MOMENTUM POLICY BRIEF N° 1

AUGUST 2025

The Momentum Model:

Designing a Gender-transformative Intervention for Young First-time Mothers in Kinshasa, DRC

SUMMARY

- Momentum was a gender-transformative community-based intervention that delivered integrated family planning and maternal and newborn health and nutrition counseling, services and referrals to first-time mothers aged 15-24 and their male partners.
- The primary objectives of Momentum were to increase the postpartum contraceptive use, improve care seeking and household practices related to maternal and newborn health and nutrition, and increase gender-equitable attitudes and behaviors.
- The intervention consisted of home visits and support groups, which were delivered by nursing students, and community dialogue and communication.
- A quasi-experimental design was used to assess intervention effectiveness.

PURPOSE

To provide a comprehensive overview of the Momentum pilot project's design and facilitate its replication or adaptation in other settings. The project was funded by the Gates Foundation.

BACKGROUND

Adolescents in Democratic Republic of the Congo (DRC) have a high rate of childbearing, limited use of modern contraceptives, a high rate of unplanned pregnancy, and high unmet need for family planning. In the 2014 DRC Demographic and Health Survey, which was conducted two years before Momentum was designed, one in four girls aged 15-19 had given birth or were pregnant with their first child at the time of the interview. Only 5% of sexually active married adolescent girls reported that they were currently using a modern method of contraception. Unmet need for family planning (FP) was high among married adolescent girls aged 15-19 and young women aged 20-24 (31% and 29% respectively). Among women who had a birth before the age of 20, a third (33%) would have liked the birth to occur later or not at all. Although four in five women sought antenatal care and had deliveries assisted by skilled personnel, the maternal mortality ratio and the neonatal mortality rate in the DRC were among the highest in the world (846 maternal deaths per 100,000 live births and 29 neonatal deaths per 1000 live births).

Studies suggested that multiple factors contributed to this situation, including financial constraints, young women's inability to make autonomous decisions that would benefit their health and that of their babies, lack of knowledge of obstetric and newborn danger signs, poor quality of care, misinformation, and harmful gender and social norms around adolescent sexuality and male involvement in reproductive, maternal, and child health.

PROJECT OBJECTIVES

Momentum was developed to test a gender-transformative model of integrated family planning and maternal and newborn health and nutrition service delivery. The project was built on a 2015 pilot study that demonstrated the effectiveness of nursing students as community-based distributors of contraception in Kinshasa. The primary behavioral objectives of Momentum were to increase uptake of postpartum contraception, improve care seeking and the adoption of household behaviors and practices beneficial to mother and baby, and foster more gender-equitable behaviors and attitudes among first-time mothers (FTMs) and their husbands/male partners.

TARGET POPULATION

The target population consisted of a cohort of FTMs aged 15-24 years who are about six-months pregnant with their first child at baseline and their husbands/male partners in Kinshasa, the capital city. FTMs were recruited at the health facility and community levels. At the health facility level, recruitment of FTMs occurred in high-volume maternity hospitals supported by a Gates Foundation-funded Jhpiego project that was designed to strengthen service delivery and improve the quality of care. At the community level, trained enumerators working with Conduite de la Fécondité (a community-based organization), and who lived in the health zones selected for the study were assisted by health zone authorities and community health workers in going house-to-house to identify women aged 15-24 who were six-months pregnant with their first child. Those who agreed to involve their husband/male partner in the project were given an invitation coupon for him if recruitment occurred at a health facility and under the following circumstances if recruitment occurred in the community: the FTM was unmarried or the FTM was married/living together and her husband was not at home at the time of the recruitment visit.

THEORY OF CHANGE (TOC)

Figure 1 presents Momentum's TOC, which illustrates the pathway from the identified problem which the project hoped to address to needed changes in behaviors or conditions that were expected to occur before the desired primary outcomes and impact could be achieved. The TOC also reflects the socio-ecological processes that affect the behaviors of FTMs and their husbands/male partners. The framework identified multiple factors that needed to change to have an impact on the health behaviors and outcomes the project aimed to achieve. These factors included lack of access to community-based FP/maternal and newborn health (MNH) services; lack of FP/MNH-related knowledge; lack of autonomy in decision making; lack of couple communication; and gender-inequitable attitudes and behaviors which are often conditioned on social norms.

The desired primary outcomes were increased uptake of postpartum FP, improved care seeking and MNH household practices, increased gender-equitable behaviors related to FP/MNH and nutrition, and the integration of the Momentum model in nursing education, leading to improved FP/MNH and nutritional status among FTMs. Intermediate outcomes were improved access to information, services, and referrals; improved knowledge, attitudes, and normative beliefs; empowered decision-making; and improved gender awareness, attitudes and normative beliefs. As Figure 1 shows, there were four interrelated interventions:

1.Integration of FP/MNH and nutrition into community-based care through nursing student providers.

This intervention involved home visits and was intended to ensure consistent, accessible FP/MNH services, leading to greater uptake of FP/MNH services, improved referrals to health facilities, and enhanced FP/MNH and nutrition-related knowledge. These outcomes were expected to strengthen community-based health service delivery and lead to improved FP/MNH and nutritional status of FTMs.

2.Nursing student-led and peer-assisted support groups.

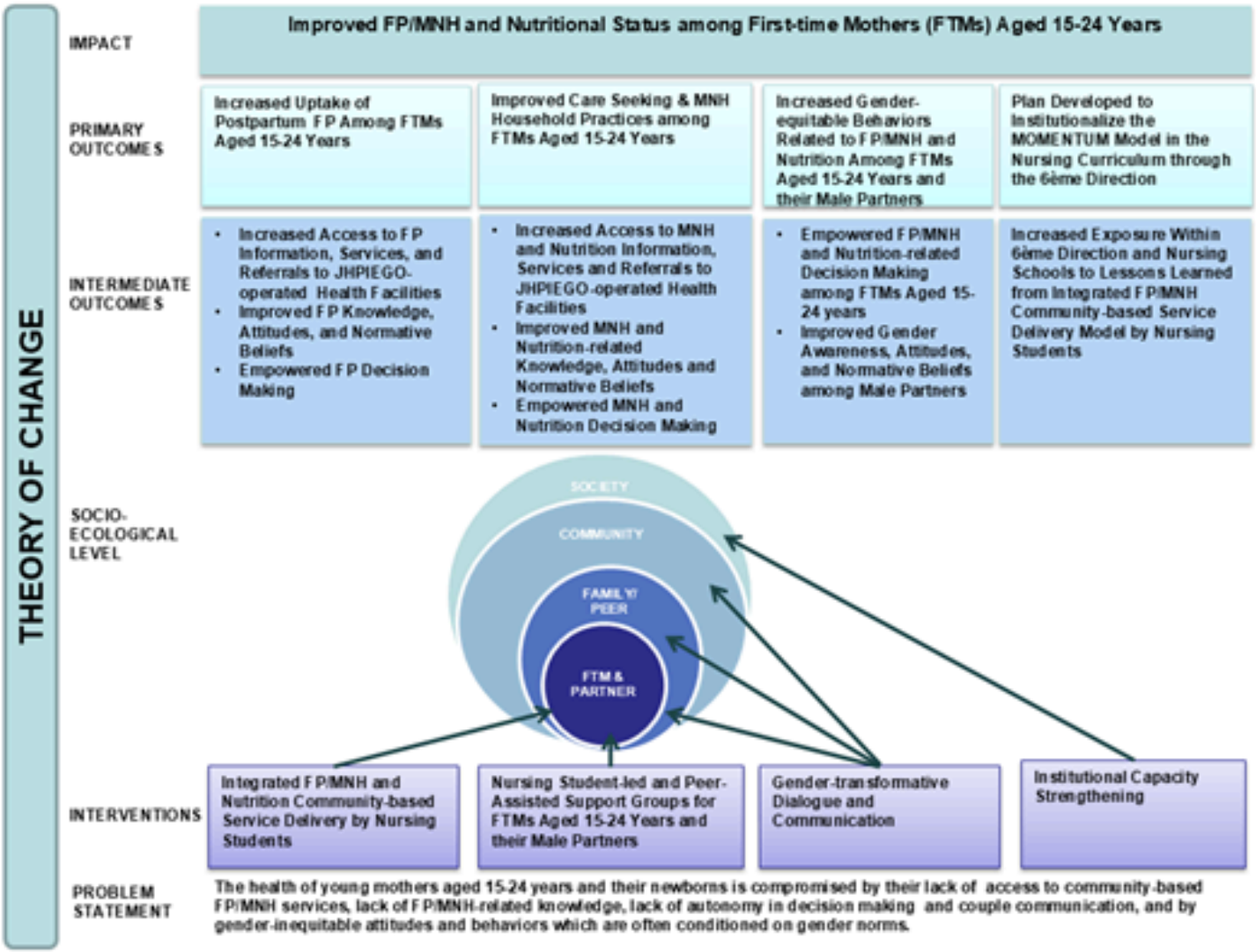
This intervention involved separate group education sessions for FTMs and male partners and provided a platform for education and dialogue, improving knowledge, attitudes, and normative beliefs about FP/MNH and nutrition among FTMs and their husbands/male partners. This intervention component was expected to empower FTMs to make decisions about their health; encourage positive couple communication; increase male partner engagement, fostering gender-equitable behaviors; and support improved care-seeking and household practices among FTMs.

3.Gender-transformative dialogue and communication.

This intervention involved community education and aimed at shifting gender norms, increasing couple communication, improving male partner support for FP/MNH decisions, and fostering more equitable household decision-making. These outcomes were expected to lead to increased gender-equitable behaviors and greater autonomy for FTMs in health decisions.

4.Institutional capacity strengthening.

This intervention was expected to increase exposure to lessons learned from the Momentum model among nursing schools and the Direction de l'Enseignement des Sciences de Santé (DESS) (Directorate of Health Sciences Education of the Ministry of Health [MOH]). This outcome was expected to result in the development of a plan to institutionalize Momentum's gender-transformative FP/MNH and nutrition community-based service delivery (i.e., the Momentum model) in the nursing curriculum.


THEORY OF CHANGE
IMPACT
Improved FP/MNH and Nutritional Status among First-time Mothers (FTMs) Aged 15-24 Years
PRIMARY OUTCOMES
Increased Uptake of Postpartum FP Among FTMs Aged 15-24 Years
Improved Care Seeking & MNH Household Practices among FTMs Aged 15-24 Years
Increased Gender-equitable Behaviors Related to FP/MNH and Nutrition Among FTMs Aged 15-24 Years and their Male Partners
Plan Developed to Institutionalize the MOMENTUM Model in the Nursing Curriculum through the 6ème Direction
INTERMEDIATE OUTCOMES
Increased Access to FP Information, Services, and Referrals to JHPIEGO-operated Health Facilities
Improved FP Knowledge, Attitudes, and Normative Beliefs
Empowered FP Decision Making
Increased Access to MNH and Nutrition Information, Services and Referrals to JHPIEGO-operated Health Facilities
Improved MNH and Nutrition-related Knowledge, Attitudes and Normative Beliefs
Empowered MNH and Nutrition Decision Making
Empowered FP/MNH and Nutrition-related Decision Making among FTMs Aged 15-24 years
Improved Gender Awareness, Attitudes, and Normative Beliefs among Male Partners
Increased Exposure Within 6ème Direction and Nursing Schools to Lessons Learned from Integrated FP/MNH Community-based Service Delivery Model by Nursing Students
SOCIO-ECOLOGICAL LEVEL
SOCIETY
COMMUNITY
FAMILY/ PEER
FTM & PARTNER
INTERVENTIONS
Integrated FP/MNH and Nutrition Community-based Service Delivery by Nursing Students
Nursing Student-led and Peer-Assisted Support Groups for FTMs Aged 15-24 Years and their Male Partners
Gender-transformative Dialogue and Communication
Institutional Capacity Strengthening
PROBLEM STATEMENT
The health of young mothers aged 15-24 years and their newborns is compromised by their lack of access to community-based FP/MNH services, lack of FP/MNH-related knowledge, lack of autonomy in decision making and couple communication, and by gender-inequitable attitudes and behaviors which are often conditioned on gender norms.

CORE COMPONENTS AND ACTIVITIES

Core components of Momentum's interventions are detailed below:

Integration of FP/MNH and nutrition into community-based care through nursing student providers: Home visits were conducted once a month by trained third- and fourth-year nursing students to provide counseling, services, and referrals for prenatal, postnatal, and newborn care, following a schedule set by DESS. Nursing students also counseled FTMs and key household influencers on FP and gender, offered a range of contraceptive methods after delivery and during the first 12–14 months postpartum (Implanon NXT, Sayana Press, progestin-only pills, combined oral contraceptive pills, male condoms, emergency contraception, and CycleBeads), conducted simple health checks for mother and baby, and provided treatment for common childhood illnesses.

Nursing student-led and peer-assisted support groups: Support groups for FTMs were led by trained nursing students, held once a month, and guided by Program M, an approach designed to promote awareness about gender inequities, rights, and health, and improve young women's personal agency. Group education topics included: (1) pregnancy and being a mother, (2) women's and men's roles in childcare, (3) sexual and reproductive rights, (4) sexually transmitted infection/HIV prevention, (5) FP, (6) gender, (7) empowerment, (8) human rights, and (9) violence (types, cycle, and seeking help). These sessions were delivered in-person and provided safe spaces for FTMs to discuss barriers to healthcare seeking and behavior change, including gender-based norms and partner attitudes.

Support groups for husbands/male partners of FTMs were led by trained nursing students, delivered in-person once a month, and guided by Program P (an approach for engaging men in fatherhood, caregiving, and maternal and child health). Group education topics included (1) father's expectation, (2) father's impact/legacy, (3) pregnancy and birth, (4) FP, (5) caregiving, (6) gender, (7) nonviolence, (8) children's needs and rights, and (9) dimensions of care giving. Program P group education sessions provided safe spaces for male partners of FTMs to critically reflect on how social and cultural norms defined fatherhood and men's and women's roles, and how gender roles shaped men's involvement in their families.

Gender-transformative dialogue and communication: These activities aimed at shifting gender and social norms around first-time parenthood and were targeted at parents of FTMs/male partners and other members of the community. Using a human-centered design process, four types of activities were co-developed and selected for implementation: (a) street theater/short plays (b) video production among male partners of FTMs on topics related to gender, decision making, and fatherhood; (c) open dialogue among key influencers of FTMs and health workers using a deck of cards with true or false statements about health and social norms; and (d) gatherings of FTMs' mothers and mothers-in-law, in which positive deviants of a Momentum-targeted health behavior shared their experiences, followed by a question-and-answer session facilitated by a community health agent.

Institutional Capacity Strengthening: A gender-transformative FP/MNH and nutrition counseling and referral package was developed for home-based delivery by nursing students, starting with the adaptation of the Program M and Program P Manual for the DRC context.

The Package was developed through a collaborative process that brought together various departments of the MOH; the Ministry of Gender, Family and Child; and Kinshasa-based non-governmental organizations and drew on existing tools developed by the MOH for community- and facility-based service delivery.

Training-of-trainer (ToT) workshops were conducted for selected stakeholders who participated in the design of the Package. The ToT workshops were followed by workshops to train 20 nursing school supervisors and 150 nursing students on the Package. Nursing students were also trained to collect and report monitoring data via a digital application as well as via a paper-based system using reporting forms that were co-designed by the project team and stakeholders.

STAKEHOLDER INVOLVEMENT

The following stakeholders were closely involved in project design and adaptation, which helped to ensure that the Momentum model was aligned with the DRC's reproductive, maternal and child health strategic objectives and was a good fit with the target population, their circumstances, and the setting:

1. Ministère de la Santé Publique :
    - Direction de l'Enseignement des Sciences de Santé (DESS)
    - Direction de la Santé de la Famille et des Groupes Spécifiques (D10)
    - Equipes Cadre des Zones de Santé (ECZS)
    - Programme National de Lutte contre les Infections Respiratoires Aiguës (PNIRA)
    - Programme National de Lutte contre les Maladies Diarrhéiques (PNLMD)
    - Programme National de Nutrition (PRONANUT)
    - Programme National de Santé de la Reproduction (PNSR)
    - Programme National de Santé des Adolescents (PNSA)
    - Programme National de Santé Mentale (PNSM)
2. Ministère du Genre Famille et Enfant
3. National and international non-governmental organizations (NGOs):
    - Action Santé et Développement (ASD)
    - Conduite de la Fécondité
    - Johns Hopkins University /Center for Communication Programs (JHU/CCP)
    - Jhpiego
    - Pathfinder International
    - Save the Children
4. Local experts, including researchers from the University of Kinshasa

We also established a Technical Advisory Group consisting of key staff from PNSA, DESS, PNSR, and youth-oriented projects (CORDAID, DKT, IRH/Passages, Médecin du Monde, Pathfinder, Promundo, Save the Children, and Tearfund) to monitor progress over the life of the project and provide advice to project leadership. Through a participatory approach, stakeholders fine-tuned the project's design as follows: selection of both intervention and comparison health zones from those with high-volume maternities supported by Jhpiego; extension of the period for following up FTMs and husbands/male partners from six months to 16 months; expansion of the supervision team to include trainers from the MOH and Ministry of Gender.

Through a human-centered design process, project beneficiaries (FTMs, male partners, mothers and mothers-in-law) proposed prototypes for community dialogue activities aimed at creating an enabling social environment for FP/MNH and nutrition and gender-equitable attitudes and behaviors, four of which were selected for implementation. While the results of formative research among the target population confirmed Momentum's original design, they also called for the intensification of group education sessions for FTMs and their husbands/male partners and the introduction of an integrated smart-phone application to improve the performance of nursing students in counseling and follow-up during home visits.

CONTEXTUAL CONSIDERATIONS

A major consideration in the design of the project was how best to recruit and engage unmarried and non-residential partners of FTMs given social disapproval of non-marital childbearing. We conducted qualitative research with unmarried FTMs and unmarried fathers at the formative stage to identify recommended strategies for paternal engagement that are specific to this group and ensure that health education activities addressed relevant cultural beliefs and attitudes about gender roles. We also established a partnership with Conduite de la Fécondité, a local NGO, to recruit FTMs and male partners at the community level.

Another consideration was loss to follow-up, especially of unmarried FTMs and their partners. To address this issue, a participant tracking system was created by collecting the addresses, cell phone numbers, and secondary contact information for all study participants and a quick-response (QR) code was used to set up unique identifiers for respondent tracking and identification.

EVALUATION

A quasi-experimental design was used to measure the effectiveness of the Momentum interventions. Three of six health zones (Kingasani, Lemba, and Matete) were allocated to the intervention arm and received home visits and group education sessions led by nursing students, while the other three health zones (Bumbu, Ndjii, and Masina 1) served as the comparison arm. FTMs aged 15-24 were recruited at six-months gestation and followed up for 16 months. The baseline survey was conducted from September to November 2018 and the post-intervention endline survey, from May to August 2020. A pretested structured interviewer-administered questionnaire was used to collect data on sociodemographic characteristics of participants, FP, antenatal care, delivery and postnatal care, exposure to Momentum interventions, fertility preferences, gender relations, and child health.

The baseline value for sample size estimation was determined using the percentage of babies born to women under 20 who received a postnatal care check within two days of birth, which was estimated at 6.5% nationwide in the 2013-2014 DRC DHS. This indicator was chosen as it had the lowest prevalence among the 14 behavioral indicators the project was required to report. The sample size was calculated to detect a 10-15 percentage-point difference in key behavioral indicators with 99% confidence, 99% power, and a 25% buffer for nonresponse and dropout. Based on these parameters, the estimated sample size included 1,213 first-time mothers (FTMs) aged 15-24 and an equal number of male partners in both the intervention and comparison arms. Although a cohort follow-up study was ultimately conducted and statistical calculations suggested a smaller sample size, the original sample size was maintained to allow for separate effect estimations for adolescent (ages 15-19) and young FTMs (ages 20-24).

In the intervention health zones, a mixed methods approach was used at endline to obtain feedback from beneficiaries on project performance, assess acceptability of and satisfaction with project activities, and provide preliminary stakeholder input for institutionalization and potential scale-up. The qualitative components of the endline study included:

1. Focus group discussions (FGDs) with FTMs and husbands/male partners to assess the acceptability of and satisfaction with the Momentum interventions.
2. FGDs with key household influencers to assess changes in attitudes and behavior among these gatekeepers who exerted considerable influence over FTMs.
3. FGDs with nursing students who provided community-based services under Momentum to identify factors influencing their performance during home visits.
4. Stakeholder in-depth interviews to obtain input to inform the development of an institutionalization plan.

A nursing student provider survey was also conducted. The evaluation included a cost analysis of the project's interventions to help assess performance, plan for institutionalizing the Momentum model in nursing education, and guide adaptation, advocacy and resource mobilization. Sensitivity analysis was conducted to test cost changes in alternative implementation scenarios. To evaluate the training, nursing students completed a pre-test and a post-test exam before and after the training workshop was implemented, to assess students' knowledge, competence, and gender-related attitudes.

The following peer-reviewed articles have been published from the baseline and endline evaluation data:

Gage, A. J., Wood, F. E., Gay, R., & Akilimali, P. (2024). Effects of the Momentum project on postpartum family planning norms and behaviors among married and unmarried adolescent and young first-time mothers in Kinshasa: A quasi-experimental study. PloS one, 19(3), e0300342. https://doi.org/10.1371/journal.pone.0300342

Wood, F. E., Gage, A. J., Mafuta, E., & Bertrand, J. T. (2024). Involving men in pregnancy: a cross-sectional analysis of the role of self-efficacy, gender-equitable attitudes, relationship dynamics and knowledge among men in Kinshasa. BMC pregnancy and childbirth, 24(1), 444. https://doi.org/10.1186/s12884-024-06638-1

Gage, A. J., Wood, F. E., & Gay, R. (2023). Expanding contraceptive choice among first-time mothers age 15-24 in Kinshasa: The Momentum pilot project. Frontiers in global women's health, 4, 1087009. https://doi.org/10.3389/fgwh.2023.1087009

Gage, A. J., Akilimali, P. Z., Wood, F. E., Gay, R., Olivia Padis, C., & Bertrand, J. T. (2023). Evaluation of the effect of the Momentum project on family planning outcomes among first-time mothers aged 15-24 years in Kinshasa, DRC. Contraception, 125, 110088. https://doi.org/10.1016/j.contraception.2023.110088

Gage, A. J., Wood, F. E., Woo, M., & Gay, R. (2022). Impact of the Momentum pilot project on male involvement in maternal health and newborn care in Kinshasa, Democratic Republic of the Congo: a quasi-experimental study. BMC women's health, 22(1), 460. https://doi.org/10.1186/s12905-022-02032-1

Gage, A. J., Wood, F. E., Kittoe, D., Murthy, P., & Gay, R. (2022). Association of Male Partners' Gender-Equitable Attitudes and Behaviors with Young Mothers' Postpartum Family Planning and Maternal Health Outcomes in Kinshasa, DRC. International journal of environmental research and public health, 19(19), 12182. https://doi.org/10.3390/ijerph191912182

Gage, A. J., Wood, F. E., & Akilimali, P. Z. (2021). Perceived norms, personal agency, and postpartum family planning intentions among first-time mothers age 15-24 years in Kinshasa: A cross-sectional analysis. PloS one, 16(7), e0254085. https://doi.org/10.1371/journal.pone.0254085

Wood, F. E., Gage, A. J., & Bidashimwa, D. (2020). Insights on exclusive breastfeeding norms in Kinshasa: findings from a qualitative study. BMC pregnancy and childbirth, 20(1), 586. https://doi.org/10.1186/s12884-020-03273-4

CHALLENGES IN THE DESIGN PROCESS

It was hard to foresee the magnitude of some expenses that were essential for the implementation of the intervention. These expenses included community-level recruitment of FTMs and their husbands/male partners, tracking of FTMS and male partners who had relocated since the baseline, and the extension of the follow-up period from 6-16 months during project redesign. The post-delivery follow-up period was extended in response to a request by the Ministry of Health to accommodate the full immunization schedule for infants. This extension meant that supplemental funds were needed for the procurement of contraceptives and medicines for home visits, replacement of community-based distribution kits (due to fading, wear and tear), and participant tracking. Overall, the design/redesign process was facilitated by frequent and clear communication among team members and stakeholders, which led to a unified vision of the project's design goals and overall objectives.

Recommended citation: Gage, Anastasia J., Gay, Rianne, and Bertrand, Jane T. (2025). The Momentum model: designing a gender-transformative intervention for young first-time mothers in Kinshasa, DRC. Momentum Policy Brief No. 1.