiopia, Nigeria, and Tanzania, both modern contraceptive prevalence and unmet need for contraception among girls aged 15-19 remained relatively low (see **Table 1**), suggesting that many sexually active girls and young women were either not seeking contraception, or may have had desired fertility. A360 saw this juxtaposition as posing a poignant call to action for youth programming: how to ensure responsiveness to both girls' desires and also their health and developmental needs?

In 2016, A360 recognized the opportunity to evolve its AYSRH programming to respond to the clear divergence evidenced in the data—a divergence between the values and goals that shape many girls' and young women's reproductive health and decision-making, and traditional public health approaches that may not sufficiently acknowledge and speak to the significance of these values in their lives. Recognizing this gap as emblematic of the gap between standard programmatic approaches and the lived experience of girls and young women, the organization sought to pursue a different approach—one that would
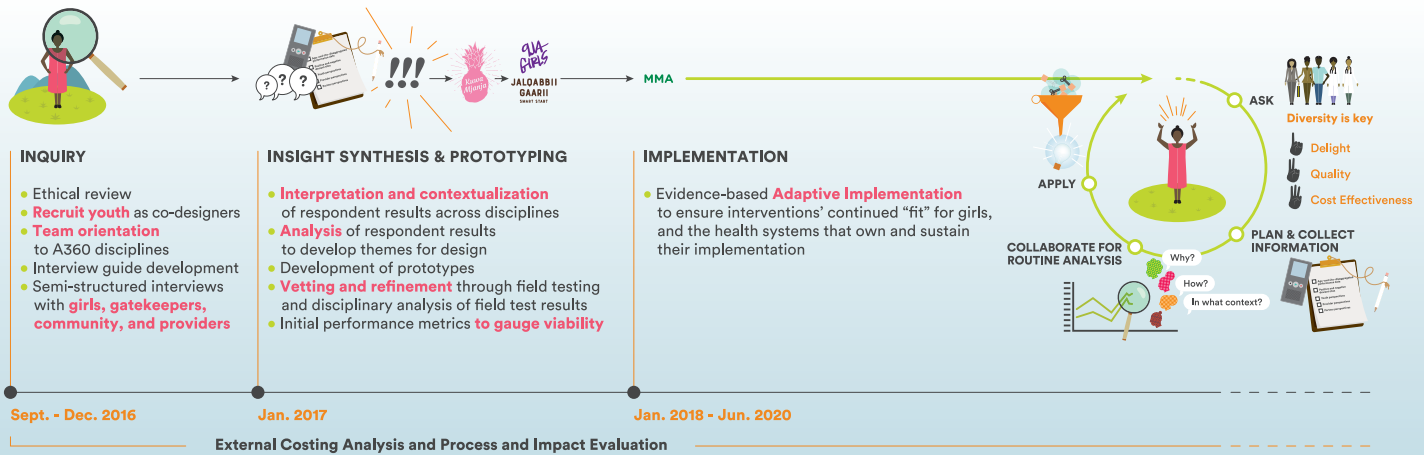
Table 1: Adolescent Sexual and Reproductive Health Landscape across Ethiopia, Nigeria, and Tanzania*

	Ethiopia (2016)[10]	Nigeria (2013)[11]	Tanzania (2016)[13]
% of population aged 15-19	9.0%	8.8%	10.1%
% of girls married and/or in union, aged 15-19	17.4%	28.8%	23%
Modern contraceptive prevalence rate (mCPR): all girls aged 15-19, currently married girls aged 15-19	7.4%, 31.8%	4.8%, 1.2%	8.6%, 13.3%
Unmet need for contraception: all girls aged 15-19, currently married girls aged 15-19	4.7%, 20.5%	6.2%, 13.1%	10.8%, 23.0%
Median age at first sexual intercourse, women aged 25-49	16.6	17.6	17.2
Median age at first marriage, women aged 25-49	17.1	18.1	19.2
Median age at birth of first child, women aged 25-49	19.2	20.2	19.7
Adolescent fertility rate (Births per 1,000 girls aged 15-19/year)	80	122	133
Total fertility rate (Number of births per woman)	4.6	5.5	5.2

*Data reveals both low mCPR and low unmet need for contraception among girls aged 15-19 across Ethiopia, Nigeria, and Tanzania, suggesting an opportunity for AYSRH programming to speak to girls' varied goals and desires, and the web of factors influencing their health and life trajectories. *All data are from the Demographic and Health Surveys from the respective countries.*

Figure 1: A360 Process & Timeline

INQUIRY
- Ethical review
- **Recruit youth** as co-designers
- **Team orientation** to A360 disciplines
- Interview guide development
- Semi-structured interviews with **girls, gatekeepers, community, and providers**

Sept. - Dec. 2016

INSIGHT SYNTHESIS & PROTOTYPING
- **Interpretation and contextualization** of respondent results across disciplines
- **Analysis** of respondent results to develop themes for design
- Development of prototypes
- **Vetting and refinement** through field testing and disciplinary analysis of field test results
- Initial performance metrics **to gauge viability**

Jan. 2017

IMPLEMENTATION
- Evidence-based **Adaptive Implementation** to ensure interventions' continued "fit" for girls, and the health systems that own and sustain their implementation

Jan. 2018 - Jun. 2020

ASK — Diversity is key — Delight — Quality — Cost Effectiveness

APPLY

COLLABORATE FOR ROUTINE ANALYSIS

PLAN & COLLECT INFORMATION

Why? How? In what context?

External Costing Analysis and Process and Impact Evaluation

This timeline depicts the A360 program lifecycle. Of note, formative data that informed the inquiry and insight synthesis & prototyping phases in Tanzania began prior to 2016 as a result of PSI Tanzania's investments in developing HCD capacity among staff.

emphasize a learning stance, with the aim of fully engaging young people to co-design interventions that are relevant to girls, including and beyond their reproductive lives.

To do this, A360 prioritized three initial strategies: 1) investing in inquiry to understand the experiences, contexts, and underlying motivations that inform adolescent behavior; 2) leveraging diverse expertise to design programming that is responsive to these experiences, contexts, and motivations; and 3) building a programmatic platform that enables direct partnership with girls and young women throughout A360's research, design, and implementation processes. To achieve the first two objectives, A360 assembled a consortium of experts with knowledge and experience that would both complement and challenge its own public health and social marketing background. The aim was to ensure a broad diversity of perspectives from the evidence base on young people's health, social, and developmental trajectories, thereby ensuring rigorous analysis and interrogation of programmatic design decisions.

The A360 consortium brought adolescent developmental science, anthropology, HCD, public health, and social marketing together with meaningful youth engagement. Adolescent developmental science offered expertise on adolescents' cognitive development and its relation to shifting motivations. Anthropology lent understanding of the societal and cultural influences on girls' perception of self and choice-making across the three country contexts. And HCD provided a vehicle for enabling the disciplines to work together effectively, utilizing a structured process to integrate the disciplines' insights into action.

Finally, recognizing an opportunity to further align each of the disciplines with AYSRH principles of meaningful youth engagement, the consortium pursued deep partnership with young people throughout design and implementation, engaging youth not only as sources of insights but also as critical partners in gathering and making meaning of information, as intervention co-designers, and as partners in implementation. The resulting A360 transdisciplinary partnership sought to design, vet, and validate interventions, working with each discipline to build toward, and hold its counterparts accountable to, the task of girl-powered programming.

Structure & Process

This approach meant embracing risk. To ensure that interventions—and the foundational underpinnings necessary to bring these interventions to life—were responsive to what might emerge about girls' experiences and desires, the A360 program was designed to follow three phases: inquiry; insight synthesis & prototyping; and implementation (see **Figure 1** for detail). In so doing, A360 created space for disciplinary interrogation and testing of ideas, but also nurtured curiosity and creativity throughout its design phase. As shown in Figure 1, A360's inquiry and insight synthesis & prototyping phases took place from January to December 2017, with an adaptive implementation phase beginning in early 2018.[a] Finally, to ensure that the program contributed to the AYSRH evidence base, A360's work was paired with a parallel, external partners for a costing analysis and process and impact evaluations.

a. For an overview of A360's Evidence-based Adaptive Implementation Approach, view: **bit.ly/A360AdaptiveImplementation**.

Figure 2: Six Dominant Themes Across Countries

1 ANXIETY & UNCERTAINTY ABOUT HOW TO SECURE A STABLE FUTURE

"My parents give me N100 for [all meals]. It's not enough. Not even enough for breakfast. So how do I eat? I need to take care of myself."
– *Unmarried girl, Nigeria*

2 MISALIGNMENT BETWEEN SEXUAL ACTIVITY STATUS, CONTRACEPTION & SELF-IDENTIFICATION

"Birth control is accepted if you are married. If you use it and you are unmarried, you are looked at as selling yourself or that you have many boyfriends."
– *Unmarried girl, Tanzania*

"I'm not having sex. He had sex with me!"
– *Unmarried girl, Nigeria*

3 MOTHERHOOD AS AN ACHIEVABLE DREAM

"If you don't have a job and can't continue your education, then having a child is the only profit you have."
– *Married girl, Ethiopia*

4 CONTRACEPTION AS A THREAT TO DREAMS

"They say contraception is good, but not for me, it's not good. It will destroy your womb."
– *Unmarried girl, Nigeria*

5 ISOLATION & MISTRUST

"Your worst enemy can be your best friend."
– *Unmarried girl, Nigeria*

6 GIRLS' CONTINUING CONNECTION TO THEIR MOTHERS

"When I have a problem, the only support I get is from my mother."
– *Unmarried girl, Tanzania*

Field research conducted during the inquiry phase yielded insights specific to each country, which were subsequently grouped into the six cross-country themes shown here.

Inquiry

In the inquiry phase, the three in-country teams recruited program staff, actively looking for inquisitive youth and adult researchers and designers to engage in the intervention design process. Concurrently, the A360 transdisciplinary consortium led a series of trainings to orient country teams on each discipline, establishing working relationships and supporting team members' ability to contextualize their work vis-à-vis core concepts across the disciplines. A360 also pursued ethics review, seeking IRB approval in the U.S. and locally, as well as consent from girls and community members to co-design intervention prototypes and test their viability.

Teams also conducted market analyses and audience segmentation to identify the benefits and drawbacks of varied service delivery channels, and the opportunities and challenges to improve coverage and outreach to youth through health sector models. These analyses were combined with field research with married and unmarried in- and out-of-school adolescent girls, boys, and male partners, parents, community influencers, and health providers in rural, urban, and peri-urban settings across the three countries, exploring girls' perception of their lives, goals, needs, and the SRH contexts in which they live.

Field research yielded insights specific to each country, which were subsequently grouped into cross-country themes. For detail on these overarching themes, see **Figure 2**.

Within each country, insights prompted the design teams to develop a number of *"How Might We?"* questions aimed at helping the A360 team to systematically and creatively brainstorm ways in which the program might respond to insights that emerged from field research (for example, "How might we meet girls' expressed desire to become more financially independent?"). These questions informed the development of intervention prototypes during the insight synthesis & prototyping phase.

Insight Synthesis & Prototyping

The insight synthesis & prototyping phase, which ran which ran through 2017, refers to a period of continuous idea generation, prototyping,[b] and rapid testing. Intervention prototypes addressed one or more of the *"How Might We?"* questions that emerged from field research. The country teams rapid-tested promising prototypes and worked through the transdisciplinary consortium to refine them. This process led to a number of significant insights, demonstrating the value of the transdisciplinary approach. See **Figure 3** for an example of how field research findings and transdisciplinary insights converged to inform intervention design in Ethiopia.

To steward consistency of disciplinary engagement throughout design, the consortium developed a set of design standards to help youth-adult teams assess the viability of intervention prototypes. Teams applied these design standards as a vetting resource to support their decision-making processes, thereby enabling them to follow girls' lead in creating context-specific interventions, while ensuring alignment with foundational disciplinary concepts. See **Table 2** for illustrative detail.

b. "Prototyping," in this context, refers to the process of quickly developing and testing rough versions of potential intervention components that seem to resonate with girls. Depending on users' reactions to the prototypes, the A360 program either abandons or further tweaks and refines interventions.

Figure 3: When Transdisciplinary Insights and Field Research Intersect...

In Ethiopia, field research revealed a strong desire among young married couples and their communities to find new means of safeguarding the stability of their families amidst a shifting economic landscape. Young couples and their influencers shared near uniform concerns about financial security and resource management, and its implications for families and communities. Building on these insights, A360 began intervention design focused on supporting creation of a cognitive and emotional link between young couples' desire for social and financial stability, and use of modern contraceptives. The eventual prototyped intervention, "Smart Start," supports the Federal Ministry of Health to ensure that this linkage is made as part of standard counseling for couples at the health post level (i.e., the lowest level of the health system).

Smart Start builds on successful service delivery models in Ethiopia's health system, linking with the government's Health Extension Program and providing targeted counseling techniques to Health Extension Workers (HEWs), the country's formalized cadre of frontline health workers. As a HEW meets with young married women and couples, Smart Start job aids support her to reframe her standard health messaging such that it speaks to adolescents' varied developmental trajectories. Of primary importance, girls and young couples experience their goals and concerns as being heard and valued.

HEWs invite girls and young couples to consider their life goals and their plans for achieving them, and begin to assign financial value to those goals in ways that resonate with them. In doing so, HEWs support girls and young couples to begin to link the emotional experience of articulating their hopes with the cognitive exercise of planning to amass the resources necessary to achieve and sustain these hopes. Couples who express, for example, the goal of having children and owning a goat, are supported to estimate

the savings necessary to purchase a goat, as well as the resources needed to care for children so that they thrive. The couple is then able to explore, both cognitively and emotionally, the implications of having children and proving fertility early versus the opportunities presented by delaying first birth and investing in income-generating efforts that could sustain the family into the future. In this way, HEWs gain a critical level of precision in their family planning outreach and counseling approaches, using messages that resonate with both communities and young couples, regardless of their developmental stage.

Smart Start illustrates how A360 interventions draw on the program's transdisciplinary approach. Cultural anthropology informs the Smart Start design, as the intervention's focus on financial planning speaks to a national sense of pride in enabling economic growth through communities' responsible stewardship of resources. By situating the concept of family planning within this national discussion, the Smart Start counseling approach helps HEWs tap into this preexisting concept that itself has social momentum behind it, easing the way both for couples and their communities to support contraceptive use for healthy timing and spacing of pregnancy. Similarly, by basing contraceptive counseling on a dialogue with youth that centers on their self-expressed goals, the Smart Start intervention design supports HEWs to reach young couples with messages that resonate with them regardless of their varied developmental trajectories—a key insight from the adolescent developmental science evidence base. Whether adolescents' motivations center on their desire for social status or on more intrinsically established goals for self-care, the HEWs' counseling approach resonates with them because the messages support HEWs to validate, rather than diminish, young couples' goals, and emphasize how family planning can support them to materialize.

At the end of the research and design period, A360 had identified priority target segments of the adolescent population (girls aged 15-19) across the three countries, and had developed and validated at least one intervention per country. In Ethiopia, the program targets married girls in five regions with the Smart Start intervention, which supports financial planning for young couples, linked to planning their families. In Nigeria, A360 is active across ten states, with programming directed towards married and unmarried girls in Northern Nigeria and to unmarried girls in Southern Nigeria. The interventions in Nigeria include *9ja Girls* (pronounced "Naija Girls") and *Matasa Matan Arewa (MMA)* (meaning "Adolescent Girls from the North"). Both build on girls' desire for empowerment and financial independence by coupling trade skills with contraceptive counseling and service provision. Finally, in Tanzania, A360 works across several regions and targets both married and unmarried girls with the *Kuwa Mjanja* (meaning "Be Smart") intervention. *Kuwa Mjanja* pairs contraceptive service delivery with

entrepreneurial skills training, responding to girls' desire for financial and social independence, and the autonomy to shape the course of their lives.

Across all three countries, the interventions connect girls with a youth-friendly health provider who offers them an opt-out contraceptive counseling session coupled with on-demand voluntary method provision within the fullest extent of local law.

Implementation

Toward the end of 2017, building on lessons from adaptive management and the field of Implementation Science—which posits that no intervention is optimal prior to implementation[13]—A360 piloted the three interventions and then transitioned to an evidence-based adaptive implementation phase. Embracing the need for iterative, learning-based implementation, A360 rolled out its interventions incrementally across its geographic catchment

Table 2: Sample Design Standard Statements

The prototype connects back to a *"How Might We"* question.
Our audience finds the prototype appealing, easy to understand, and it meets their needs and preferences.
The prototype addresses key drivers, audiences, and market failures identified in the inquiry phase.
The prototype builds upon lessons learned in adolescent contraceptive programming.
The prototype is likely to lead to a solution that is practical to implement.
The prototype can be measured for new and continued/repeat contraceptive users.
The prototype meets ethical standards.
The prototype is culturally sensitive and does not create any social risk for the user.
The prototype is a solution targeted at a specific developmental window.
The prototype promotes young people's decision-making power in their own lives.

Country teams used a set of design standards to assess the viability of intervention prototypes. This helped enable teams to follow girls' lead in creating context-specific interventions while ensuring alignment with foundational concepts from each discipline.

area, engaging qualitative and quantitative monitoring and field research data to inform how best to continually adapt the interventions for optimal fit amidst diverse local and health system contexts. Across each of the three countries, teams pursued continuous quality improvement to enable the program to adapt to girls' and local health system actors' needs, while still maintaining fidelity to foundational elements of the interventions.

To provide detail of the A360 experience to date, the following section presents the case of *Kuwa Mjanja*'s design and implementation in Tanzania.

Tanzania's *"Kuwa Mjanja"* Intervention

The Tanzania team prioritized two foundational themes that emerged during the inquiry and insight synthesis & prototyping phases: that girls crave accurate, trusted sources for SRH information, as well as greater financial autonomy. From their design process emerged *Kuwa Mjanja* – a motivational brand based on the local saying "Be Smart." Illustrating A360's youth-powered approach, girls redefined this phrase, which, for adolescents, was previously associated with "being clean" (in reference to menstrual hygiene) and "staying away from boys." Girls have transformed this saying and now use it to reference

a sense of pride and purpose in their ability to achieve their dreams. The brand engages girls for SRH services through a three-pronged model that includes in-clinic and in-community pop-up events for girls, and clinic days for girls and mothers.

Kuwa Mjanja events link girls to on-demand contraceptive counseling and services through inspirational sessions coupled with training on entrepreneurial skills, such as making and selling their own products, including simple popular goods like ground nuts or *ubuyu*, a common baobab fruit candy in Tanzania. Sessions include fun, engaging *Kuwa Mjanja* content, such as games to help girls engage in what might otherwise be perceived as awkward SRH subjects, and archetypal stories of girls with whom participants are likely to identify, to help explore critical AYSRH themes. Girls transition from these inspirational and entrepreneurial skills sessions to health service provision through an unobtrusive opt-out contraceptive counseling moment wherein they receive private, one-on-one counseling and voluntary method provision from trained youth-friendly health service providers. **Figure 4** provides detail on the *Kuwa Mjanja* strategy and its foundational concepts.

Figure 4: The *Kuwa Mjanja* Blueprint

Kuwa Mjanja (Be Smart) delivers life skills and contraceptive counseling sessions—tailored to and branded for the unique needs of the girls we serve. It's a girl-powered call to action that seeks to reframe the narrative about girls, and contraception, in Tanzania.

UNDERSTAND ME

● TAILOR PROGRAMMING TO WHERE GIRLS ARE DEVELOPMENTALLY AND SOCIALLY

Younger **Farida** and older **Bahati** are two archetypal moments in Tanzanian girls' life trajectories, based on both girls' self-identification and developmentally sensitive segmentation research. With messages designed to resonate with both, Kuwa Mjanja speaks to girls where they are in their lives.

Account for developmental and experiential differences to speak to girls' holistic needs, today.

● KNOW YOUR BODY; KNOW YOUR PATH

IN TANZANIA, we build on Farida and Bahati's inflection points to reach, inspire and engage them with engaging, approachable, and critical SRH information and services.

● OFFER GIRLS AN ATTAINABLE COMPETING JOY

Many girls' perception of attainable joys include motherhood, and financial stability and independence. Kuwa Mjanja aims to validate and support girls in their self-stated goals, leads with entrepreneurial skills training, and ensures counseling begins with inquiry about girls' life and reproductive goals and assurance of return-to-fertility.

IDENTIFY WITH ME

● BALANCE THE POWER SCALES

GIRLS AS DESIGN PARTNERS
The team found appropriate moments to engage girls as design and implementation partners, hiring some to join permanent staff.

● KUWA MJANJA INSPIRES GIRLS TO DREAM

"Be Smart" messages encourage girls to take pride in knowing their goals and having a plan to achieve them.

● POSITION CONTRACEPTION AS A TOOL TO ACHIEVE HER PLAN FOR HER LIFE

KUWA MJANJA INVITES GIRLS to consider their dreams, and offers income generating training with contraceptive counseling in service of helping her achieve those dreams.

Sisi Nanasi – Lyrics
I am smart. I have a crown and I am good on the inside.
One day I will be a big businesswoman, or be the leader of my country

We stand tall (we are pineapples)
We wear crowns as our symbol.
We are good girls, we shine.
We have decided to dream.

SERVE ME

● PROVIDE GIRL-DEFINED SERVICE DELIVERY AT TIMES AND LOCATIONS THAT GIRLS IDENTIFY

ENGAGE ALL AVAILABLE SERVICE DELIVERY OPTIONS
Kuwa Mjanja service delivery runs out of the spaces girls say they feel most comfortable in. That includes both public and private sector and both in-clinic and community-based events.

● TO SUPPORT AN ENABLING ENVIRONMENT, SEE CULTURE AS AN ASSET

LEVERAGE SOCIAL MOMENTUM IN MESSAGING
Kuwa Mjanja's segmented messages build on varied cultural practices surrounding girls' menarche. Kuwa Mjanja messages ease girls' pathway to care by aligning SRH messages and services with concepts they— and their influencers— already know and endorse.

● RECOGNIZE AND UTILIZE THE POWER OF A BEAUTIFUL BRAND

Kuwa Mjanja, symbolized by the *nanasi* ("pineapple" in Kiswahili), is a brand that embodies respect, fun, and youthfulness. Girls redefined "Kuwa Mjanja" (Be Smart) which, traditionally, was used as a euphemism for being clean (menstrual hygiene) and "staying away from boys." Blending delightful branding with a redefined message, we're disrupting the status quo, with girls driving ship.

● BUILD TRUST BY CULTIVATING PROVIDER MOTIVATION TO SERVE GIRLS

Girls identify providers they feel are youth friendly, and Kuwa Mjanja gives them additional YFS training.

● MAINTAIN AN ADAPTIVE FOOTING

Kuwa Mjanja teams at local and central levels use mixed methods monitoring to stay in the know about both girls' and health system partners' perspectives on the quality and experience of Kuwa Mjanja events and service delivery. In this way, the teams keep girls' voices central as they rapidly learn and adapt to optimize the intervention for scale.

As shown here, the A360 inquiry and insight synthesis & prototyping phases yielded a programmatic "blueprint," which provides a set of guiding principles that reflect insights from field research and the five A360 disciplines. This figure calls special attention to how Tanzania's Kuwa Mjanja intervention maps to the global A360 blueprint.

Step 1: Understand me

Tailor programming to where girls are socially and developmentally:

Building on insights from the A360 transdisciplinary consortium and field research, the design team in Tanzania conducted a segmentation analysis, which aimed to surface the nuanced experiences and needs of girls aged 15-19. This analysis yielded two priority archetypes of Tanzanian adolescent girls—older, more experienced Bahatis and younger, less experienced Faridas. The design team then developed tailored messaging and programming to align with the varied needs and social and developmental trajectories of Bahatis and Faridas. Once a girl self-identifies with one of the two archetypes, *Kuwa Mjanja* offers her messaging and services that are best suited to meet her where she is.

"Know Your Body, Know Your Path"

All elements of the *Kuwa Mjanja* intervention are sensitive to girls' life stages and differing developmental needs. For example, the *Kuwa Mjanja* intervention is presented to Farida through "Know Your Body" messaging, wherein mobilizers open dialogue with discussion of menarche and puberty—topics that the Farida archetype is navigating. For Bahati, mobilizers introduce the intervention through "Know Your Path" messaging, which centers on discussion of girls' life goals and charting a plan for achieving those goals. Mobilizers then provide both Bahatis and Faridas with information about upcoming *Kuwa Mjanja* events. All discussions aim to reach, engage, and inspire girls with approachable SRH and life goal information that directly speaks to their needs at their life stage.

Offer girls an attainable competing joy:

Field research clearly showed that adolescents across the three countries see motherhood as a "primary joy." It affords young women social status and is a revered role in the community. For many young people, the perceived risk of infertility, perceived (though inaccurately) as a side effect of contraceptive use, holds greater weight in decision-making than the risk of an unintended, early pregnancy. Thus, without a similarly rewarding "competing joy," AYSRH programs often struggle to gain traction. In Tanzania, Kuwa Mjanja inspires girls to dream of achieving their other goals for the future (the competing joy), so that they can have equal or greater rewards in life, and still pursue motherhood when the time is right for them.

Step 2: Identify with me

Balance the power scales:

AYSRH programs often view girls as the intended beneficiaries of programming, rather than as equal partners in the design and implementation process. By applying the tenets of meaningful youth engagement and inviting girls to serve as equal partners in designing interventions, A360 aims to balance the programmatic power scales. As such, select young people who participated during A360 formative phases now continue as full-time staff, supporting ongoing refinement of interventions to ensure resonance with girls and young women as the reach of *Kuwa Mjanja* expands, as part of the program's adaptive implementation phase.

Inspire girls to dream:

Kuwa Mjanja ("Be Smart") messages encourage girls to take pride in knowing their goals and making a plan for achieving them. The program carefully designs all intervention content and visuals to reinforce the pride associated with being a girl with a plan.

Position contraception as a tool to achieve her plan for her life:

Once girls are inspired to dream, the *Kuwa Mjanja* intervention positions contraception as one tool among many (including income-generating skills) for girls to use to achieve their dreams. This shift in messaging is particularly important for increasing the relevance of contraception for girls. For example, field exercises in Tanzania revealed that when young people begin engaging in sexual behavior, their identity does not always align with their behavior. A young woman may be having intercourse but may not identify as being sexually active and in need of contraception. Thus, when contraception is aligned with the identity of someone who is sexually active, a young woman may have little motivation to access contraceptive services. Rather, linking contraceptive use with the pursuit of one's dreams makes contraception relevant to all girls, regardless of their sexual activity status.

Step 3: Serve me

Provide girl-defined service delivery at times and locations that girls identify:

SRH programs are most effective when they reach and serve girls in spaces they know and trust, at times and locations that are convenient for them. In Tanzania, girls expressed a desire for both public and private sector health services, and for community-based and in-clinic events. *Kuwa Mjanja*, in turn, designed service delivery interventions to meet these needs. In addition, it quickly became clear that weekend services were convenient for girls; thus, the program worked with the health sector to offer Saturday pop-up events and services. Providers affiliated with *Kuwa Mjanja* offer opt-out, rather than opt-in, contraceptive counseling and on-site availability of a comprehensive method basket across all service provision models. In so doing, *Kuwa Mjanja* meets girls where they are and eliminates barriers to access.

To support an enabling environment, see culture as an asset:

From menarche to sexual debut, marriage, to childbirth, many cultures mark important events in girls' lives with long-standing traditions. Aligning intervention elements with these rituals can increase their acceptability and sustainability. In Tanzania, sociocultural practices vary widely—with some communities explicitly recognizing menarche with events to learn about sex and sexuality, while other communities follow a more tacit recognition of girls' maturation. *Kuwa Mjanja* builds on these differing cultural traditions, ensuring that segmented messaging mirrors the respect and celebration of young women who have reached menarche, in ways that are recognizable and acceptable across Tanzania's varied sociocultural landscape. In this way, *Kuwa Mjanja* eases girls' pathways to care by aligning SRH messages with concepts that are familiar to them and their community gatekeepers.

Recognize and utilize the power of a beautiful brand:

Drawing from social marketing, A360 leverages the power of branding to capture adolescents' attention and to dignify the health service-seeking process. *Kuwa Mjanja* created youthful branded content to generate delight among girls and demarcate the *Kuwa Mjanja* experience. *Kuwa Mjanja*'s visual marker is a pineapple (in Kiswahili, a *nanasi*). Use of the *nanasi* is meant to draw parallels between the strength of a pineapple and the archetypal *"Mjanja girl."* The brand experience emphasizes initiation of contraceptive messaging via discussion of girls' dreams, and inspirational archetypal stories of *nanasi* girls (see **Figure 4**).

Build trust by cultivating provider motivations to serve girls:

Where possible, *Kuwa Mjanja*'s providers are identified by girls for training prior to entering the intervention's pool of approved providers. *Kuwa Mjanja* coordinates additional provider trainings on youth-friendly services, and encourages supervisors to recognize these providers for their participation. This strategy of inviting girls to identify respectful providers allows for girl-defined safe spaces.

Maintain an adaptive footing:

Kuwa Mjanja's local and central teams pursue adaptation as a means of continuous quality improvement. Teams use mixed methods monitoring to use mixed methods monitoring to gauge service delivery performance as well as girls', providers', and partners' perspectives on the quality and their holistic experience with *Kuwa Mjanja*. For more: **bit.ly/A360AdaptiveImplementation**.

Key elements of
the *Kuwa Mjanja* design

Segmentation

The design team had initially planned to tailor outreach to girls in Tanzania based on their marital status. However, while field testing the pop-up events, A360 recognized an opportunity to refine its audience segmentation to better align with girls' lived experience. Rather than a distinction between "married" versus "unmarried," field exercises showed that girls segmented by more nuanced conditions, identifying with one another based on their progress in their respective life trajectories. Based on this, the A360 design team decided to expand its understanding of the true target population, and leveraged segmentation analysis to that end.

The results led to precision of understanding about four archetypal figures: "Farida," "Furaha," "Pendo," and "Bahati." Farida and Furaha are younger (typically 15-17 years old), and at the cusp of physical maturation (developing breasts, body hair, and beginning menstruation). They differ in their sexual experience; Farida is likely to be sexually active, whereas Furaha is not. They are both socially dependent on their families and mothers, and rely primarily on their mothers for knowledge and support, including around their engagement with SRH information. Their immediate concerns revolve around navigating the social, emotional, and physical changes that they are experiencing as they enter adolescence.

Bahati and Pendo, by contrast, are more physically mature. While they may be anywhere in the 15-19 age range, they are typically representative of girls aged 18-19, and share similar social and developmental stages. Bahatis and Pendos are more knowledgeable and socially independent than Faridas and Furahas, already have a sense of their goals for the future, and are interested in support to achieve those goals. Bahati is more sexually experienced, whereas Pendo has not yet had her sexual debut.

Recognizing how suddenly and unpredictably girls' sexual activity status can change, and the heightened need for girls to feel connected to trusted information and services during this dynamic time, A360 prioritized developing messaging and outreach that would resonate with girls regardless of their sexual activity status. The project integrated the four segments into its programmatic design by absorbing Furaha into the "Farida" segment, and Pendo into "Bahati." In so doing, the project targeted its outreach based not on girls' sexual status, but on their life experiences and needs.

Mobilization

Kuwa Mjanja mobilization efforts are rooted in these segmentation results. Through research and validation exercises with the transdisciplinary consortium, A360 developed targeted messaging for the new composite "Faridas" and "Bahatis". For Farida, the *Kuwa Mjanja* intervention comes to her through "Know Your Body" messaging, wherein mobilizers open dialogue with girls with discussion of menarche and puberty. From there, mobilizers share the *nanasi* (meaning "pineapple") archetypal story indicative of the *Kuwa Mjanja* brand: that *nanasi* are girls who stand tall and have pride in themselves, wear their crown showing that they know their worth, and are strong on the outside and sweet on the inside, knowing their power and their potential. Mobilizers then invite girls to pose any questions they may have, and eventually transition to providing information about upcoming *Kuwa Mjanja* events. In this way, menarche serves as the entry point for discussing contraception.

For Bahati, mobilizers introduce the intervention through "Know Your Path" messaging. In these discussions, mobilizers share archetypal stories of *nanasi*, but focus primarily on initiating conversations through discussion of girls' life goals, and invite girls to share their own desires for their future before providing information about upcoming *Kuwa Mjanja* events. Mobilizers are themselves often girls and young women. These "*Kuwa Mjanja* Queens" are girls with large, active social networks. They are identified by local government actors and are recruited to mobilize and receive their own skills development in the process.[c] Notably, Kuwa Mjanja Queens are not peer educators, leaving the counseling and information to the health provider on site at pop-up events.

To enable an inviting, open initiation of *Kuwa Mjanja* events, the A360 team couples individualized mobilization and outreach efforts with mass mobilization. Before each event, the country team travels via car with loudspeakers to share information about upcoming *Kuwa Mjanja* events with the community through fun, welcoming messages.

Mjanja Connect

In 2017, recognizing an opportunity to create additional engaging, adolescent-friendly tools through which to mobilize and convey *Kuwa Mjanja* messages, A360 partnered with Vodafone to develop a mobile-enabled tool called "*Mjanja* Connect." Used by mobilizers, *Mjanja* Connect introduces girls to *Kuwa Mjanja* through a series of videos and fun quizzes, including one called "What kind of *nanasi* are you?" The tool uses girls' responses to the quiz to determine which priority archetype they match and then presents messaging and other information compatible with either Farida or Bahati,

c. In addition, A360 also leverages PSI's existing cadre of interpersonal communication (IPC) agents, affiliated with another PSI initiative called the Women's Health Project, to mobilize girls to attend events.

depending on how the girl self-identifies. The quiz concludes with information about contraception, with methods presented in order of those most to least in line with a girl's priorities, needs, and experiences, followed by a description of all other methods. For instance, if a girl indicates that more than anything else, she has trouble maintaining daily routines, the tool would first present those methods that rely less on the user, such as the injectable, implant, or IUD. All methods are counseled in combination with male condoms for protection against HIV/STI infection. If a girl opts for no method, the tool concludes with a video about the importance of emergency contraception.

Clinic- and Community-based Pop-up Events

Kuwa Mjanja events happen through in-clinic or in-community pop-up events for girls, and clinic days for girls and mothers. Together, these three models work to ensure that girls and young women have a variety of options to engage with the intervention at locations, venues, and times most convenient for them. During clinic days, *Kuwa Mjanja* teams join with clinic staff and providers to provide branded counseling and service provision as part of routine health services within local facilities. During these events, girls and mothers can engage with providers regarding menstruation, body literacy, and SRH information, as well as providing girls with an opt-out private counseling and service provision moment. During on-site clinic-based pop up events, outreach teams convene on facility grounds and work in partnership with facility providers and managers to provide dynamic dialogue sessions, entrepreneurial skills trainings, and to deliver branded services. During community-based pop up events, implementation teams support local facilities and community development officers to deliver this dynamic package of *Kuwa Mjanja* activities and services in the community through mobile outreach.

Across the two pop-up models, a *Kuwa Mjanja* facilitator kicks off the event with a call-and-response refrain about the significance of the *nanasi* and archetypal stories of who *Mjanja* girls are. These animated talks focus on key elements

of *Kuwa Mjanja*'s girl-centered brand messaging: sharing differing inspirational stories of girls who are standing tall, wearing their crown, and being strong. These motivational talks then transition to entrepreneurial skills training. *Kuwa Mjanja* facilitators register girls who attend these events and then use this "registration" list to discreetly approach girls individually throughout the course of the event and provide them an opt-out moment to receive counseling. These sessions lead with girls' goals, allow space to discuss body changes related to adolescence, and reaffirm the relevance of contraception as a tool in service of girls' pursuit of their life goals. Girls then receive counseling and provision of a method, if they so choose. Contraceptive implants, IUDs, injectables, pills, and condoms are offered on-site, regardless of the service delivery modality.

Youth-Friendly Timing and Location of Events, Coupled with Providers

Though events were originally planned throughout the week and during regular service delivery hours, the A360 team quickly recognized the importance of weekend events. Because client volume in public sector facilities is typically lower on the weekends, providers have more time to offer tailored service delivery in line with the *Kuwa Mjanja* brand during weekend events. Given that weekends also present fewer scheduling conflicts related to girls' other school or family responsibilities, the A360 team decided to hold public sector pop-ups on Saturdays, in addition to regularly scheduled weekday events. Health providers at these pop-up events come from local health facilities. Providers receive a per diem to compensate them for their Saturday work hours and, through their involvement, A360 works to build trust between girls and the providers in their communities. In this way, *Kuwa Mjanja* events support long-term linkages between girls and their local health care providers.

Across service delivery models, all providers are trained in youth-friendly service provision but whenever possible, providers at *Kuwa Mjanja* events are also girl-selected.[d] Before moving into a given area, *Kuwa Mjanja* teams work with girls to identify health providers in their local area whom they perceive to be youth-friendly. The A360 team then informs these positive deviant providers that they have been nominated by girls in their area to serve as *Kuwa Mjanja* service providers. If providers are interested, the program arranges for them to receive additional training on youth-friendly health services (providers receive a per diem when they attend training), creating opportunity for providers to be recognized by their supervisors as girl-identified, youth-friendly providers. Kuwa Mjanja maintains a pool of providers vetted by girls as youth-friendly. Once

trained, A360 taps these individuals to provide services at *Kuwa Mjanja* events held in their area.

Performance

Programmatic evidence to date suggests that the *Kuwa Mjanja* intervention is resonating with and effectively reaching adolescents for contraceptive service uptake. From June 2017 to September 2018, the A360 program has delivered AYSRH information to over 80,000 Tanzanian girls aged 15-19 through *Kuwa Mjanja* events. Of those girls, 62% have adopted a modern contraceptive method. A large proportion of these adopters (64%) selected a long-acting reversible contraceptive (LARC), with the most frequently chosen method being the implant (50%). Compared to nationally representative rates of LARC adoption amongst this age group, these results suggest that A360 has achieved notable progress enabling girls' demand for and access to a comprehensive basket of modern methods. **Figure 5** shows the cumulative method mix among *Kuwa Mjanja* adopters compared to that of all girls aged 15-19 using a modern contraceptive method in Tanzania.

In addition, since transitioning to the adaptive implementation phase, the A360 program has uncovered a number of important findings through routine qualitative monitoring, which occurs at randomly selected pop-up events, and is supplemented by weekly data calls and monthly meetings.
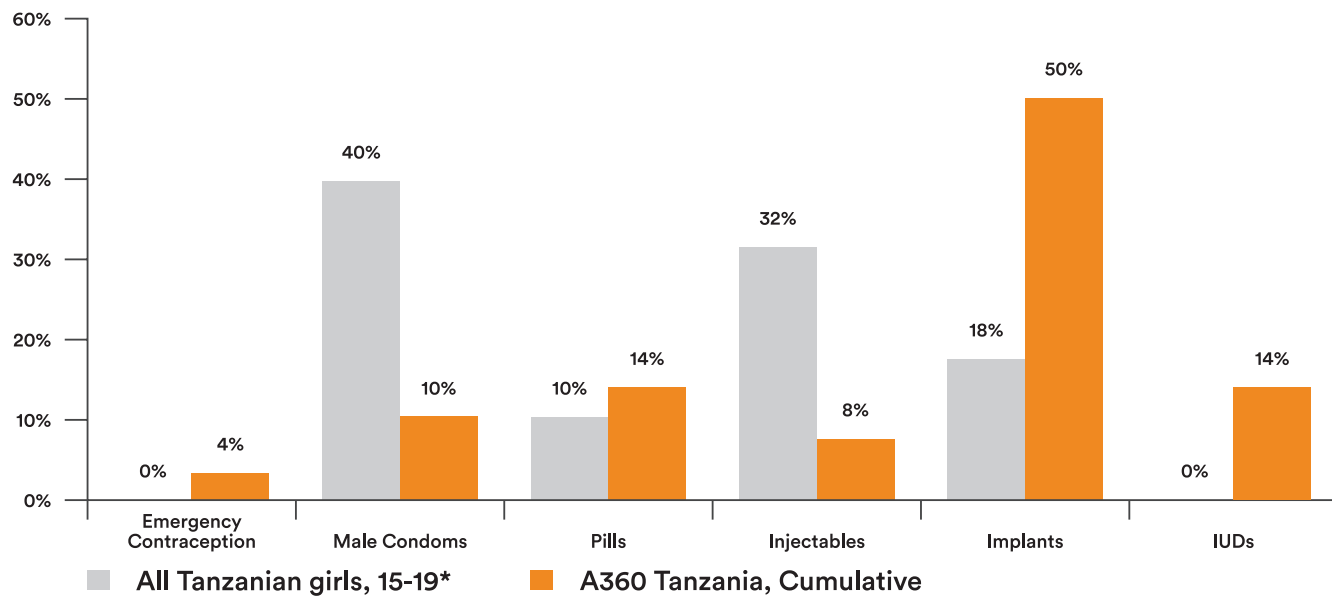
Lessons Learned and Recommendations

Now mid-course in its project lifecycle, A360's learning stance has yielded a number of reflections and lessons learned, which may prove useful to other implementers.

Adaptive Implementation as a Natural Partner to Human-Centered Design

Recent conversations in the fields of Implementation Science and Health Systems Research have reiterated the critical importance of adapting interventions to the complex and dynamically changing contexts in which they are implemented. Doing so requires implementers to maintain an adaptive footing—to both sense the need for adaptation and to execute accordingly. Though research indicates that this is not yet the norm in how most development programming is oriented, it is increasingly recognized as a critical goal for the future.[14] Within A360, adaptive implementation gained a ready ally in HCD. To enable girl-powered programming in the

d. Girl-selected provider teams are engaged at *Kuwa Mjanja* service delivery events held in partnership with private sector facilities, and those with public sector facilities where *Kuwa Mjanja* teams and local government officials jointly assemble and prepare provider teams. District Reproductive Health Coordinators from local governments partner with *Kuwa Mjanja* to identify public sector providers to participate in *Kuwa Mjanja* events directly. In those instances, providers are always trained in youth-friendly service provision but may not always have been girl-selected as well.

Figure 5: Cumulative Contraceptive Method Mix, Kuwa Mjanja Adopters vs. All Tanzanian Girls aged 15-19 Using a Modern Contraceptive Method

Legend:
- All Tanzanian girls, 15-19*
- A360 Tanzania, Cumulative

Data values:
- Emergency Contraception: All Tanzanian girls 0%, A360 Tanzania 4%
- Male Condoms: All Tanzanian girls 40%, A360 Tanzania 10%
- Pills: All Tanzanian girls 10%, A360 Tanzania 14%
- Injectables: All Tanzanian girls 32%, A360 Tanzania 8%
- Implants: All Tanzanian girls 18%, A360 Tanzania 50%
- IUDs: All Tanzanian girls 0%, A360 Tanzania 14%

*Compared to the national rate of LARC adoption among the Tanzanian adolescent population, the A360 program has achieved notable progress enabling girls' demand for and access to a comprehensive basket of modern methods. All A360 data reflected represents cumulative performance through September 2018. *According to the 2015-16 Demographic and Health Survey, the mCPR for all Tanzanian girls aged 15-19 is 8.6%. These data are representative of the method mix breakdown among these girls only.*

design phase, A360 recruited staff based on a recognition of the need for creativity, curiosity, and comfort with ambiguity. These skills have proven critically valuable not only in the design phase, but throughout implementation. With these skills endemic to the project's values and design, teams have been able to confidently transition to the project's adaptive implementation phase.

Project management, too, has benefited in the form of staff retention. When the program transitioned from the insight synthesis & prototyping phase to implementation, A360 observed signs that some staff might begin to leave due to a perception that, with the design phase coming to an end, implementation might default to a less inquiry-driven, more fidelity-focused orientation. The adaptive implementation approach, with its emphasis on inquiry and learning to inform continuous improvement, has helped to stem attrition by continuing to provide opportunities for team members to employ and hone their skills as they continue to refine and optimize the interventions.

Mixed Methods Monitoring is Key to an Adaptive Footing & Risk Mitigation in Scale-Up

As with any project, expansion of the A360 program brings with it potential for drift from the technical strategy set during design. Excessive drift away from the essential efficacious elements of the intervention presents risk and underlines the need for a means of rapid course-correction. *Kuwa Mjanja*'s use of evidence-based adaptation offers an exemplar case. Recognizing the need to balance beneficial adaptation versus harmful drift, the team used mixed methods monitoring to understand not only quantitative performance, but also the experiences of girls, providers, health system partners, and mobilizers during *Kuwa Mjanja* events. This quickly proved valuable. For example, to support depth and speed of coverage, the team experimented briefly with adding school-based actors into the mobilization process for *Kuwa Mjanja* pop-up events. Attendance at pop-ups increased significantly following this programmatic tweak, as desired. However, as qualitative monitoring revealed, this shift in mobilization strategy caused unintended consequences for core elements

of the intervention. Teachers began imposing their own beliefs and values, such as telling girls to attend events to learn to "avoid temptation" as they disseminated information about *Kuwa Mjanja* events. These inserted messages conflicted with the *Kuwa Mjanja* messaging and brand, which emphasize respect for girls and a focus on girls' self-defined dreams rather than judgement of their decision-making. The resulting impact on girls' experience was confusion and, at times, concern and a reduced trust in the intervention. To address this challenge, the country team introduced rapid onboarding procedures for local actors prior to mobilization, which focused on ensuring their full knowledge of *Kuwa Mjanja*'s girl-centered brand. Management also redoubled efforts to emphasize the importance of accurate, targeted, consistent mobilization messages. A360's adaptive implementation and routine qualitative monitoring allowed the program to experiment where needed, while being able to recognize challenges in real-time and quickly course-correct.

Importance of Combined Public and Private Sector Engagement for Youth Service Delivery

Formative research for the *Kuwa Mjanja* service delivery model revealed the importance of a service delivery stance open to both private and public sector engagement. Though the efficiencies of private sector service delivery channels appealed to girls' desire for rapid and high-quality service delivery—a channel which PSI Tanzania was able to readily provide through its franchise of private sector clinics nationwide—girls also emphasized a desire for services at no cost. In order to "go where girls led," A360 recognized the need to partner with both sectors, thereby also supporting the public sector's reach and coverage of girls. Today, *Kuwa Mjanja* is implemented through both sectors, with the majority of service delivery occurring through the public sector. This also requires investment to enable implementing teams to toggle between the challenges of implementing in the private versus the public sector. For example, whereas private sector channels allow A360 to easily reserve one full day for *Kuwa Mjanja* pop-up events, in the public sector, implementing teams work to support health system counterparts to balance a large client volume with the need to provide services to girls in a private space. This ability of implementation teams to toggle adeptly between the two sectors, and support both to leverage their strengths for girls' benefit, has proven valuable to quality implementation and scale-up.

Cost-Effectiveness and its Role in Sustainability

From its inception, A360 has had a mandate to pursue cost-effectiveness, with the understanding that AYSRH projects' contributions to understanding and improving cost per contraceptive adopter can offer value to the field of AYSRH as a whole. Yet, pursuing cost-effectiveness amidst a landscape characterized by limited evidence about AYSRH costs poses its challenges. Given that few studies explore precisely what appropriate costs for AYSRH programming are, the A360 project teams have worked diligently to navigate and scrutinize efforts to reduce costs while simultanously reaching clarity about the minimal viable intervention that resonates with both girls and the health systems that must ultimately sustain them. At times, scrutiny over cost has presented itself in contrast to opportunities to potentially deepen or enrich the breadth of A360 programming. We anticipate that other AYSRH projects with cost-effectiveness mandates will experience similar challenges until the evidence base is broadened. Without knowing the return on certain investments, it can be difficult for implementers to ensure that programs and decision-makers neither over- nor under-estimate the costs required to achieve sustained impact. A360 hopes that its own cost analysis, the results of which will be made available at program end, will contribute to this evidence base and help future AYSRH projects navigate this critical space.

Next Steps

Ultimately, in Tanzania, the A360 program hopes to achieve broad-based scale. To do so, the program team is pursuing both horizontal scale (i.e., geographic expansion) and vertical scale (i.e., institutionalization). A360 is partnering with various departments within the Ministry of Health, Community Development, Gender, Elderly, and Children to ensure that *Kuwa Mjanja*'s value is in service of larger national program and policy goals for SRH. This investment in government partnership is seen as a critical means of expanding the reach and scope of relevant, timely AYSRH services for Tanzanian girls, at-scale—by supporting expanded numbers of public sector sites to deliver girl-powered programming, while also ensuring alignment with public system policies, processes, skills, and finances.

Across the three countries, A360 continues to optimize and expand activities using adaptive implementation, working in partnership with governments for sustainable scale. While challenges remain, the A360 interventions appears to resonate with girls, resulting in significant contraceptive uptake among adolescents. Actively listening to girls discuss their hopes and desires, and offering them culturally and developmentally relevant strategies for realizing their goals—informed by multiple disciplines—can help to position girls for success during adolescence. A360's experience suggests that investment in this approach to girl-centered, girl-"powered" programming may prove valuable to AYSRH programming in future settings.

Contributors

Appearing in alphabetic order. Italics indicate authorship.

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Jessa Blades

Claire Cole

Laura Glish

Melissa Higbie

Shahada Kinyaga

Pamela Mallinga

Sarah Mehta

Edwin Mtei

Ahna Suleiman

Amy Uccello

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a360learninghub.org   @Adolescents360