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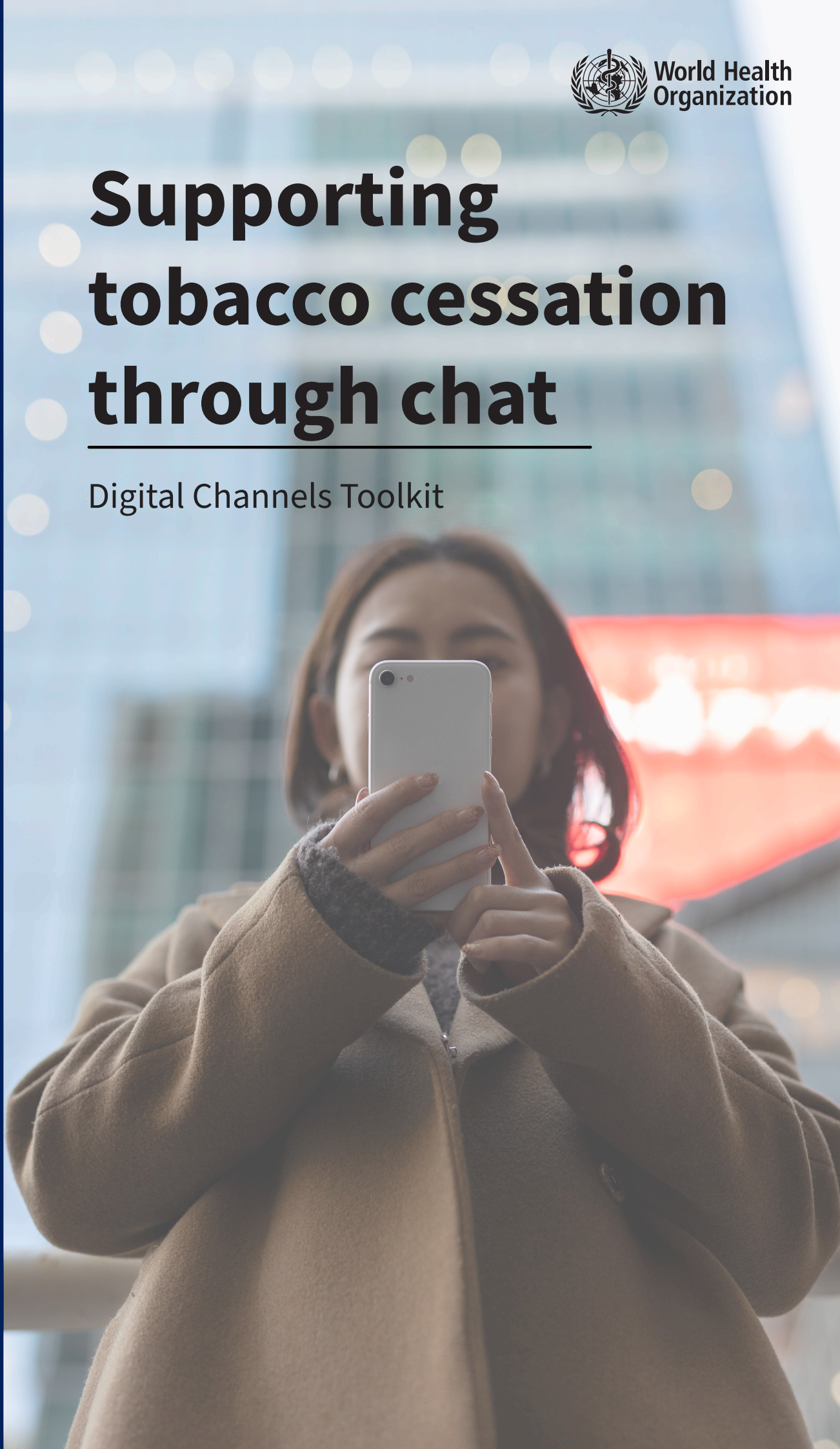
Supporting tobacco cessation through chat

Digital Channels Toolkit



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Declaration of interests

Declarations of interest (DOIs) were requested from all external experts involved in the development of this product. All submitted declarations were reviewed by WHO, and no potential conflicts of interest were identified. As part of the assessment process, disclosed interests were evaluated for their relevance and potential impact on the experts' objectivity. This process ensured WHO's independence and impartiality in decision-making. Since the onset of the COVID-19 pandemic, Reach has partnered with WHO to develop chatbots addressing various health topics. This collaboration has been conflict-free and mutually beneficial, fostering a strong and productive relationship. The toolkit reflects the outcome of years of shared expertise and effective cooperation. In instances where consensus could not be reached, WHO retained final decision-making authority.

Approach

WHO provides capacity-building and training packages to help governments establish or strengthen their national tobacco cessation systems, including integrating brief tobacco interventions into their primary care systems and developing national toll-free quit lines and mCessation projects.

This work was carried out in collaboration with mHealth teams and chatbot experts, who help adapt existing WHO normative guidance for use with new mobile tools. The resulting methodologies and tools will be disseminated to Member States to enable scalable, cost-effective implementation. This approach aims to expand reach, enhance efficiency and reduce resource demands for national tobacco cessation efforts.

The mCessation handbook can be found at: https://www.who.int/publications/i/item/978924154981-3

Glossary of terms

Term	Description
Daily messages	These are check-in messages that users who have joined the Quit Challenge will receive on a daily and weekly basis, to monitor their progress and provide encouragement.
Quit tobacco menu	This houses all the static content for the Quit Challenge. Information covers cravings, motivation for quitting, triggers, tips for triggers, tobacco harm, types of triggers, e-cigarettes and the Quit Challenge – which houses the daily messages.
mHealth	Medical and public health practices supported by mobile devices.
Quit Challenge	A messaging and content campaign that targets smokers encouraging them to stop smoking via targeted messages that inspire them and provide helpful information on the benefits of quitting smoking.

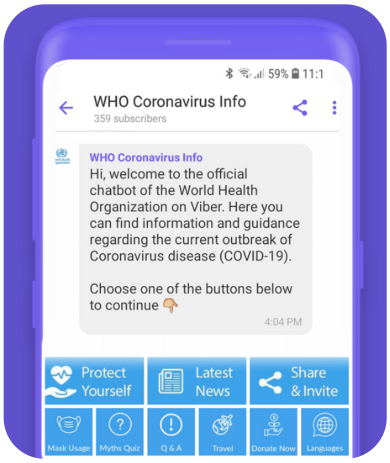
Introduction to WHO HealthAlert

Early in the COVID-19 pandemic, the World Health Organization (WHO) partnered with Reach Digital Health (formerly Praekelt.org) and messaging platforms such as WhatsApp, Facebook Messenger and Viber to launch health chatbots to provide millions of people with the latest news and information to protect themselves and others from COVID-19. The WhatsApp chatbot alone has reached over 14 million people.

Since the end of the pandemic, the WHO HealthAlert service has been transformed into a service that provides general health information to citizens and health workers alike, as well as free self-help interventions – with introductory interventions focusing on topics ranging from smoking cessation to nutrition and stress management.

Access to health information through chatbots has been especially critical in low-income countries and fragile states where health systems are often too fractured or strained to meet all community needs during disease outbreaks. Studies have also shown the high efficacy of AI chatbots in promoting healthy lifestyles, treatment and medication compliance, smoking cessation and reduction in substance misuse.[1]

We aim to make the successful interventions and content implemented on the WHO HealthAlert programmes freely available and ready to implement on your platforms. All toolkits have been optimized to be integrated with existing chat-based social impact programmes.



Who are our toolkits for?

Primarily for organizations, decision-makers, programme managers and implementers supporting social impact digital and mobile interventions.

Explore the HealthAlert chatbot by WHO here:

1 Aggarwal A, Tam CC, Wu D, Li X, Qiao S. Artificial intelligence-based chatbots for promoting health behavioral changes: systematic review. J Med Internet Res. 2023;25:e40789 (Journal of Medical Internet Research - Artificial Intelligence–Based Chatbots for Promoting Health Behavioral Changes: Systematic Review) (accessed 20 June 2025).

Toolkit overview

Priority area

Tobacco cessation

Purpose

To help organizations **use existing evidence and guidance to support tobacco cessation** in tobacco users, especially in low-resource settings around the globe.

Audience

Intended for **users seeking support to quit tobacco**. The content is crafted to be as simple as possible and more accessible to a wider range of literacy levels.

The Toolkit includes:

- instructional **guidelines** for content implementation;
- editable **content master sheets** for adaptations and translations; and
- **additional resources** to better understand what a successful implementation would look like.

Introduction to the Quit Challenge

Tobacco use remains a leading global health crisis, responsible for over 7 million deaths[2] annually, which include over 1.5 million non-users exposed to second-hand smoke, infants and children among them.[3] These deaths are projected to rise, particularly in low- and middle-income countries, where access to effective cessation tools is often limited.

To reverse these trends, access to and demand for effective cessation interventions must be scaled up, as quitting significantly reduces the risk of tobacco-related morbidity and mortality. We know that 60% of the world's tobacco users want to quit, but only about 30% of the world's population have access to appropriate tobacco cessation services.[4] One way to offer cessation interventions at scale is through online and digital resources.

This document is an open-source toolkit delivering an mHealth intervention that supports individuals on their journey to quit tobacco. This intervention messaging set for the tobacco cessation module is currently available in Arabic, Chinese, English, French, Portuguese, Russian and Spanish.

7 million

deaths occur annually due to tobacco use

60%

of the world's tobacco users want to quit

30%

have access to appropriate cessation services

Open-source toolkit delivering individual cessation support

2 WHO report on the global tobacco epidemic, 2025: warning about the dangers of tobacco. Geneva: World Health Organization; 2025 (https://www.who.int/publications/i/item/9789240112063) (accessed 23 June 2025).

3 WHO global report on trends in prevalence of tobacco use 2000–2030. Geneva: World Health Organization; 2024 (https://www.who.int/publications/i/item/9789240088283) (accessed 10 June 2025).

4 WHO report on the global tobacco epidemic, 2019: offer help to quit tobacco use. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665326043). License: CC BY-NC-SA 3.0 IGO (accessed 9 June 2025).

The World Health Organization Global Observatory for eHealth (GOe) defines mHealth as medical and public health practice supported by mobile devices.[5] In total, nearly 4.7 billion people worldwide own a smartphone,[6] and there is huge potential for mHealth to facilitate improved health outcomes. By creating simple, accessible mHealth interventions and open-source toolkits, we allow more targeted users to get the benefits of the intervention in question.

In 2015, WHO developed the mTobaccoCessation programme to assist countries in putting together a detailed work plan for developing and deploying a national level Tobacco Cessation programme to support people with quitting tobacco.[7] Given the extensive evidence that mobile phone-based support for smoking cessation is effective,[8] WHO and Reach Digital Health have adapted the mTobaccoCessation programme for WhatsApp, Viber, Facebook Messenger and WeChat use.

The goal of this programme on WhatsApp, the Quit Challenge, is to provide people with the tools and resources they need to successfully quit tobacco. The Quit Challenge is hosted on the WHO chatbot, HealthAlert. Users can sign up for the challenge on the WhatsApp line. It offers people daily messages for 42 days to guide them through their journey to quit. The programme encourages people to remain motivated, identify triggers and curb cravings to improve health outcomes.

42 days

of quit guidance

Chat-based

open-source toolkit

Access

to vulnerable population groups

5 Global Observatory for eHealth. Geneva: World Health Organization (https://www.who.int/observatories/global-observatory-for-ehealth) (accessed 10 June 2025).

6 Smartphone usage statistics (https://backlinko.com/smartphone-usage-statistics) (accessed 10 June).

7 Mobile health for tobacco cessation. Geneva: World Health Organization; 2015 (https://www.who.int/publications/i/item/978924154981-3) (accessed 10 June 2025).

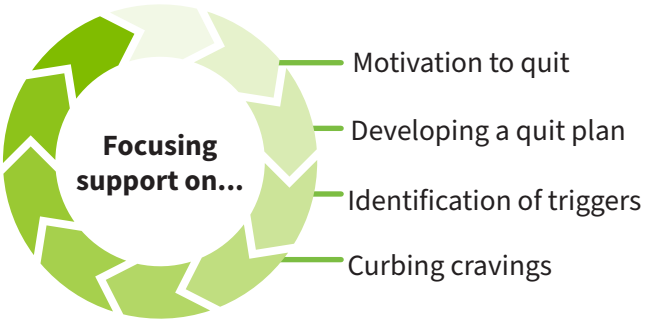
8 WHO clinical treatment guideline for tobacco cessation in adults. Geneva: World Health Organization; 2024 (https://iris.who.int/bitstream/handle/10665/377825/9789240096431-eng.pdf?sequence=4) (accessed 9 June 2025).

This document is an open-source toolkit mapping out how to create and localize the Quit Challenge chat-based experience for your country and/or locality to support individuals looking to quit tobacco. Reasons for localizing the challenge may include choosing to offer it in a local dialect/language, add resources that are available, insert local cultural nuance such as customs, holidays or specific types of tobacco or provide it on a specific communication platform (e.g. Viber).

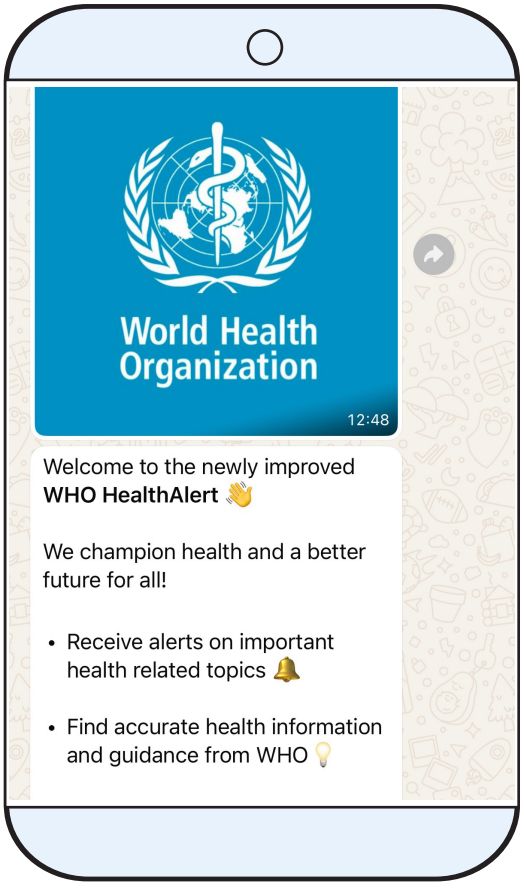
The current content has been configured with WhatsApp and Facebook parameters in mind (such as specific WhatsApp formatting, character limits, media requirements and button/quick reply functionality). Still, it could be rebuilt for any messaging channel that supports chat-based mHealth interventions.

The target audience for the Quit Challenge is tobacco users with limited access to other tobacco cessation interventions or for whom other tobacco cessation interventions have not worked. The Quit Challenge intervention focuses on building up the users' motivation and follow-through in quitting tobacco use.

Try it now on WhatsApp by following this link: https://wa.me/41798931892?text=quit



Try the Quit Challenge now on WhatsApp



Functionality of the Quit Challenge

The content in the Quit Challenge is sourced from WHO's mTobaccoCessation programme. It has been simplified to ensure that it is as basic and universally understood as possible so as to appeal to a broader audience and be deliverable on a chat-based service. The Challenge aims to support individual quit journeys through a 42-day challenge, focusing on:

1. motivation to quit
2. developing a quit plan
3. identification of triggers
4. curbing cravings.

Understanding the Challenge registration

When users enter the Challenge for the first time, they must complete registration before they begin. This includes picking a language and answering a few short demographic questions and questions on their tobacco use habits, followed by an action to set the quit date, within the next two weeks.

After registration and setting the quit date, users can start the Challenge immediately or get a countdown reminder and a motivational message every day till their set quit date, which is up to 14 days from the moment of registration. Once the quit date has been reached, users will receive a daily message for the next 42 days to count down the time they are tobacco free, keep them motivated and suggest tips and tricks for sticking with their goal.

At any time during the Challenge, users can set a new quit date or stop the Challenge. Those who successfully finish the Challenge will get additional check-in notifications for up to 6 months to see if they are still tobacco-free after this time and how they are doing on their quit journey. Users who do not complete the Challenge receive prompts to continue with the Challenge and set a new quit date.

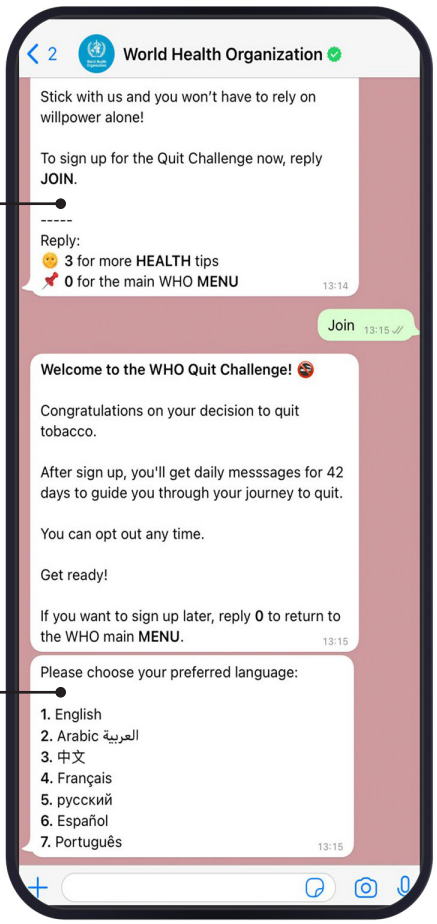
Understanding the Challenge structure

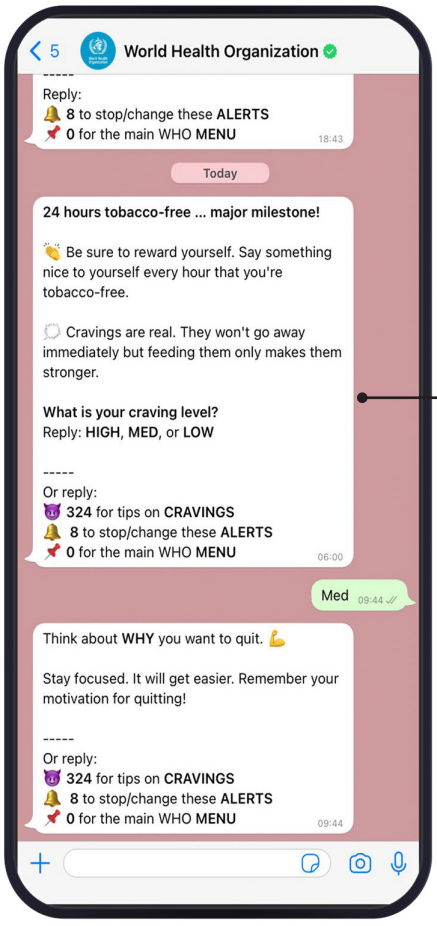
The Quit Challenge is a single, guided module, which is triggered by users responding to prompts before, within and after the Challenge. This includes registration for the Challenge, setting the quit date, countdown to the set quit date, 42 days of quit journey and an additional follow-up for up to 6 months. Users interact with the Challenge by using the buttons in the flow to move from one content piece to the next. The Challenge is designed to send only one push-notification per day, for the duration of the Challenge. User inputs will trigger the kind of message they will receive next. The diagram below highlights the different elements of the Challenge.

Anatomy of the Quit Challenge alerts

Navigational footers
Additional options for users to further explore the Quit Challenge content

Language options
Choose from the six official UN languages in which to complete their challenge





Daily messages
Check-ins, tips, advice and other additional content to help users stay motivated to quit smoking

The table below highlights the types of content covered in the Quit Challenge:

1 Challenge section: Registration

About	Section content
Content in the Quit Challenge is sourced from WHO's mTobaccoCessation handbook and adapted for WhatsApp and Facebook Messenger use. Registration for the Challenge is mandatory to ensure personalized progress tracking and content recommendations over time. Collecting basic demographic data will also assist in analysis on "quit rates" amongst specific groups in the future.	When users enter the Challenge for the first time, they must complete the registration: - preferred language - demographic questions - questions on tobacco use - quit date. Each task above guides the user through the content step-by-step.

2 Challenge section: 14-day countdown

About	Section content
The 14-day countdown is based on the user responses provided during the registration, where users chose a quit date within a 14-day period. The goal of this section is to build up motivation and provide a daily reminder for the set quit date.	A daily push notification is sent to users for up to 14 days to: - build motivation to quit; and - remind them about the set quit date. At any time during the countdown, users can choose to change the quit date or stop the Challenge.

The table below highlights the types of content covered in the Quit Challenge:

3 Challenge section: 42-day quit journey

About	Section content
Once the set quit date has arrived, the main part of the Challenge begins. From this day onwards, users are to stay free from tobacco for 42 days. The goal of this section is to motivate users to stay free from tobacco for 42 days, identify their triggers and curb the cravings. The daily check-in question makes it possible to assess whether the user has relapsed and then prompts the user with the option of setting a new quit date and encouraging them to try again.	A daily push notification is sent to users for up to 42 days. As part of the push notification, users receive: - information about health benefits of quitting tobacco; - tips and tricks on how to stay on track; and - a daily check-in question. At any time during the Challenge, users can choose to change the quit date or stop the Challenge.

4 Challenge section: 6-month follow-up

About	Section content
Those users who complete the Quit Challenge successfully become eligible for a 6-month follow-up. Those who do not complete the Quit Challenge can either set a new quit date and start again or exit the Challenge. It is completely normal for someone to try multiple times to quit tobacco.	A push notification is sent to users who successfully completed the Quit Challenge at 2, 3 and 6 months after the Challenge to follow up on their progress. Those who have returned to using tobacco during this time get prompted to take the Challenge again by setting a new quit date.

The different sections of the Challenge cannot be implemented independently of each other.
Each section relies on the other sections in the Challenge; the ordering of each section is important and should not change.

Implementation of the Quit Challenge

As mentioned, this tobacco cessation intervention aims to support users on their quit journey by providing motivation, identifying triggers and curbing cravings. Users can sign up for the Quit Challenge through the WHO's HealthAlert chatbot on WhatsApp or Facebook Messenger, anywhere and anytime.

Designing the Quit Challenge to suit local contexts.

- ☐ **1.** A pre-existing digital/mobile platform to host the intervention.
- ☐ **2.** An environment to build the intervention on (RapidPro, Turn.io, etc.). These service providers are also the WhatsApp business partners. They act as an interface to integrate systems into the WhatsApp Business API, thus enabling users to interact with the WhatsApp service.
- ☐ **3.** A channel where you can host the intervention (e.g. WhatsApp, Facebook, Viber, etc.).
- ☐ **4.** A content team to be able to develop content adaptations for your specific use cases. For example, to localize the language, tailor the content or add a local quit line phone number.
- ☐ **5.** A development or engineering team to assist with any logic, technical troubleshooting or development of new user experience logic and features. For example, a backend developer, QA tester, data analyst, content designer and user experience (UX) designer.

The below resources are provided as a guide to implementing the content for the Quit Challenge on your service.

Toolkit resources

To implement the Quit Challenge on your platforms, see Installation checklist above to ensure you have everything you need before starting.

The resources and guidance have been divided into sections below.

Content and language adaptations

This section includes the complete set of the Quit Challenge content in available languages.

Privacy policy and data protection

As a chat service, the Quit Challenge makes use of a privacy policy that adheres to global data security laws (POPIA, GDPR, CCPA). This privacy policy applies to all iterations of the Quit Challenge, assuming the product is unaltered in data collection, storage, sharing and processing. A template privacy policy and guidelines on adapting the privacy policy are provided.

https://drive.google.com/drive/folders/1vE5-FYgqQuGcEbtPTxirxZY0rrDFwtLy

Marketing and recruitment

During the launch of the Quit Challenge, priming alerts were sent to existing HealthAlert subscribers to recruit users to the Challenge. This section includes the content that was used for these alerts, which you can use to recruit users to your chatbot or use them as inspiration to develop alerts.

https://drive.google.com/drive/folders/1BWAB6WTDX3zkeWDBv504lCMirTOJARyS

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1. Aggarwal A, Tam CC, Wu D, Li X, Qiao S. Artificial intelligence-based chatbots for promoting health behavioral changes: systematic review. J Med Internet Res. 2023;25:e40789 (Journal of Medical Internet Research - Artificial Intelligence–Based Chatbots for Promoting Health Behavioral Changes: Systematic Review) (accessed 20 June 2025).
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