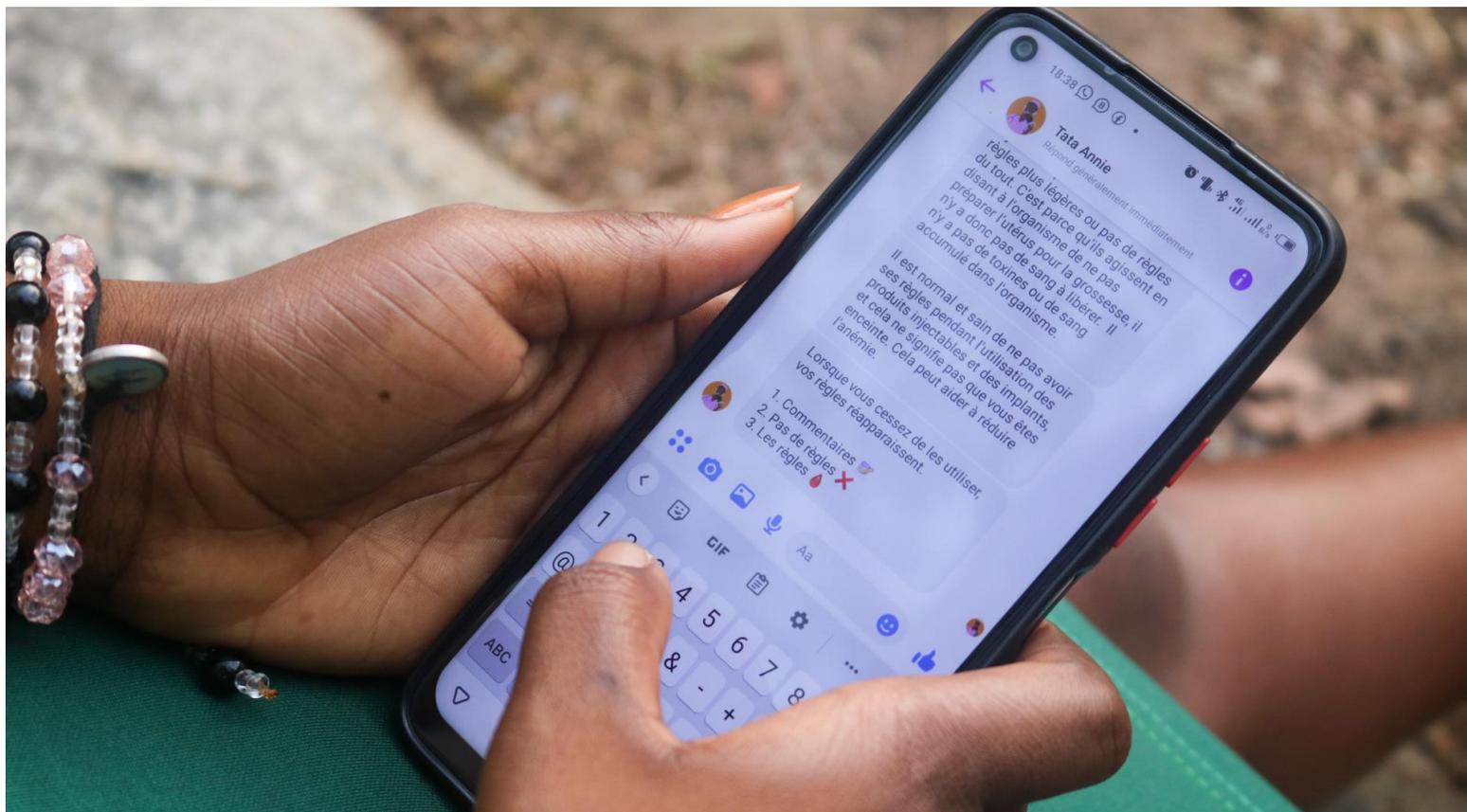


MOMENTUM

Private Healthcare Delivery



Program Brief

MEETING THE CONTRACEPTIVE NEEDS OF YOUTH THROUGH DIGITAL TOOLS

REACHING BENINESE YOUTH WHERE THEY ARE

The past decade has seen an increase in the development of digital tools that reach users with sexual and reproductive health (SRH) information. Digital tools can offer new ways to share SRH information and link to services. When designed for and/or by youth, the tools may have added benefits of confidentiality and anonymity, which may be even more valued by younger populations.¹

¹High-Impact Practices in Family Planning (HIPs). Digital Health for Social and Behavior Change: New technologies, new ways to reach people. Washington, DC: USAID; 2018 Apr. Available from: <http://www.fphighimpactpractices.org/briefs/digital-health-sbc/>

In Benin, MOMENTUM Private Healthcare Delivery aims to improve youth access to reliable SRH information with digital tools. With youth input, MOMENTUM designed an SRH-focused chatbot, *Tata Annie*, to meet the needs of youth in Benin, and to provide confidential, on-demand SRH information. This program brief outlines the key design elements and adaptations made for the digital tool, including how trainings and support from Meta were leveraged to promote the use of the chatbot. Aimed at practitioners who seek to use digital tools to increase access to SRH information and services, the brief highlights MOMENTUM’s process in Benin to design and adapt a chatbot, for youth, and the early learnings around the chatbot’s use, reach, and sustainability.

INTRODUCTION

Digital solutions for social and behavior change – including changing attitudes around contraception and increasing uptake of contraceptives – have been identified as a promising high impact practice.² Digital solutions can provide information and link users to services and have the potential to alleviate the burden for over-stretched health systems in providing such information and reduce the user’s cost of seeking information.

Several digital tools have been developed over the past decade focused on promoting accurate information on and linkage to family planning (FP) and SRH services. However, while digital tools have the power to reach users where they are, the quality and accuracy of the information can vary by tool.

A landscaping conducted by the USAID- supported Research for Scalable Solutions (R4S) highlighted a broad range of FP digital tools and reviewed the comprehensiveness and accuracy of the FP content in the tools.³ In this landscaping, the ‘Counseling for Choice’ Chatbot developed by Population Services International (PSI) for a program in Cote d’Ivoire was highlighted among the tools containing comprehensive and accurate information about FP as well as being aligned with the Principles for Digital Development.⁴

One of the recommendations of the R4S review was “*Do not reinvent the wheel! There are great tools available for adaptation.*” Consequently, the Beninese Association for Social Marketing (ABMS) saw potential in building on lessons from Cote d’Ivoire and insights from the R4S review, to improve and adapt a chatbot for Benin.

With support from USAID, the MOMENTUM Private Healthcare Delivery project, in partnership with ABMS has now brought to life a digital, user facing SRH chatbot named *Tata Annie*. *Tata Annie* brings contraceptive information and counseling on-demand, to adolescents and young people through their mobile phones, providing access to SRH information anonymously and privately. The chatbot is hosted on

Box

What is a Chatbot?

A chatbot is a digital tool that uses a specific algorithm or artificial intelligence (AI) to ask users a series of questions and provide them with the information they are seeking. Chatbots might exist in a stand-alone app, use their unique website, or be housed on an existing digital application, such as Facebook or WhatsApp.

² High-Impact Practices in Family Planning (HIPs). Digital Health for Social and Behavior Change: New technologies, new ways to reach people. Washington, DC: USAID; 2018 Apr. Available from: <http://www.fphighimpactpractices.org/briefs/digital-health-sbc/>

³ Brittingham Sarah, Zan Trinity, Yacobson Irina. So many tools; how to choose? Results from a content analysis of family planning digital platforms (brief). Durham (NC): Research for Scalable Solutions/FHI 360;2021

⁴ The Principles for Digital Development promote practices such as the use of open standards, open-source technologies, and the importance of addressing privacy and security.

Facebook and was developed by drawing from the SRH- focused chatbot originally introduced in Cote d'Ivoire.

YOUTH ACCESS TO SRH INFORMATION

Despite Benin's strong policy environment for youth accessing and using contraception⁵, some youth in Benin do not have reliable access to information on SRH⁶ and 31% of young people in the country (aged 20-29) have an unmet need for modern contraception.⁷ Unmarried, adolescent girls (15-19) have a significantly higher unmet need (65%).⁸ Working through the ABMS managed youth program *Amour&Vie*,⁹ MOMENTUM is leveraging digital platforms like the *Amour&Vie* Facebook page and WhatsApp to reach youth with SRH information. *Amour&Vie*'s outreach through youth clubs and health centers, as well as a digital presence through social media applications, provides a strong foundation for the *Tata Annie* chatbot. The *Amour&Vie* Facebook page has nearly 80,000 followers, reaching a range of youth segments, including young adolescents 10-14, adolescents 15-19, and youth 20-25. With significant traffic on this social media page and with 11 million mobile phone users in Benin¹⁰, a chatbot for SRH became a favorable avenue to reach a digitally connected youth population. Keeping this in mind, MOMENTUM designed and adapted the *Tata Annie* chatbot by leveraging the expertise of Beninese youth who are engaged with *Amour&Vie*.

The chatbot includes five components (see box 2) that not only focuses on information about contraceptive methods but provides information on menstrual health and other SRH topics such as sexually transmitted infections (STIs).

Box 2

5 COMPONENTS OF *Tata Annie*

1. An **FP/SRH Frequently Asked Questions (FAQs)** section where users select specific contraceptive methods to learn about among the range of options available locally.
2. A brief **menstrual health and hygiene FAQs** section, with a similar structure to the FP FAQ section.
3. A “**find my method**” contraceptive counseling section based on the [Counseling for Choice](#) approach where users respond to a series of questions about their needs and preferences; based on the user's responses, the chatbot suggests 2-3 contraceptive methods that correspond with the stated desires. From there the user can choose to learn more about each of the suggested methods or a specific one.
4. A **clinic locator** that identifies MOMENTUM- supported facilities that provide contraception, where providers are youth responsive.
5. An option to be **connected to a live, trained SRH counselor** to chat with about contraception or other related topics.

⁵ Population Reference Bureau. *Youth Family Planning Scorecard*. <https://scorecard.prb.org/youthfpcorecard/en/>

⁶ Demographic and Health Surveys. *Benin Standard DHS, 2017-2018*. <https://dhsprogram.com/methodology/survey/survey-display-491.cfm>

⁷ World Health Organization. *Benin, Contraception within the context of adolescents' sexual and reproductive lives: Country Profile*. https://cdn.who.int/media/docs/default-source/hrp/adolescents-srh-country-factsheets-2021.pdf?sfvrsn=62aec9d5_17

⁸ Ibid

⁹ *Amour&Vie* is a youth program that aims to improve the sexual and reproductive health of adolescents and young people aged 10-24 by offering them a forum for exchange and adapted services. In addition to printed magazines, a digital presence, radio spots, and community activities, another piece of the *Amour&Vie* program are youth centers that provide youth-friendly health services.

¹⁰ World Bank. *Individuals using the internet (% of Population), Benin*. <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=BJ>

With the ability to utilize the chatbot anonymously, users can feel confident to explore Frequently Asked Questions and find the contraceptive method right for them, without judgment or stigma. The chatbot is available 24 hours a day, supporting youth anonymity and privacy to access information when they want it. Users also have the option to find youth-responsive clinics nearby or speak to a live, trained counselor.

DEVELOPING AND ADAPTING THE CHATBOT FOR BENIN

Following a ten-step process (see Figure 1), ABMS developed the content for *Tata Annie* by reviewing the content from the chatbot in Cote d'Ivoire and subsequently made adaptations during the development process. Engaging youth in the design process was prioritized throughout the development, with initial assessments and review and pretesting conducted by young leaders within ABMS called *pigistes*, to ensure the flow and language were contextually appropriate. The *pigistes* are aged 16-20 and work with MOMENTUM on activities related to *Amour&Vie*.

Figure 1: Development Process for Chatbot <i>Tata Annie</i> <i>(Several of these steps may be taken concurrently)</i>		
Step	Timeline	Description
1. Diagnose/ Decide	4 weeks	Identify end-user needs and determine the best way to meet the need including approaches and technology platforms.
2. Data to Action development	1 week	Develop key indicators to track for eventual dashboard development.
3. Content Localization	2-3 weeks	Adaptation and localization of chatbot for country context, considering branding, content, and technology platforms.
4. Development	2 weeks	Configuration of the content into the <i>Amour&Vie</i> Facebook page.
5. Testing	1-2 weeks	Internal testing of the tool by digital colleagues and user acceptance testing by the country team to check for any issues.
6. Layering in testing feedback	1-2 weeks	Review feedback and implement required changes.
7. Dashboard Development	1-2 weeks	Development of PowerBI dashboard to track indicators
8. Soft Launch	2-4 weeks	Soft launch of the tool in closed social media groups (less than 100 users aged 16-20) to gather initial feedback from users to inform scale up with digital marketing campaign.
9. Launch	Ongoing	Full launch with digital marketing after layering in feedback from soft launch.
10. Iteration	Ongoing	Continuous improvement from user feedback.

Through a survey shared with youth aged 16-20, the *Tata Annie* persona came to life. “Tata” is a phrase young people in Benin use to refer to youth-friendly health workers who work in health centers. Ensuring the language, expressions, and colloquialisms used by youth in Benin were integrated into the chatbot was a small, but significant change made when reviewing the chatbot in Cote d’Ivoire and adapting it for Benin.

Through user-informed design, further adaptations were made, including the request that users be able to easily navigate within the chatbot to an option that enabled them to speak with a real person. Including options to connect with a real person came because of informal conversations ABMS had with young people from *Amour&Vie*. ABMS’s team of digital content drivers sought to provide responses to live questions about contraceptive methods to ensure that users could better navigate their questions and seek responses not found in the chatbot. To respond to this need, MOMENTUM included a hotline number to ABMS, a link to the *Amour&Vie* Facebook Page and WhatsApp, and the contacts of two health providers.

Another adaptation included the referral section of the application. It was important to keep a geolocator within the chatbot, capable of helping a user locate a nearby youth-responsive, contraceptive method provider. However, the Cote d’Ivoire model required a training piece for providers to equip them with the digital tools to redeem and track digital referrals. ABMS opted instead for a lower-touch, self-reported referral option.

SPOTLIGHT: CAPITALIZING ON SUPPORT FROM META TO STRENGTHEN DIGITAL HEALTH IN BENIN

The development of digital health activities in MOMENTUM was supported by capacity development tools ABMS received from a partnership between PSI and Meta in 2021. This partnership initially supported an initiative to design and deliver social behavior change campaigns on Facebook and Instagram as part of efforts to promote COVID-19 vaccine confidence, promote healthy behaviors and combat misinformation. Meta provided training in the use of Facebook tools for social behavior change communication, audience profiling, messaging, and advertising as well as support in use of Facebook analytic tools and campaign messaging. It was these tools and the skills acquired, in addition to ongoing support from Meta-funded expertise in 2022, that enabled ABMS to adapt and develop digital health activities that would support the contraceptive needs of youth in Benin. The knowledge and skills gained from the Meta partnership, coupled with learnings from the chatbot development in Cote d’Ivoire, gave life to *Tata Annie*.

LAUNCHING THE CHATBOT

The chatbot was launched in Benin in October 2021. To promote its use, a digital promotional campaign was launched through Facebook and other digital channels, tapping into the capacity-building tools MOMENTUM had received from Meta. The chatbot was also promoted at in-person events such as symposiums and mass media events. Vital to the initial promotion and ongoing awareness of the chatbot is the outreach from *Amour&Vie* as they organize activities to present the chatbot to youth in the community.

Once users access the bot application, which is available through the *Amour&Vie* Facebook page, users are welcomed by *Tata Annie*, as if they were meeting a friendly provider, in person. A statement of confidentiality is shared, noting that data collected will not be traced back to identifiable users. From there the chatbot asks what the users would like to learn about, at which point users can begin navigating through the five components of the chatbot. A user can limit their use to one section or explore it all.

Users may start, pause, stop, revisit, and resume interactions with the chatbot whenever they like and as many times as they like.

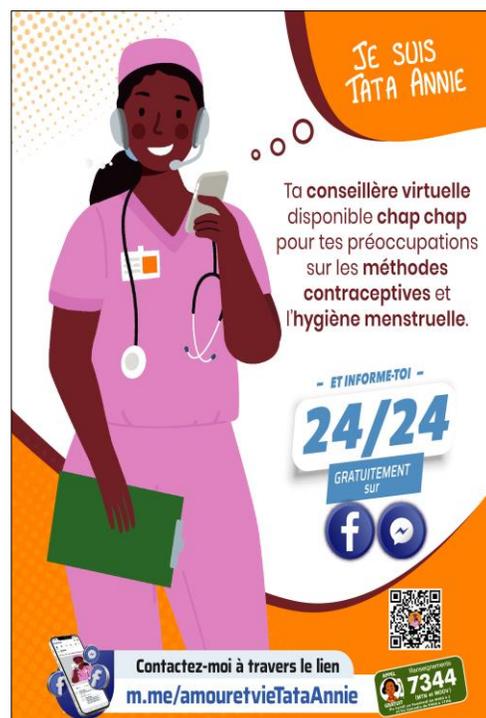
Before launching the chatbot, Benin developed a dashboard to collect program data, so that MOMENTUM could learn in real-time and adapt the chatbot as needed. The dashboard collects data from users including sex, age, the contraceptive method information most accessed, and components of the bot most visited, among other information. Knowing who is using the chatbot and how enables the project's digital and program staff to better tailor information to the users.

USER FEEDBACK AND LEARNING

The dashboard not only provides basic demographic information of the chatbot users but also enables users to provide feedback about the application, which is helping MOMENTUM respond to issues or address concerns. Feedback has been positive overall, and many have asked for more information or requested information for other topics be added. One user wrote, *“I propose that we add more images and also that we add the themes of gender, sex, equality, and equity.”* Another user shared *“So far, I got all the information I needed. But I would like you to show me how to place a condom to avoid problems.”*

Users have also left questions regarding missed periods and questions on how to calculate fertile periods, for example. The feedback mechanism within the chatbot is also enabling users to leverage the confidentiality of the platform to ask questions they may not have otherwise asked in person. Users have left questions related to sexual pleasure, sexually transmitted infections, relationships, and how to know if a missed period indicates pregnancy.

Since its launch in October 2021, nearly 8,000 unique users¹¹ have accessed the chatbot. Of these unique users, the largest age segment is 20-24, followed by 15-19. Data from the dashboard indicate that users access the information about menstruation most frequently, followed closely by the “find my method” section. While fewer users opt to directly locate a clinic, nearly one-third of users chose to use the live chat function and ask follow-up questions from a human agent via chat. Users who responded to a brief survey say the chatbot is useful. While it is unsurprising that the geographic location showing the highest use of the chatbot was Cotonou, Benin’s largest city, users in the more rural, northern portion of the country have also accessed the chatbot, demonstrating the vast geographical reach digital interventions can have. Separate but complementary activities within the MOMENTUM project in Benin, such as training youth and women’s organizations on SRH messages and services (including the introduction of *Tata Annie*), are supporting the geographical reach of the application given many of the organizations are located well outside Cotonou.



¹¹ Tata Annie Chabot Dashboard

THE WAY FORWARD

Since the chatbot's launch, *Tata Annie* continues to be promoted and shared with youth in Benin. MOMENTUM is utilizing frequently heard comments and feedback from users to continue adapting the chatbot. Based on user feedback, important updates have been made along the way, such as the inclusion of a user's location list, which now includes all the municipalities of Benin. User feedback continues to be received through the dashboard and other follow up. MOMENTUM will consider adding content that addresses the reproductive health needs of adolescent boys and young men, after receiving feedback from these users.

Noting that the largest age segment reached by the chatbot is 20-24, MOMENTUM will add chatbot themes that interest users ages 15-19; themes will be integrated based on a rapid needs assessment of users 15-19. As the chatbot reaches more youth, MOMENTUM will expand access to the application through WhatsApp and a microsite, allowing users to access the chatbot with a single phone number, without the need for a Facebook account. The extension to a microsite removes the barrier of needing an account or a compatible device. Accessing the solution via the microsite requires no commitment, other than a device with internet access. A referral tracking system will also be introduced. MOMENTUM also plans to integrate better capability for geolocation and referral to nearby health facilities, including private health facilities. The project continues to build upon the tools and support received by Meta to improve social media strategies and digital campaigns that promote the chatbot's use and expands its reach.

Ensuring the long-term sustainability of this digital innovation is a priority, integrating with public sector needs and capacities wherever possible. The project is exploring possibilities to formalize and integrate the chatbot with broader efforts by the Ministry of Health's Information Systems Directorate. Cost-effectiveness is also key to the sustainability of the chatbot. While costs of hosting the chatbot are minimal, costs for promotional activities will need to be considered once external funding concludes.

Insights from the *Tata Annie* chatbot are useful to other countries where MOMENTUM is implemented, including Pakistan where a chatbot aims to primarily reach men with FP information and services. The continued learning and adaptation of the chatbot is critical, as the ability to offer SRH information and link to services in confidential and low-touch ways can make contraception more accessible to youth. However, more data, evidence, and learning are still needed to understand if this accessibility leads to improvement in the uptake and use of services.

