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A handbook on how to implement **mTobaccoCessation**

WHO/ITU Publication cataloguing section

TABLE OF CONTENTS

PAGE 4	Background
PAGE 5	Overview of the handbook
PAGE 8	Developing a national mTobaccoCessation programme
PAGE 27	Suggested mTobaccoCessation Monitoring and Evaluation process
PAGE 31	System reporting
PAGE 32	Scheduled evaluations
PAGE 34	Template for a national mTobaccoCessation Program
PAGE 38	Annex 1
PAGE 40	Annex 2: Sample Content libraries
PAGE 62	Unprompted Keywords: Crave, Mood, Slip
PAGE 66	Annex 3: mHealth for NCDs initiative Technical Workshop: Template Agenda

Acknowledgements

The World Health Organization and International Telecommunications Union gratefully acknowledge the contributions made to this report by the following individuals:

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Overall guidance was provided by the Be He@lthy, Be Mobile steering committee members, from WHO: Douglas Bettcher, Najeeb Al-Shorbaji, and Nick Banatvala, and from ITU: Yushi Torigoe, Eun-Ju Kim, and Kemal Huseinovic.

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Administrative support was provided by Zahra Ali Piazza. Copyediting and proofreading was done by Angela Burton and layout and design was done by Aram Melikyan.

WHO Library Cataloguing-in-Publication Data

A handbook on how to implement mTobaccoCessation.

1. Information technology. 2. Medical informatics. 3. Technology transfer. 4. Information systems. 5. National health programs. I. World Health Organization. II. International Telecomunication Union.

ISBN 978 92 4 154846 5 (WHO) (NLM classification: W 26.5) ISBN 978 92 61 15281 9 (ITU)

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Printed in Geneva

Background

The World Health Organization (WHO) and the International Telecommunications Union (ITU) have formed a partnership called the 'Be He@lthy, Be Mobile' Initiative to use mobile technology - in particular text messaging and apps - to help combat noncommunicable diseases (NCDs) such as diabetes, cancer, cardiovascular diseases and chronic respiratory diseases. As part of this initiative they wish to assemble evidence-based and operational guidance to help countries and governments to implement these programmes. This document provides a starting point for such guidance in relation to mTobaccoCessation - mobile phone-based support for people to quit smoking.

There is now sufficient evidence that mobile phone-based support for smoking cessation can be effective. A recent Cochrane Systematic Review (1) included five high-quality randomized controlled trials (RCT) with 6-month cessation measures and concluded that the intervention increased quitting rates by approximately 71%. Three of the studies included purely text messaging interventions: STOMP was developed by the University of Auckland and trialled across New Zealand (2); txt2stop was further developed from STOMP for a United Kingdom (UK) population and tested in the largest and highest quality trial to date (3); researchers in Australia added text messages as an option to their online quitting coach and as a separate intervention (4). The review identified several studies underway on further text message cessation programmes in the United States of America (USA), Norway and the UK.

Other reviews have indicated that text messaging may also be effective in other areas of healthy behaviour change and disease management. There are currently no randomized controlled trials of the effectiveness of any smartphone apps to support smoking cessation. One review of the available smartphone apps (via iTunes) found that few apps adhered to key cessation guidelines, or recommended or linked to proven effective techniques such as pharmacotherapy, counselling or quitlines (5).

Overview of the handbook

The main objective of this handbook is to assist countries in putting together a detailed work plan for the development and deployment of a national level mCessation program.

This handbook outlines the considerations and decisions to be made in planning for a national level mTobaccoCessation programme and provides guidance on some of the technical aspects of implementation. This has been prepared by an international group of experts in mTobaccoCessation for WHO and ITU, to be used by governments, ministries and other relevant national organizations.

It handbook:

- Explains key components of setting up a program for mHealth (specifically mCessation in this case)
- Provides a template for a Planning and Implementation Document (PID) for each country/ instance based on the decisions made by that country.

- Includes a sample Technical Specifications Document developed in conjunction with the Costa Rica Ministry of Health to be given to their IT system provider outlining system requirements.
- Details to inform a Monitoring and Evaluation (M&E) plan for each country, including examples of commonly used participant feedback questions.

In addition, the annexes provide further detail, templates and examples of specific aspects:

- Annex 1: A description of current, available mTobaccoCessation programmes, and considerations for the development of new mTobaccoCessation programmes.
- Annex 2: A library of existing message libraries suggested by the informal expert groups that can be used by countries for their own adaptation
- Annex 3: Suggested technical workshop agenda

The handbook is a working document and will be updated based on ongoing implementation and feedback from countries, consultation with experts and review of new programs. Be He@lthy

Be Mobile

Developing a national mTobaccoCessation programme

There are several key activities that need to be considered in the planning phase of a national mTobaccoCessation programme:

- Needs assessment
- Technical Advisory Group
- Formative research (if required, see description below)
- Text message programme content and algorithm development and adaptation
- Technology specifications
- Promotion recruitment and marketing
- Monitoring and Evaluation

It is suggested that these activities inform the development of an mTobaccoCessation Planning and Implementation Document (PID) for any new programme and feeds into the program plan template described at the end of this section.

1. Needs assessment

Much of this information is likely to exist already, or will be uncovered in initial discussions with interested organizations in countries wishing to set up a plan. A needs assessment document can pull it all into one place in order to inform planning, identify gaps in knowledge and set out the assumptions decisions are based upon. A needs assessment should ideally include synopses of:

- » the state of tobacco control. Statistics on smoking prevalence and any particular cohorts of interest within the population; any information on the proportion of smokers who want to quit or who try to quit annually; information on the smoking cessation services that already exist, and on what people in this community currently use to help them quit; current tobacco control policy; mass media campaigns for tobacco control/ quitting; relevant government/ health priorities.
- » the state of mobile communications. Statistics on mobile phone use and the use of text messaging; the costs to consumers of text messaging, data, calling; any cultural issues around the use of mobile phones; a description of the mobile network environment (e.g. how many different network providers exist, and if they provide value added services, including any relating to health); if unsolicited text messaging (spam) by companies is allowed/occurring; information on whether health services use text messaging at all.

- » stakeholder views. Investigation should be made into relevant agencies and organizations and their potential level of interest in supporting a mobile cessation programme. This could include:
 - funders of public health services;
 - ministry of health and other relevant government agencies;
 - health insurance companies;
 - agencies responsible for tobacco control;
 - existing providers of national and regional smoking cessation services (e.g. quitlines);
 - health service providers responsible for preventive services;
 - telecommunications companies (telcos), mobile network providers and any industry representative body or association;
 - any local mobile phone service providers or companies providing mTobaccoCessation services;
 - local smoking cessation or mHealth researchers.

2. Technical Advisory Group (TAG)

After identifying stakeholders, the next step is to bring important representatives together. The Technical Advisory Group (TAG) should include those necessary to make decisions around funding and planning, those who will be involved in implementing, promoting and evaluating the programme, and those who can contribute to the long-term sustainability of the programme. It is important that someone who at least understands, and perhaps actually represents, the mobile network environment in the country is included on the TAG. This will depend to some degree on each country as some are covered by cross-company associations and agencies, and some may need local company representation.

For each instance the main sponsors or funders may need to consider how formal this arrangement will be (e.g. Terms of Reference, meeting frequency, responsibilities).

The purpose of the TAG will be to:

- agree the roles and responsibilities of the various organizations involved for the different phases of development and adaptation, implementation, evaluation and ongoing service provision. In particular, this should include discussions about who will own the programme long-term with respect to functions such as maintenance of message content, promotion of the programme, managing any participant contact and holding contracts or agreements on dealing with technical and other issues arising.
- support the implementation and promotion of the programme;
- agree on the overall design and purpose of the evaluation and support the conduct of the evaluation as required;
- make recommendations for ongoing service provision based on evaluation findings.

Initial questions to be considered by the TAG include:

• What is the overall purpose and philosophy of the programme? Is it to provide support for those who want to quit. or to promote quit attempts? What is the theory underpinning the programme, and what are the mechanisms by which it might work? For example, are there specific behaviour change theories and techniques that are particularly relevant in the context of this population, their readiness to quit, and their use of mobile phone technology?

- Who is the target audience? Where is the greatest need in our population? Who is most likely to benefit from such a programme? Is it all smokers wanting to quit? A particular age group? A specific region or ethnic group, or smokers who have not yet decided to quit?
- What are the best ways to promote programmes to that target audience? How will participants sign up?
- Can we use an existing programme and adapt it for our population and context? Or does something new need to be developed? Is there a particular local model that will need to be applied to an existing or new programme (e.g. cultural models of health or health promotion)?
- How will it fit with existing cessation services and other related programmes? Can we learn from and link with existing programmes that are popular and effective among our target population?

How it will be operationalized? Can we follow how mTobaccoCessation has been operationalized elsewhere or are there local models that need to be followed?

The TAG should consider the needs assessment and the evidence base (both described above) in order to inform answers to these questions. It should also consider whether there is sufficient information to proceed, or if further data or formative research are required.

Examples of national cessation programmes: New Zealand and the United States of America (USA)

In New Zealand, The Ministry of Health funds an NGO to provide national cessation services (including quitline, online services, txt2quit and subsidized nicotine replacement therapy) free of charge to consumers. The NGO subcontracts a health IT company holding the license for the STOMP text messaging programme to provide the texting service via a gateway or aggregator.

In the USA, some health insurance plans and companies are starting to make mTobaccoCessation services available to clients directly or via employers. Enrolment into an mHealth programme may occur via SMS, a website, or through a quitline phone counsellor. Some programmes contract to develop their own text-delivery platforms while others use existing platforms. Existing platforms are available from both the private and public sector. For example, as part of the Smokefree.gov Initiative (a large-scale, national mHealth programme), the National Cancer Institute (NCI) runs a series of text-based cessation and behavioural intervention programmes. NCI has also developed a database of text message content that can be used by any service wishing to build its own delivery platform.

11

3. Formative research (if required)

If you think there is insufficient, up-todate information with which to plan the implementation of such a service then further background or formative research may be required, e.g. online surveys of smokers or focus groups with the specific target audience.

4. Text message programme content and algorithm development and adaptation

This may be based on the TAG's consideration of the questions as outlined above, although in some instances the TAG may delegate the task of addressing these questions.

Examples of existing available mTobaccoCessation programmes are outlined in Annex 1, as are considerations for developing a new text message mTobaccoCessation programme.

What is the overall purpose in terms of target audience, mechanisms and desired outcomes?

Steps:

 In-country experts in cessation, public health, tobacco control and healthy behaviour change should review the existing programme/s available for use. This requires consideration of both the actual text messages themselves and the rules around how the programme works.

Text message considerations:

- language, tone
- how they fit with existing cessation services and tobacco control messages

- how comprehensible (understandable) the text messages are
- more/less motivational and informational texts
- relevance of practical tips and strategies to the population
- cultural considerations
- degree of personalization (e.g. names included) and tailoring according to collected baseline data
- tailoring for specific groups (e.g. ethnicity, age, gender).
- Rules and logistical considerations of the programme:
- timing
- frequency and intensity
- chronological progression, e.g. countdown to quit, intensive period, maintenance period
- duration of intervention
- different programmes and messages for different groups
- degree of tailoring and personalization
- registration process and baseline data collection
- will there be two-way or incoming text messages and how will these be handled?
- are there other interactive aspects such as on-demand text messages to address cravings or relapse?
- rules around stopping or changing the programme
- can the programme be restarted for those who lapse and want to set another quit date?
- will participants be able to change these things for themselves via website or have to call or text an administrator?
- 2. In-country cessation experts work with mTobaccoCessation experts and the programme provider to adapt existing messages. This can include translation, changing the wording, removing and adding new messages, changing the rules in the system and designing the registration and administration functions of the new programme.

- 3. Pretest the content of the text messages with members of the target audience for coherence, comprehension, acceptability, language, tone, appropriateness and relevance. This can be done in a variety of ways from focus groups, online surveys, or the use of pre-existing groups (e.g. students). The number of participants will depend on the degree of segmentation of the audience required (how many different target groups), the degree of change from an existing tested programme, and initial feedback from participants. Bear in mind that receiving a text message on a mobile phone in the course of a busy day is guite different from sitting down to read a number of text messages on paper. Testing in the way in which the programme will ultimately be received is best but is not always feasible or practical.
- 4. Further refine the messages based on target audience feedback, and perform further pretesting if considered necessary.
- 5. Finalize database of messages and agree on a plan for the maintenance of this database as well as what reports from users will be developed, and the delivery schedule of these reports. Messages may need to be reviewed and updated on a regular basis and it needs to be clear who is responsible for this.
- 6. Document the functional specifications for how the programme is intended to operate. These are the business rules about who will receive what messages, when and how often.

Steps for developing a new text messaging behaviour change programme

Overview

In broad terms, developing a text messaging programme should include the same phases of development that are typical for the development of all health communication materials.

I. Designing the text messaging programme

Step 1: Choose the behaviour change goal

Step 2: Choose the communication objectives and behavioural techniques

Step 3. Design the framework for the programme

Step 4: Write the message library

II. Pretesting the text messaging programme concept and messages

Once a text messaging programme has been developed it needs to be pretested, pilot tested and revised. Additional evaluation is recommended to determine its efficacy and, if disseminated, to evaluate the programme implementation.

I. Designing the text messaging programme

Step 1: Choose the behaviour change goal

The target of a behaviour change programme should be carefully selected based on a balance of health priorities and characteristics of the target audience, such as readiness to change. For a more detailed discussion on choosing a behaviour change goal and selecting a target audience, see Making Health Communication Programs Work (6).

Step 2: Choose the communication objectives and behavioural techniques

Carefully consider the communication objectives and behavioural techniques that will be used to promote change in the targeted group. Communication objectives and behavioural techniques should be based on insights from the formative research and informed by theory and available evidence-based guidelines. **Example:** For a smoking cessation programme, communication objectives might be aimed at increasing knowledge about the short-term health benefits associated with quitting. Behavioural techniques might include getting participants to call a quitline, set a Quit Date, track smoking patterns in the pre-quit period, manage cravings in the post-quit period, and reach out for help when experiencing an intense craving or when slipping up and smoking. Communication objectives are what people should know at the end of the programme (for more, see NCI's Making Health Communication Programs Work)and behavioural techniques are the actions people should take to make the targeted behaviour change (7).

Once the communication objectives and behavioural techniques are identified, consider how the attributes of text messaging as a modality can support the communication objectives and behavioural techniques targeted.

Mobile communication allows for interactive help anywhere and anytime. This includes: real-time help in crisis situations; messaging that can interrupt and remind participant of goals; help that is personalized and tailored to the individual; goal setting; in-the-moment tracking of goals and feedback on goals. Additionally, mobile communication can be thought of as a modality that can supplement other programming modalities (e.g. face to face counselling) and provide additional opportunities to reinforce messaging from counselling sessions.

To help organize the logic of a health behaviour text messaging programme, it is beneficial to create a diagram outlining how particular programme components (inputs) fit with theoretical constructs, which can then be used to achieve proximal outcomes and longer term behavioural and health outcomes. Figure 1 presents a logic model describing how a hypothetical smoking cessation text messaging programme might work.

Step 3: Design the framework for the programme

The framework for the programme provides an overarching plan of how messages are sent to users. The framework should include a description about the timing and frequency of messages as well as indicate the kinds of messages that 'check-in' on users (surveys) and the keywords users will be able to use to ask for additional help in times of need. For an example of a framework and message library, see QuitNowTxt message library at http:// smokefree.gov/health-care-professionals.

In designing the framework, decisions may need to be made about the following key issues:

• Frequency of messages: The frequency of messages will be determined by the need for the programme's messages to stand out to the user. Most proven text messaging programmes proactively send out at least one message per day in the key behaviour change periods of the programme, and fewer text messages (e.g. three messages per week) in a less acute phase of the programme.

mHealth for NCDs

- Example: Text2Quit sends five messages on the quit date, daily messages in the first week after quit date and three messages per week in the weeks after that. For users who are frequent texters, message frequency may need to be higher so that messages stand out from the many texts they already send and receive daily. It should be noted that some programmes do not send regular texts, and only send texts when a user requests information (e.g. SexInfo, a sexual health information service, is a reactive service that replies when the user initiates a question to the system).
- Timing of messages: The timing of messages may be related to both their content (e.g. what they are asking the user to do), the daily routine of the user (e.g. when the user is free to consider the text message), and the nature of the behaviour change (e.g. meal tracking texts should be sent at lunchtime). Consideration also needs to be made as to what event will trigger the messages. These could be messages timed around the event of enrolment, around a date of behaviour change (e.g. quit date), or around a weekly cycle (e.g. day of the week such as a Monday pledge text).
- Nature of interaction with the programme: While some text messaging programmes (e.g. text4baby) are primarily one-way, with little opportunity for replies and other forms of interaction, most proven programmes have some element of interaction. It is recommended that interaction occurs around surveys (e.g. "Are you ready to guit? Reply 1 if you are ready or 2 if you are not ready"), tracking (e.g. "How many cigarettes did you smoke yesterday? Reply and see if you met your goal") and with keywords. Keywords are words that the user can send into the system at any time for additional help (e.g. a user sends in the keyword 'crave' if they are having a craving and need help). Keywords should be limited in number so that users can easily remember them and use them as needed.
- Source of messages: The source of the text messages is generally the programme name (e.g. text4baby). However, automated messages may be supplemented with messages from a real person, counsellor or clinician. In some programmes, automated messages are supplemented by messages written by a person when a user indicates to a computer-generated survey that they need additional help (e.g. they just smoked a cigarette). Even within automated programme messages, message source can vary, with

some messages coming from the programme and others from a specific person who is part of the programme. For example, in Text2Quit, some messages come from a fictitious quit pal who offers social support. In other programmes, the programme may pair a user with an actual quit buddy to interact with via text.

- The degree to which the programme will be tailored: A decision has to be made as to whether the programme will run as a single generic programme, with all users receiving the same programme, whether there will be different versions (or protocols) for different types of user, or even whether personalized versions of the programme may be offered. In general, creating extra protocols or tailoring to individual characteristics can be expensive and therefore must be carefully thought through. A reason to consider including tailored protocols is because the evidence suggests that tailored programmes result in higher readership, higher message recall, perceptions of higher personal relevance and in some cases greater behaviour change.
- Example: In a texting programme designed to help pregnant women quit smoking, there could be different message protocols for women who are: ready to set a quit date in the next 2 weeks; women who want to cut down on their smoking; and women who are not willing to guit or cut down. Across programmes, message protocols could be tailored around factors such as: demographic variables (e.g. if the user is male or female), readiness to change (e.g. if the user is willing to set a quit date), planned method for behaviour change (e.g. whether they will quit with medications), source of social support, and benefits they will personally reap by changing behaviour. For programmes with multiple protocols, consideration needs to be made as to whether a user will be able to switch protocols once in one particular programme protocol (e.g. move from having a quit date protocol to the cutting down protocol).
- Consider other ways the programme will be 'smart': Because text messages are sent by a computer system, they can be 'smart'. They can track progress over time and give feedback on progress towards goals. They can track user interaction with the system and offer points or other 'gamified' rewards systems to promote engagement. For users with low engagement, the system can offer reminders to take steps and make progress.

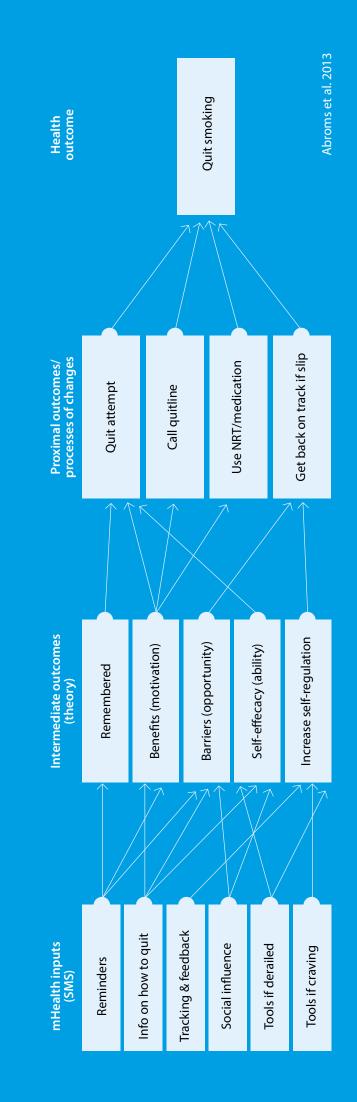


Figure 1: Logic Model for mHealth & Smoking Cessation

Step 4: Write the message library

The message library is a database of the actual messages that will be sent to the user. Messages need to be written for each case supported by the programme. Messages need to be 160 characters (including spaces) or fewer. For an example of a framework and message library, see QuitNowTxt message library at http:// smokefree.gov/health-care-professionals.

Here are some tips when writing the message library:

- Messages can take many forms. They can be aimed at providing information or advice, asking users to track behaviours, providing feedback on goals, offering reminders or providing social support (see Table 1 for examples). Remember: try to keep it to one actionable message per text. People are processing information in a distracted state and it is possible to say too much in 160 characters (even likely).
- Message language. Text messages generally should start with the programme name. Do not use abbreviations or text speak (e.g. 'how r u doin?'). Users find this type of language to be unprofessional coming from a credible health source.
- Provide a way for users to get more information. Give them the option to either reply to a text to request more information or provide a link to a web page with more information.
- Consider smartphone or social media integration. Remember, users may be reading text messages on smartphones. This means that text messages can seamlessly link to email, web and Facebook, and the content can include multimedia (audio, video), games and visualization of data. Consider how you might build in multimedia links from the text messages.
- Repurpose already-existing content. Where
 possible, use existing materials and adapt
 for use in the text messaging programme.
 Most government publications are in the
 public domain and can be used without
 permission for such purposes.
- Focus on message quality. As with all good health communications materials, messages should be evidence-based and

derived from theory. Messages should stem from your communication objectives and the behavioural techniques you plan to promote.

• Consider the literacy demands on your audience. Once the message library is written, check the literacy demands associated with the messages. This can be done by importing the messages into Microsoft Word and using the tool to determine reading level. In general, shorter words and sentences have lower literacy demands. Also, messages should cover one main point rather than multiple points to avoid confusion.

II. Pretesting the text messaging programme concept and messages

Once the programme is designed and messages to support the programme are written, there should be a pretesting phase to solicit feedback on the programme's concept and the specifics of the message library. Based on this feedback, revisions should be made to improve the programme.

The following are ways to get feedback on the programme:

- » Conduct interviews with target audience members. In these interviews, describe the programme to them, show them the message library (or portions of it) and ask for feedback. Users might be asked to rate messages for tone, content, clarity and persuasiveness. They could be asked to rewrite messages that are objectionable, unclear or otherwise unsatisfactory. This might be done in person, over the phone, by email or through a message board on a website. To simulate receiving programme messages, part of the pretesting interview may include sending sample text messages to the user's phone and asking for feedback on individual messages.
- » Pilot-test the programme. Feedback could also be obtained through a short pilot test, perhaps 2–4 weeks in length, depending on the type of programme. If possible, consider testing two versions of the programme in order to get a sense of users' ex-

6

Table 1: Message examples based on approach

Approach	Example message
1. Provide health information, advice and tips, often tailored around user characteristics	Try using Nicotine Replacement Therapy (NRT). Smokers who use NRT double their quit rates.
2. Ask users to set goals	By how many cigarettes do you hope to cut down?
3. Provide opportunities for tracking progress	Track how many cigarettes you smoked yesterday.
4. Provide reinforcement for goals which are met	Congrats! You met your goal.
5. Offer reminders (e.g. to take vita- mins; to follow-through with goals)	Your Quit Day is tomorrow.
6. Offer social support	Hi! I'm your quitpal. I've been through this and quitting is tough. Stick with it and you'll make it through.

perience on a key decision variable (e.g. with and without a 'buddy' protocol). Two ways to prepare the programme for a pilot with users are:

- have it programmed and then deliver the automated programme by a computer system for the pilot test. This has the advantage of being a true simulation of the user experience. The downside of this method is that it can take several months to get it programmed and if major changes are identified through the pretest, the reprogramming can be expensive and time-consuming.
- simulate the user experience by sending out each message manually – that is, by a programme staff member using a desktop computer or another mobile phone. This can be sustained for a short period of time (1–2 weeks), and in some cases with a simplified protocol. Google Voice offers a free service for sending out text messages that can be employed for this purpose from a desktop computer.

A word of caution: the most common negative feedback on these types of programmes likely to be collected in the pretesting or pilot testing phase is that the programme sends out 'too many messages'. While the science is not yet clear on the ideal 'dose' for such messages, user experience is important. Figuring out the correct dose will be a careful balancing act between having a programme that regularly interrupts and reminds the user about the goals of the programme and not sending out so many messages that the user gets annoyed and opts to unsubscribe from the programme. For users who do send in a keyword to unsubscribe, an alternative to stopping all messages is to offer and,

with consent, to provide the user with a low-dose version of the programme. This could help to keep the user engaged and subscribed to the programme.

5. Technology specifications

It is important that technical aspects are considered from the start in collaboration with technical partners. Some of the important underlying principles to be considered include:

- a 'win-win' philosophy for all partners, particularly when considering a longterm strategy;
- aiming for the service to be free to consumers;
- consideration of mobile network environmental influences on the implementation of the programme;
- appropriate contractual arrangements with the best providers;
- ensuring service provision is sustainable in the long-term;
- ensuring alignment of the programme with the Article 14 guidelines of WHO's Framework Convention on Tobacco Control (FCTC).

Working with telecommunications companies (telcos), mobile network providers and aggregators

It is important that representatives from the technical side of the implementation (e.g. telcos or at least someone who understands these issues for the country in question) are included on the TAG. There are variations in the mobile communications network environment between countries that may influence implementation and need to be considered from the planning stage. Support from the networks/telcos or an industry organization is extremely helpful in setting up the programme and in considering its sustainability. Some providers may see their support of such a programme as good publicity or as a useful addition to their offerings.

However, in the absence of such support, it is possible to deliver the programme via a contractual arrangement with an aggregator (sometimes known as a gateway company) that has established relationships with all telcos/networks. Using an aggregator can be an easy way to deliver messages to a large number of participants regardless of carrier or location without having to establish these interfaces individually. The aggregator does add a charge – however for large programmes the per-message charges can be relatively cheap.

Working with software providers

In general, scheduling and messaging software will take the database of text messages, the mobile phone numbers of participants and any relevant participant characteristics (such as language) plus the business rules and specifications, and will send out the right text message to the right mobile phone at the right time. It will also receive incoming messages and deal with any interactive components to the programme (e.g. automated key words like CRAVE that trigger an immediate text message about dealing with cravings). All of the functional specifications rules need to be written into the software so it also may make sense to include providers within the TAG. Some programmes, such as STOMP, have existing software that is currently administered by a provider e.g. HSAGlobal (a New Zealand-based multinational health IT company). In this case, HSAGlobal set up a new 'instance' of their programme for each

new customer that includes their adapted text messages, their business rules and an administration website for the customer to manage the programme. The company will then continue to maintain the software under a contractual agreement with the customer. In the case of the NCI programme, the text messages themselves have been made freely available for anyone to include in any manner they see fit. In their USA programme, NCI contracts the company called Mobile Commons as its system to administer and deliver the messages.

The steps required in this work stream are:

1. Consider the following questions and issues:

- What sort of arrangement with the telcos and/or aggregator will suit the long-term implementation of the programme?
- Who should hold contractual arrangements for dealing with technical issues that arise (i.e. the service level agreement)?
- How can you ensure the programme is free to consumers and available to all consumers regardless of carrier, network or location?
- Who is going to develop and/or run the software engine long term (existing provider, in-house, external developer)?
- What other partners may be required (for example, an aggregator) and who will manage this?
- Who will hold the contractual arrangements and what will the support for maintenance and issues arising look like?
- Is this a sustainable model? Consider the ongoing costs of delivering the programme such as per-message costs and how this may affect the size of the programme.

2. Establish contractual arrangements with partners. Consider issues around intellectual property, security and privacy of mobile phone numbers, the testing plan, expectations of involvement in monitoring and evaluation, data sharing and accessing agreements, and service level agreement for maintenance and dealing with issues as they arise.

3. Finalize the functional specifications in collaboration with the technical partners.

4. Technical partners build the appropriate systems and interfaces.

- 5. Internal testing by technical partners.
- 6. User acceptance testing:
- Allow for extensive testing of the programme with in-country experts and stakeholders.
- Follow this by testing the programme with members of the target audience.

Technology specifications for service to deliver SMS smoking cessation for Country

Background

This programme will be promoted to the general public through online and mass media advertising. Smokers who wish to quit will register via an online form, phone or possibly text message. They will provide a small amount of baseline information (mobile phone number, self-selected quit date, demographics) which will be collected and may help to personalize or tailor the programme (which is scheduled chronologically around the quit date). Prescheduled text messages will be pushed automatically to the participant for up to 6 months and the programme will then stop. Participants will be able to send text messages to the programme using automated keywords. For example, 'crave' will trigger an automated text message response from a keyword-associated database; 'stop' will stop them receiving text messages for data collection (e.g. 'how many cigs did you smoke in the past 7 days?'). There may be random incoming text messages that should be reviewed but will not require action.

Overall requirements

These are to:

- » maintain the rules to determine which text messages are sent to which mobile numbers at what days/times, as required by Country's Ministry of Health.
- » maintain the database of mobile phone numbers registered with the programme according to Country's requirements around privacy and data security.
- » make the programme must be available to all potential participants in Country regardless of mobile network provider or geographic location, and be free of charge to the end-user for receiving messages.
- » manage the interfaces with the aggregator/mobile network providers as necessary to maintain the integrity of the programme.
- » develop the registration procedure for participants to register via phone, web or text, with the registration data collected being accessible in real time to Ministry of Health administrators for managing participants and for report-

ing purposes (including collecting all registrations of interest even where they do not lead to a participant starting the programme).

- » collect baseline information used for tailoring the SMS programme, e.g. self-selected quit date (QD) to allow the text messages to be anchored around this date, including countdown messages prior to QD, intensive period from QD and then reducing frequency to 6 months.
- » deliver a two-way SMS programme to each participant for 6 months.
- » develop the system to manage incoming text messages, including:
 - recognized keywords where automated actions result (e.g. crave, lapse, stop) – and collect and report information on when these are used by each participant (for reporting purposes).
 - data collection text messages that require a response, which are collected and reported in real time for administrators to view and report (e.g. 'how many cigarettes did you smoke in the past 7 days?' and response is collected according to progress through the programme – 4 weeks, 24 weeks post QD).
 - 'unrecognized' incoming text messages able to be viewed by administrators and appropriate actions recorded by administrators (e.g. ignore, call back).
- » provide administration portal for Country Ministry of Health administrators that allows them to view and manage participants, view and manage the text message programme, add and amend

text messages, view real-time reports on participants and their progress through the programme.

- » report functions, access and variables to be agreed with Ministry of Health.
- » develop the system to allow participants to opt out of receiving messages (but retain in database for reporting purposes) by sending 'stop' text message.
- » ensure privacy and security of personal information provided by participants, with secure access by approved Country Ministry of Health administrators only.
- » provide an approved (by Ministry of Health) testing plan for the entire programme prior to commencing the programme. Ensure the programme is fully functional with no identified issues.
- » provide training on the administration of the programme as required.
- » ensure the programme meets Country's rules and regulations around data protection. Data must be maintained for x time period.
- » maintain the programme over time, providing support to administrators as required, dealing with issues arising in timely manner (include timeframes here, e.g. for minor issues, for major issues that affect participants adversely, for advising on network or other issues interrupting service delivery and advising on any looming changes likely to affect service in the future).

Administration requirements

Different levels of access to the system to be agreed with the Ministry of Health:

- » Limited access. Allow key stakeholders (password protected) to view reports but not be able to make any changes to the programme or text messages, or to view personal information on participants. This should include numbers of participants, numbers of registrations, numbers of opt outs.
- » Full administrator access. Key staff will be provided with password-protected access to allow them to view all participant information and conduct the following administration functions:
 - view and add, delete or amend text messages;
 - send individual and mass text messages to participants as required;
 - view people who have registered but have not completed consent so that they may be contacted directly;
 - view all participants in the programme at any time according to their progress through the programme and their responses to data collection quitting questions;
 - be able to find an individual participant's programme and responses by their mobile phone number or ID or name. (If a participant calls with an issue, the administrator can find out where they are in the programme, whether messages have been sent, see their incoming text messages etc.);
 - be alerted to any issues arising with the service;
 - link provided ID number to other databases (or maybe this will be done

separately – need to export list of participant ID numbers so that this can occur);

- view all reports and be able to export or email reports on demand;
- be able to identify participants who have not responded to data collection quitting questions so they may be contacted directly;
- review all unrecognized incoming text messages (by mobile phone number, date and time) and record decision to ignore or actions taken;
- be able to randomly select a subsample of participants for an evaluation.
 View all completed participants so that this can occur.
- pause the programme for individual participants (for example, people who are unwell or going overseas may wish to stop the programme temporarily);
- change participant's mobile phone number when necessary.

Administration reports include:

- 1. mobile phone numbers registered;
- participants in the programme (consented, receiving text messages) according to progress through the programme, their mobile phone no. and ID;
- use of keyword functions by each keyword and mobile phone number, date and time received; be able to report how many times an individual participant has used the keywords;
- unrecognized incoming text messages by mobile phone number, date and time received (and be able to record actions taken);

- 5. technical issues with the system;
- 4-week quitting question participants who have been sent the question and their responses, participants who have not responded;
- 24-week quitting question participants who have been sent the question and their responses, participants who have not responded;
- 8. Participants who have completed the 6-month programme (including their response to data collection quitting question at 24 weeks).

Key indicators to be reported from the system

- Number of people registering interest.
- Number of people completing registration and/or commencing the programme (by age, gender, location and other important variables as decided by the Ministry of Health).
- Number of participants who text STOP to opt out (and at what stage in the programme they do this, e.g. have they been in the programme for a week or 3 months?).
- Number of people who respond to 4-week quitting question.
- Responses of people to a 4-week quitting question (% of responders and % of total sample at 4 weeks, who self-report having quit).
- Number of people who respond to 6-month quitting question.
- Responses of people to 6-month quitting question (% of responders and % of total sample at 6 months, who self-report having quit).
- Number of people who use the CRAVE function, LAPSE function, RELAPSE function (and how many times per participant).

- How participants heard about the programme.
- Technical issues, network problems etc.

Service specifications

This is a more detailed description of the participant journey through the programme, from registration to completion (see flow chart). Potential participants register online or by text message.

- Registration must include mobile phone number (automatically if by text message), quit date (do you want to provide information to help people select a quit date?), ID number (if this can be linked to demographic data). All those registering should be collected. If online, you may need to check mobile number in case it is wrongly entered.
- All those completing registration are sent an immediate text message asking if they agree to be sent the text message programme (wording to be decided).
- Participants must reply to the message affirmatively to start the programme. A record of this reply must be kept.
- Programme commences with text messages from the 'countdown to quit' database until the day before their selected quit date. One text message per day sent at random time between 8am and 8pm.
- From their selected quit date, the programme selects messages from the 'intensive' database at the agreed frequency and timing (e.g. three messages per day sent at random times between 8am and 8pm, or morning/lunchtime/dinner time, randomly selected from the database or in a predetermined order).
- Messages continue until x days from quit date (describe change in frequency and database if appropriate, e.g. move to 'maintenance' database of messages and reduce frequency to x per week).

- At 4 weeks post quit date, a data collection quitting question will be sent as part of the scheduled programme. This text message will expect a response (a digit or a written number or colloquialisms such as 'none'). Responses will be recorded and reported. If the participant does not respond in 24 hours, the question text message will be resent at that time. If they still do not respond, no further reminders will be sent.
- At 24 weeks post quit date a data collection quitting question will be sent as part of the scheduled programme. This text message will expect a response (a digit or a written number or colloquialisms like 'none'). Responses will be recorded and reported. If the participant does not respond in 24 hours, the question text message will be resent at that time. If they still do not respond, no further reminders will be sent.
- If the participant texts the word STOP, the programme will immediately stop sending text messages to that participant. This will be recorded and reported with the mobile phone number so that administrators can contact the participant if required.
- If the participant texts in the keyword CRAVE, a text message from the 'crave' database will be immediately sent to the participant. The participant can access this as many times as desired (or a set amount of times if preferred), with the system aiming to send a different text message each time until they have all been sent.
- If the participant texts in the keyword LAPSE they will receive an immediate text message from lapse database (it will be different each time they do this);
- If the participant texts in the keyword RELAPSE, they can start another 4-week intensive round of messages if desired.
- At 24 weeks (or whenever) after quit date the programme ceases. No further text messages are sent.
- The participant is able, (or not depending on programme structure) to re-register and start the programme again at any time.

6. Promotion

Promoting the programme to the public is an extremely important, and potentially expensive, component of planning for implementation that should not be overlooked.

This will be influenced by the following considerations:

- Who the target audience is where they may be looking for help currently and the best means of reaching this population with promotional material.
- Who will be seen by the public as the owner of this programme? The operational model may well direct the promotional campaign – for example, the Ministry of Health can promote it alongside their other programmes.
- What organizations are currently involved in mass media campaigns for tobacco control or to advertise cessation services

 can the campaigns be linked or leveraged? Can lessons be learned about what promotional techniques are effective?
- How will people sign up directly by text message, online, by phone, in-person via other smoking cessation services? And how much data will be collected at baseline in order to allow tailoring and ensure follow-up?
- The local mobile network environment will influence whether sending unsolicited text messages is acceptable (it contravenes network codes of conduct in some countries). This may also be an important consideration in the potential effectiveness of and engagement with the programme – if the population has become desensitized to receiving unwanted health-related text messages already, will they be likely to read the mTobaccoCessation text messages?

Further considerations include:

- The use of incentives to encourage participation. This has not been a feature of programmes to date but has been found to be effective in other contexts.
- Other marketing and promotional campaigns may well be able to leveraged, e.g. by stakeholder agencies, including the technical partners.

Promotion to media and public

Participants register via online form or by text (including mobile phone number, self-selected quit date (between 1–3 weeks from registration), and ID number

On completion of registration, sent first text message 'Do you want to receive the X text message programme? Reply SI'

Participant replies (Si, si, S, s, accent, is, Si.....all recognised). Scheduled programme of test messages starts

Countdown to quit date (QD) includes one message per day with preparation tips (from registration to day before QD)

Text STOP – stop sending text messages

Text CRAVE – immediate text message from crave database, different each time

Text LAPSE – immediate text message from lapse database, different each time

Text RELAPSE – can start another 4-week intensive round of messages if desired Intensive period of 3 text messages per day from QD to 4 weeks post-QD (between 8am–8pm, allow participants to change time if shiftwork). Quitting question at 4 weeks ('how many cigs past 7 days?'), allow to re-set QD?

Maintenance period of reducing frequency of text messages to one per day, three per week, one per week, one per 2weeks, up to 6 months post-QD. Quitting question @ 6 months

Programme finishes at 6 months. Option to allow people to re-start programme

- Timing of the campaign consider a soft launch prior to starting the promotional campaign to ensure all processes are working well in a small number before a large number of participants sign up.
- How the programme may integrate with existing cessation activities and infrastructure.

Steps to be considered in this stream are to prepare a media and promotion plan for the programme with roles, activities, timelines, targets and a budget.

A wide range of traditional and online promotional strategies have been employed to increase the reach and engagement of these programmes. Online promotion has been particularly successful in the United States-based Text2Quit and SmokefreeTXT programmes. An additional approach has been to offer the text-service as a component of other existing services such as smoking cessation quitlines.

7. Monitoring and Evaluation

Evaluation planning must be considered from the start of the project. There are several levels at which the evaluation could be pitched, from providing very high-quality evidence in a trial through to using uncontrolled data to describe outcomes in participants. It is important to understand the level of evidence and outcomes that may be required by local decision-makers with respect to sustaining or expanding the programme. Both process and outcome evaluations are always useful in providing learnings for others, as well as to inform local improvements in the programme.

At the start of the project the TAG should collate the outcomes considered necessary by the different key stakeholders and develop an evaluation plan. A plan for the publication of the evaluation should also be agreed from the outset.

It is recommended that as much data collection as possible is included as a routine part of the programme. For example, that smoking cessation status is collected via a text message question as part of the programme. The following aspects of evaluation should be considered:

- Stakeholder interviews for lessons and issues in implementation.
- Numbers and demographics of those signing up.
- Where they heard about the programme.
- Indicators of engagement with the programme (e.g. opt outs, use of CRAVE function).
- Participant interviews (sample) or survey for satisfaction and suggestions for improvement (including questions around frequency, intensity, timing, tailoring, interactivity, level of support, registration process).
- Quit rates at 4 weeks and 6 months self-reported 7-day point prevalence and continuous abstinence in order to be comparable with other programmes.
- Other services, support, pharmacotherapy used by participants in conjunction with the programme.
- Costs of implementation and ongoing costs of programme (cost per quitter).

This information can be collected via programme data, text message and/ or online questions to participants, and interviews with a sample of participants. Quit rates (and cost per quitter) can be compared with other cessation programmes in-country and internationally, and with population norms for quitting. Alternatively, a controlled trial could prospectively compare those receiving the mTobaccoCessation intervention with those who do not. It should be considered whether a randomized controlled trial is necessary depending on the existing body of research evidence.

Ongoing monitoring should be included in the routine operation of the programme. This includes the numbers and demographics of participants, indicators of engagement, where they heard about the programme and text message questions about smoking status.

Suggested mTobaccoCessation Monitoring and Evaluation process

The following section describes a process for establishing Monitoring and Evaluation for national mTobaccoCessation programmes.

An ongoing process for monitoring and evaluation needs to be established from the very start of the programme. It is good to be clear from the outset what information is to be collected for which purposes in order to align the frequency and effort of data collection with its importance and cost.

These purposes include:

- managing the ongoing operation of the programme;
- providing feedback for continual improvement of the programme;
- external reporting to funders on overall performance and impact to justify further investment;
- providing lessons learned in the implementation of the programme that can be used elsewhere (e.g. for implementing other mHealth programmes).

Wherever possible, data collection can be integrated into the programme as it is established. In this way, necessary data can be collected without extra cost or resources. This can provide ongoing real-time data for the administration and operation of the programme, and can also be collated and analysed for monitoring. More expensive independent evaluations can then be scheduled less frequently to answer specific questions about impact, as required. Important questions to ask during monitoring and evaluation

1. Is the programme reaching the right people?

The programme needs to be accessible to smokers, particularly those in high-priority groups, and those who may be unable or unwilling to seek any other forms of available quitting support.

Barriers to the programme reaching the right people can include a lack of exposure to programme advertisements, lack of access to technology, cost, and perception that the programme is not appropriate or unlikely to be effective.

Questions examining these barriers are suggested by the M&E framework include what share of the targeted population:

- has minimum access to a mobile phone?
- can read and/or write in the language used in the SMS?
- can afford to engage in the mHealth programme?
- is unwilling to engage in mHealth projects for cultural or personal reasons?
- live in an area covered by mobile network?

Once the programme is operational, it will need to report on:

- » the numbers who participate in the programme. This can be reported in many ways including:
 - the proportion of smokers who take up the programme;
 - the proportion of smokers in high-priority populations who take it up (i.e. by age group, location, ethnicity, income level;
 - where participants heard about the programme (mass media, posters, recommended by a professional or other service, recommended by family or friends, Internet etc.).

» the proportion of the target population that completed the programme, including:

- the number of smokers/tobacco users who completed the programme divided by the total number of smokers/tobacco users in the country.
- » the actual cost of participating in the programme.

Separate scheduled evaluations may be able to gather more information such as:

- population-based surveys to determine the effectiveness of the promotional campaign in letting people know about the programme by asking about recognition, awareness and attitudes;
- asking smokers who have not taken up the programme about their reasons for not participating.

This information should feed directly back into planning for promotional campaigns for the programme.

2. Are we providing a high-quality programme?

If we are not providing a high-quality programme, people may choose to participate but quickly drop out. This will not help them to quit and they will tell others that the programme is of low value. Quality relates to whether message content is appropriate and helpful, whether the messages are reliable (e.g. do they arrive when they are supposed to?), whether the registration process and interactive components work as advertised, and if there are no unexpected technical issues.

Questions around quality in the M&E framework include:

- what is the performance level of the system used for the mHealth project?
- what is the reliability level of the system used for the mHealth project?
- what is the security level of the system used for the mHealth project?

The programme itself can report on the following:

• The number of people who text in STOP in order to stop receiving messages. This can be a proxy measure for people who are unhappy with the programme for any reason, but it may also include those who have quit and therefore feel they no longer need to receive messages. When presented as a proportion of participants over time, more participants texting STOP may indicate an issue with the quality of the programme.

- Numbers of participants using the interactive components of the programme.
 Very low numbers may indicate a lack of engagement with the programme that could be the result of poor perceived quality of the programme or a lack of understanding of the components available.
- Administrative reports on the steps in the registration process can be useful to identify timeliness and other issues arising during this process, e.g. large numbers who have registered an interest but fail to complete the full registration process.
- Aggregator companies can usually report on the reliability of message delivery with confirmation of delivery reports and any technical issues arising.
- Incoming unrecognized text messages from participants may alert staff to any unexpected technical issues need to be addressed.
- A scheduled evaluation can also contact:
- non-completers and people who texted STOP to ask for their reasons, and any issues related to the quality of the programme;
- completers and ask for any quality-related issues;
- to ask for feedback from participants who did not quit about the usefulness of the text message programme and any suggestions for improvement.

3. Is the programme effective?

Smoking cessation programmes are usually measured by their effectiveness in helping smokers to make quit attempts and to stay smokefree for at least 4 weeks and up to 6 months. As part of regular monitoring, participants can provide data on whether they:

- made a serious quit attempt during the programme (at least 24 hours when not sick), and the number of serious quit attempts made during the programme;
- have had any cigarettes in the past 7 days (point prevalence), at 4 weeks post their quit day, and at 6 months post their quit day;
- have smoked at all since their quit day (allowing up to 5 lapses = continuous abstinence) at 4 weeks post quit day and at 6 months post quit day.

Quit rates can be examined by priority population or factors that may affect quitting success, e.g. age group, sex and level of nicotine addiction (if this has been collected), etc. They can also be examined for those who complete the programme (not including those who texted in STOP before the end of the programme). However this is not necessarily recommended as the reasons why people stop the programme may not be clear. Quit rates presented over time can demonstrate whether the programme maintains its effect. Quit rates, if measured in standard ways, can be compared with other similar cessation programmes. The cost per guitter is also often used to compare programmes delivered by different modalities.

30

A scheduled evaluation can also approach a subsample of participants in the programme for more detailed feedback, such as:

- do they feel the programme helped them quit?
- what aspects were helpful?
- what did they like or dislike about the programme?
- how could the programme be improved to be more helpful?
- for those who did not quit, did they reduce the number of cigarettes smoked, do they feel better equipped to quit in the future?

Research studies also often verify self-reported quitting with biochemical measures such as expired carbon monoxide or salivary cotinine levels. This is not usually undertaken in the evaluation of national cessation services.

Questions suggested by the M&E framework include:

- What share of the population reached adheres to the programme?
- To what extent is the user experience enjoyable?
- To what extent is the content of the mTobaccoCessation programme useful in informing the population or triggering behavioural change?
- What share of the population that adheres to the programme changes its behaviour and would maintain these changes?

4. Are there any negative consequences of the programme?

Programme administrators should be aware of any potential negative consequences arising from the programme.

Unexpected consequences may be picked up through incoming text messages. Predictable potential issues, such as technical issues, should have systems set up for early identification and response. Managers may also want to consider whether to specifically ask about any potential issues that are considered important, for example, car accidents while reading text messages. Data may be collected via ongoing system reporting, ongoing monitoring (e.g. surveys), and scheduled evaluations of all participants or subsamples of participants or whole populations.

These questions can be asked as part of ongoing system reporting or scheduled evaluations.

System reporting

The mHealth text messaging system should be able to provide reporting for the administration and operation of the programme. This reporting may also be used for monitoring and reporting purposes.

The types of reports that may be provided include:

- 1. All registered participants
 - Cumulative over time
 - By month or year
 - By location, age group, sex, ethnicity
 - By how they heard about the programme
- 2. Participant status
 - Registered but haven't completed the consent or registration process (if this is an issue with the programme, depends on process for registration), or ineligible (reason)
 - Active (currently receiving the programme)
 - Completed the programme
 - Opted out (texted STOP)
 - Withdrawn (other than by texting in STOP)
- 3. Participants who have opted out (texted STOP)
 - Mobile phone number
 - Date of opt out
 - The point in the programme the participant had reached when they texted STOP
- 4. Unrecognized incoming text messages from participants
 - Date, mobile phone number, text of message
 - Ability to action, respond, sign off and delete
- 5. Participants using the interactive components of the programme
 - Depends on components available, e.g. CRAVE

- Number of participants using each function
- Number of times used per mobile phone number
- Number of times used by week from Quit Day

6. Technical issues

- Any downtime of the system, messages sent outside rules or unexpectedly
- Delivery reports (may come from the aggregator if appropriate) to confirm messages were delivered
- Data to be collected via text messages from participants (if this is included in the programme)
- 7.
- Mobile phone number, date and text of message
- Response rate to text message question/s sent without response (by mobile phone number)
- If asking for quitting status, report time point (4 weeks, 3 months, 6 months), response by mobile phone number
- Ability to respond if incoming text response is not understandable
- 8. When participants are to be contacted by staff (operational, to be set according to needs)
 - E.g. non-responding, for data collection or final follow-up quit assessment
 - List of participants due to be followed-up, by mobile phone number, date due, type of follow-up required (e.g. 6 month call)
- 9. Quit rates (if being collected by text message system)
 - Cumulative numbers of those who quit, continued smoking or did not respond (for all participants)
 - By important factors e.g. age group, location, sex, ethnicity
 - · By month or year

Examples of standard questions in smoking cessation

Scheduled evaluations

1. Process evaluation

Lessons about the process of implementing the mTobaccoCessation programme could be useful for planning future national mHealth or eHealth initiatives and may even lead to savings and shortened timeframes in future implementations.

This process evaluation should include interviews with key stakeholders involved in the implementation process – e.g. in promoting the service to the public and in managing the programme once it is operational. Questions will reflect upon what was done well, what was not done well, what could have been done better, the enablers, the barriers, what made the programme implementation successful, what 'sells' the programme to the public and the health sector, and what hinders the further development and improvement of the programme.

2. Scheduled detailed evaluations of effectiveness

The first scheduled evaluation should probably take place after approximately one year of operation in order to ensure that a sufficient number of participants have completed 6 months since their quit day (for 6-month cessation rates). The scheduled evaluation should focus on a thorough examination of the effectiveness of the programme with respect to quit rates. A cost-effectiveness evaluation is likely to be important for funders.

Further evaluations will be timed as considered necessary. These evaluations should feed into the continual improvement of the programme and its delivery.

3. Continual improvement of the message database

Programme managers should also develop a plan for the regular review and updating of messages themselves. The text messages should be reviewed every 1–2 years for relevance, salience, effectiveness, comprehension and consistency with other national services. This should include review by local smoking cessation experts and by the target audience. It is likely that some messages will be dropped because of negative feedback from the audience and new messages will continue to be added. This will be particularly important if the priority populations change over time.

Do you currently smoke? Yes/No
If Yes, do you smoke every day?
If Yes, average number of cigarettes smoked daily?
Which of the following statements best describes your current situation?
I would like to try quitting within the next month
I would like to try quitting – not within the next month but within 6 months
I smoke but I have no intention of quitting in the next 6 months
How soon after you wake up do you smoke your first cigarette? Within 5 minutes
6–30 minutes
31–60 minutes
After 60 minutes
Do you find it difficult to refrain from smoking in places where it is forbidden? Yes/No
Which cigarette would you most hate to give up?
The first in the morning
Any other
Do you smoke more frequently during the first hours after waking up than during the rest of the day? Yes/No
If you are so ill that you are in bed most of the day, do you still smoke?
Yes/No
How long ago did you quit?
("When did you last smoke?" or "When was your Quit Day (for example, the day you quit smoking all together)?" Answer one
only of days/weeks/months) days weeks months ago
OR Date
Have you smoked tobacco at all since your Quit Day? (Select one only)
No, not a single puff – Go to Question x
Yes – between one and five cigarettes
Yes – more than five cigarettes
Have you smoked tobacco in the past 7 days? (Select one only)
No, not a single puff – Go to Question x
Yes between one and five cigarettes
Yes more than five cigarettes
Have you gone back to daily smoking? (Select one only) Yes/No
Tes/No
How many quit attempts did you make during the programme?
Apart from this programme, have you had any other help to stop smoking in the past 4 weeks? Yes/No E.g. nico-
tine gum, patches, zyban, nortriptyline, helpline, face to face counselling, group sessions, Internet programme,
book, hypnosis, acupuncture etc.
We are interested to know if any particular aspects of our programme worked well for you. Can you rate the fol-
lowing parts of the programme according to whether you liked them or disliked them?
What did you like the most about the programme?
What did you dislike most about the programme? (If anything)
Do you have any suggestions on how to do it better in the future?

Do you have any suggestions on how to do it better in the future?

Template for a national mTobaccoCessation Program

This section is set out as a checklist or template for a project plan for countries intending to implement an mTobaccoCessation programme, and includes examples of potential content. A detailed plan for mCessation should cover the following sections:

Background and context

This section gathers important information from the needs assessment as it applies to decision-making around the strategy for implementing mTobaccoCessation in each context. This includes the following:

- Problem statement: a description of the smoking problem that the programme intends to address.
- Overview of the present situation or context of smoking and smoking cessation in the country.
- Levels of national and government commitment to the project.
- Process followed in project identification and formulation: what information was used and which stakeholders have been involved?
- Relationship to other programmes and activities (past and current) in tobacco control and smoking cessation.

Strategy

This section takes the decisions made as described in the planning section and turns them into a description of the programme to be implemented, and the strategy for implementing it.

 Overall project objective: for example, 'to adapt mTobaccoCessation programme for the population of X, particularly targeting X demographic of smokers who want to quit, and to implement it as a free national service'.

- National and regional strategy: how it fits with any national and regional strategies.
- Project strategy: how it is going to be operationalized and promoted.

Main activities

There are four main activity streams in the implementation of the programme. All need to ensure alignment of the programme with the Article 14 guidelines of WHO's FCTC.

- 1. Text message content and service specifications development/adaptation plan
- 2. Technical operations and delivery plan
- 3. Promotion plan
- 4. Evaluation plan

The section needs to describe the working group/responsible teams for each of the above main activity areas.

Management

This section clearly outlines decisions on who will be responsible for the implementation of the project and ongoing provision of the service.

- Roles and responsibilities for carrying out the project: project team members, responsibilities for the four main activities.
- Overall description of project management.
- Management committee (if applicable, Terms of Reference).
- Accountability for project implementation.

Outputs

The project document should clearly state the key deliverables of the project, for example:

- the adapted text messages and service specifications;
- a fully functioning and tested text messaging system;
- promotion of the programme to the target audience;
- the proportion of the target audience who signed up to the programme;
- the proportion of the target audience who received and completed the programme;
- evaluation of the first 6 months, and then 12 months, of service provision.

Indicators

These are the impact goals (details of measurable achievements) of the project, for example:

- the text messaging programme is fully functional with no technical issues;
- X many participants signing up to the programme per month, per year;
- X% of the target audience signed up/ completed the programme per year;
- dropout rate of <X% (i.e. those texting 'stop' to stop receiving messages);
- participant quit rate of XX% at 4 weeks/ YY% at 6 months/ZZ% at 12 months.

Timeframes

Estimated development timeframe: 4–5 months

- » Needs assessment and formative research (if required): the length of this phase depends on how much information is already accessible and the availability of local researchers to bring this together to inform the TAG.
- » TAG planning: agreement on implementation plan, promotional plan, evaluation plan. Mainly depends on getting the right partners engaged. For overall agreement on aspects of implementation, subgroups can be assigned to continue to work on the different plans during the development phase.

- Content adaptation: depends on whether any new content needs to be developed or if the project is a straight adaptation of an existing programme. Pretesting and refining can take a couple of rounds.
- Technical development: for a company that already has a programme this could be as short as 2 months, for a new company it could be considerably longer.

Estimated implementation and evaluation timeframe: 8 months

- Testing: full testing of the programme.
- Launch: soft launch once testing fully completed, public media campaign.
- Evaluation: at least 6 months follow-up of initial cohort.
- Report on evaluation, refinement, improvement and ongoing service provision.

Budget

Elements to be considered:

- Formative research if required (focus groups, online surveys).
- TAG meetings/teleconferences (admin, venue, phone costs, printing, preparation of documents).
- Planning: development and documentation of country plan, promotional plan, evaluation plan, contracts.
- Adaptation/development of content and functional specifications: expert time, admin and collation, preparation of documents, pretesting and reimbursement for time.
- Technical development: subcontract IT company for development of software/interfaces.
- Text messaging and gateway costs (will vary): set-up fee, per-text message costs (generally in bundles where the larger the bundle of messages/ month expected, the cheaper the pertext message costs).
- Marketing/media costs: depends on media used.
- Evaluation costs: researchers, interviews, data collection and management, analysis, interpretation and input from TAG, write-up.

Risks and mitigation

Possible risks and related mitigation include:

- Insufficient information on which to plan or develop an appropriate service for local context: *perform needs assessment and consider formative research if further information required.*
- Lack of local experience or expertise to develop or implement the programme: seek local collaboration with international experts, groups and organizations with relevant experience.
- Programme is not appropriate or effective for local population: connect with local experts, researchers and agencies who can provide expertise and experience to adapt programmes with international experience.
- Programme is not sustainable: consider sustainability for all relevant stakeholders from the start, and ensure appropriate partners are included in the TAG at the outset.
- Programme participation low: *ensure there is a planned promotional campaign.*
- Programme is not as effective as in other countries: ensure evaluation includes qualitative feedback from participants to inform ongoing improvements to the service.

Be He@lthy Be Mobile

Annex 1

There are several mTobaccoCessation programmes that have been developed and implemented internationally. Table 1 outlines current known programmes.

	SmokefreeTXT	SMS USA/Turkey	STOMP	Text2Quit
Development process	Developed by National Institutes of Health (NCI). Available to anyone in USA (may cost for text messages depending on plan). User data indicates field-consistent quit rates at 6-month follow up. Ongoing RCT evaluation.	Developed by the Cen- tre for Innovative Public Health Research (USA). Trialled in Turkey – increased quit rate for females/light smokers but not for males/heavy smokers (RCT). Trialled in USA among young adults – doubled short term quit rates (RT).	Developed by University of Auckland and trialled in New Zealand – doubled short term quit rates (RCT). Licensed to HSAGlobal. Refined for national imple- mentation in New Zealand by The Quit Group. Adapted and trialled in the UK – doubled long-term veri- fied quit rates (txt2stop RCT).	Developed by George Washington University and trialled in USA. Piloted among college students and refined (RCT under review, available on request). Licensed to Voxiva and dis- tributed via Alere, USA.
Components	Core messages focus on cessation strategies and support. On-demand, user in- itiated, bi-direction- al crave, mood, slip with motivational and actionable behavioural tips. Bi-directional as- sessment of mood and cravings with automated respons- es using tips, advice and encourage- ment. In English, Spanish, Chinese, Brazilian Portuguese.	 Type of message changes according to pre-quit, early quit, late quit, relapse, and encouragement post-quit. E.g. preparation, benefits of quitting, coping strategies, medication. Different 'paths' according to quit/not at day 2 and day 7 post-quit day. On-demand crave, text buddy. 	As delivered by HSAGlobal: Cessation support and tips. Smoking facts. On-demand crave, slip-up. Relapse programme. Provider can alter messag- es, add polls. Has been translated into Spanish.	Advice on quitting. Peer ex-smoker messages. Medication messages. On-demand games and tipe Check-in on smoking status messages. Weekly smokefree pledge. Personalization for goals, reasons, triggers, social sup port, gender, money saved. On-demand crave, reasons, smoked, statistics.

	SmokefreeTXT	SMS USA/Turkey	STOMP	Text2Quit
Schedule of texts	2 weeks pre-quit: 2 texts/day	2 weeks pre-quit: 3–5 texts/day	1–2 weeks pre-quit: 1–2 text/day	2–4 weeks pre-quit: 8 texts and 1 email/week
	6 weeks post-quit: 1–4 texts/day Check in at 1, 3 and 6 months	4 weeks post-quit: 8/ day on quit day, then reduced from 6/day to 1/ day in the last week	4 weeks post-quit: 3/day 5–24 weeks: 1 every 3 days Relapse: 4 weeks of 3/day	1 week pre-quit: 30 and 2/ week Week post-quit: 34 and 3/ week
				2–3 weeks post-quit: 10 and 2/wk 3+ weeks post-quit: 3 and
				1/wk Relapse: 4 and 1/week
Contact	Erik Augustson	Michele Ybarra	Robyn Whittaker	Lorien Abroms

Annex 2: Sample Content libraries

Day Received	KEYWORD CATEGORY	Message	Character Count
OPT-IN DAY		Welcome to QuitNowTXT! Congratulations on your decision to quit smoking. To opt out at any time, text STOP to this phone number. StdMsgRatesApply	145
	DIFFICULTY STATUS	QuitNowTXT: Do you think it will be hard to stop smoking? Reply with: HARD, SO-SO, or EASY.	91
	HARD	QuitNowTXT: We know it is hard but it is a decision you will not regret. Keep getting the support you need and remind yourself of your smokefree reasons.	153
	SO-SO	QuitNowTXT: Take it 1 day at a time and practice avoiding your triggers. Half of Americans who ever smoked are now ex-smokers. That can be you!	143
	EASY	QuitNowTXT: You are on the right track! Quitting smoking is hard but stay confident. You can do this. Thanks again for joining QuitNowTXT!	138
Q-14		QuitNowTXT: The countdown begins! 14 days until you quit smoking. We are here to help you prepare & follow through. Get ready!	126
Q-14		QuitNowTXT: Quitting works best when you're prepared. Stick with us & you won't have to rely on willpower alone. We'll show you how to quit 1 craving at a time.	160
Q-13		QuitNowTXT: Tell a friend! Try quitting with someone. You will have a friend to talk to about how you feel and this support will help keep you on track.	152
Q-13		QuitNowTXT: Counseling and medications can increase your chances of quitting. Talk to your doctor about the best options for you. Text STOP 2 stop.	147
Q-12		QuitNowTXT: Knowing your triggers is the only way to avoid them. Visit smokefree.gov/cravings to learn more about triggers. Then write down your top 3 triggers.	160
Q-12		QuitNowTXT: In the U.S., tobacco kills more people than AIDS, alcohol, car accidents, murders, suicides, drugs, and fires combined. Quit today!	143
Q-11		QuitNowTXT: There is NO such thing as safe tobacco. Cigars, pipes, hookah, and dip carry many of the same health risks as cigarettes, like addiction.	149

Day Received	KEYWORD CATEGORY	Message	Character Count
Q-11		QuitNowTXT: Next time you have the urge to smoke, try and resist for 5 min- utes. Or skip the cigarette entirely. Think of it as practice for quit day!	149
Q-10		QuitNowTXT: 10 days to go! Value your future. No matter when you quit, you are adding years to your life. You will not regret this. Text STOP 2 stop.	149
Q-10		QuitNowTXT: Gaining a few extra pounds after quitting is normal, but eating healthy and exercising can stop most of this weight gain, if not all of it.	151
Q-9		QuitNowTXT: Many people use cigarettes to deal with stress or boredom. Try going to the gym, taking a jog, or walking the dog instead of smoking.	145
Q-9		QuitNowTXT: Make a list of your reasons for quitting to help you stay focused. Put it someplace you will see it every day like your car, wallet, or kitchen.	156
Q-8		QuitNowTXT: Do not be fooled! There is no such thing as a safe cigarette. Quitting is the only way to protect yourself from the health risks of smoking.	152
Q-8		QuitNowTXT: There are so many benefits to being smokefree. Tell a friend what you look forward to most!	103
Q-7		QuitNowTXT: 1 week left on the countdown. You can learn how to live with- out cigarettes. You learned to walk before you ran. It took time. Text STOP 2 stop.	155
Q-7		QuitNowTXT: Find out how much money you spend on cigarettes: smokefree.gov/reasons-to-quit. Think about what else you could do with that money!	143
Q-7		QuitNowTXT: You are going to set a great example for your children or other loved ones. Thank them in advance for helping you quit smoking.	139
Q-6		QuitNowTXT: Identify supportive people you trust and can talk to, like friends, family, or your partner. Call or text them when you need to vent.	145
Q-6		QuitNowTXT: Your pet can get sick and die from secondhand smoke. It sinks into fur, feathers, eyes, and skin. Think again before you smoke.	139
Q-5		QuitNowTXT: You may feel strange when you quit- this is withdrawal. You are addicted to nicotine and your body is used to smoking. These feelings will go away.	159
Q-5		QuitNowTXT: Getting closer to the big day. Try cutting back on your smok- ing. This can help you get ready for quit day. Text STOP 2 stop.	136
Q-4		QuitNowTXT: Whether smoked, chewed, or sniffed, tobacco contains nico- tine. Nicotine is highly addictive. Gum and candy help with cravings. Stock up!	148
Q-4		QuitNowTXT: Smoking makes your breath, clothes, and hands stink. It ruins your skin and hair and even causes wrinkles.	118
Q-3		QuitNowTXT: People, places, and things can make you want to smoke. Write down your triggers. Make a plan to help you steer clear of them on you quit day.	153

Day Received	KEYWORD CATEGORY	Message	Character Count
Q-3		QuitNowTXT: 3 more days! Eat more fruits/vegetables and exercise. It will help reduce stress, boost confidence and help you feel better all around.	147
Q-2		QuitNowTXT: Take all the tobacco-related materials out of your home, car, office, or wherever you keep them. Lighters, matches, and ashtrays too. Everything.	157
Q-2		QuitNowTXT: 2 more days! Do laundry today. Get that smoky smell out now so you will smell and feel fresh on quit day. Do not forget your jackets!	145
Q-1		QuitNowTXT: Drinking a lot of water on quit day will fight off cravings and help keep you hydrated.	99
Q-1		QuitNowTXT: Almost the big day! Throw your pack in the trash before you go to bed tonight, and get plenty of sleep. Text STOP 2 stop.	133
QUIT DAY (Q)	PREPARED STATUS	QuitNowTXT: Today is your QUIT date! It is here & you can do this! You are stronger than you think, so be positive. Are you ready? Respond with READY or NOT.	157
Q	READY	QuitNowTXT: Greatlet's get started! Have mints, water, and snacks to get you through the day. Life is all about choices and you will not regret this one.	155
	NOT	QuitNowTXT: When you are ready to pick a new date, we hope you sign up again by visiting Smokefree.gov. You can even sign up again today.	137
		QuitNowTXT: Text your supporters and remind them of the big day. Make sure they are there for you.	99
Q		QuitNowTXT: Don't forget to throw away your pack of cigarettes and lighters! Seeing them at home, work, or in the car may tempt you to want to smoke.	149
Q	SMOKEFREE STATUS	QuitNowTXT: Day 1 is almost over! Keep quit smoking info on hand with the QuitGuide: http://smokefree.gov/apps-quitguide. Did you quit today? Reply: YES or NO	158
	YES	QuitNowTXT: Great! Keep staying strong and smokefree. We know it is not easy, but it is totally worth it.	105
	NO	QuitNowTXT: We know quitting is hard and sometimes it takes a few tries. Do you want to continue or start over and set a new quit date? Reply: STAY or NEW	154
	STAY	QuitNowTXT: We are glad you stayed! Sometimes we slip, so now you can be prepared if tempted again. Remember, going smokefree is the way to go.	143
	NEW	QuitNowTXT: We will still be here when you are ready. Just visit Smokefree. gov and sign up with your new quit date. You can even sign up again today!	149
Q+1		QuitNowTXT: 24 hours smokefreemajor milestone! Be sure to reward your- self. Each hour smokefree, say or do something nice for yourself.	135

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+1	CRAVE	QuitNowTXT: Cravings are real. They won't go away immediately, but feeding them only makes them stronger. What is your craving level? Reply: HI, MED, or LOW.	157
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+1		QuitNowTXT: Reminding yourself of your reasons for quitting can help keep you on track when you need a boost. Take a few minutes to revisit your list.	150
Q+1		QuitNowTXT: Visit smokefree.gov or women.smokefree.gov. We are always adding new free tools! The first days are going to be tough. They will help!	146
Q+2	MOOD	QuitNowTXT: If you're feeling cranky it could be because you're quitting smoking. This is only temporary, so stay strong! Reply with your mood: GOOD, OK, or BAD	160
	GOOD	QuitNowTXT: Glad you are feeling good! Keep up that positive attitude and keep staying strong.	94
	ОК	QuitNowTXT: Hang in there! It could be worse. No one says it will be easy, but they do say it is worth it!	106
	BAD	QuitNowTXT: We know quitting is tough but stay strong! We all have bad days, and you will get through this. Do whatever to boost your mood-just do not smoke.	157
Q+2		QuitNowTXT: Don't do it alone. Ask for support. Tell your friends exactly how they can help. Here are some tips: smokefree.gov/getting-support.	143
Q+2		QuitNowTXT: Keep gum, mints, or a lollipop in your purse or pocket. If offered a cigarette, you will have something to keep your mouth busy.	142
Q+3		QuitNowTXT: 3 days smokefree! You may notice that your food tastes better. Smoking dulls your taste buds. Luckily they regenerate after just 48 hours without cigarettes.	169
Q+3	CRAVE	QuitNowTXT: Wait 5 minutes for cravings to pass. Keep your mouth busy with mints, straw, or sunflower seeds. What is your craving level? Reply: HI, MED, or LOW	160
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141

Day Received	KEYWORD CATEGORY	Message	Character Count
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+3		QuitNowTXT: You may not always feel as confident as you should and might slip. Keep trying no matter what. It IS possible to quit for good. Text STOP 2 stop.	157
Q+3		QuitNowTXT: Everyone who smokes has smoking triggers. Knowing your smoking triggers and figuring out how you will deal with them will help you stay in control.	160
Q+4		QuitNowTXT: 4 days smokefree! The first few days can be tough, so try to re- lax. Listen to calming music, drink herbal tea, or enjoy some dark chocolate.	152
Q+4		QuitNowTXT: "It's hard to fail, but worse to never have tried to succeed." Connect w/ @SmokefreeGov or @SmokefreeWomen on Twitter for more encouragement and support.	165
Q+4		QuitNowTXT: Avoid drinking coffee or caffeinated beverages after you quit. Caffeine can make symptoms of nicotine withdrawal worse and make you feel jittery.	157
Q+5		QuitNowTXT: Day 5! Stay positive. Do not let things get you down. Your journey to a smokefree life might be a struggle, but looking back it will be well worth it.	162
Q+5	CRAVE	QuitNowTXT: Cravings will get weaker and less frequent with every day that you don't smoke. What is your craving level? Reply: HI, MED, or LOW	142
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+5		QuitNowTXT: If friends/family smoke, ask them not to smoke or leave their cigarettes near you. Change the scenery. Go for a bike ride to ride out the craving.	158
Q+6		QuitNowTXT: Stress and anger are smoking triggers. If you're feeling stressed or upset to get extra support; call or text a friend or family member to lean on.	159
Q+6		QuitNowTXT: 6 days and counting! Make time to exercise every day. Exercis- ing helps reduce the stress that makes you crave cigarettes. Text STOP 2 stop.	151
Q+6		QuitNowTXT: Counseling and medication can increase your chances of successfully quitting. Talk to your doctor about the best options for you. Text STOP to stop.	160

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+6		QuitNowTXT: The road to quitting can be bumpy, but supportive friends/ family and new hobbies can help.	102
Q+7		QuitNowTXT: 1 week smokefree! Do not look back now. Mark your calendar and do something special today to celebrate this milestone!	130
Q+7		QuitNowTXT: Next time you have a craving, grab a friend and head to the movies. A movie and popcorn is a great way to reward yourself for staying smokefree.	157
Q+7	SMOKEFREE STATUS	QuitNowTXT: Hey are you still smokefree? Text back: YES or NO	61
	YES	QuitNowTXT: Great! Keep staying strong and smokefree. We know it is not easy, but it is totally worth it.	105
	NO	QuitNowTXT: We know quitting is hard and sometimes it takes a few tries. Do you want to continue or start over and set a new quit date? Reply: STAY or NEW	154
	STAY	QuitNowTXT: We are glad you stayed! Sometimes we slip, so now you can be prepared if tempted again. Remember, going smokefree is the way to go.	143
	NEW	QuitNowTXT: We will still be here when you are ready. Just visit Smokefree. gov and sign up with your new quit date. You can even sign up again today!	149
Q+8		QuitNowTXT: Quitting smoking not only makes your lungs stronger but it speeds up recovery time from injuries.	110
Q+8	CRAVE	QuitNowTXT: To deal with cravings: breathe in, hold for 5 seconds, breathe out, and repeat. What is your current craving level? Reply: HI, MED, or LOW	151
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+9		QuitNowTXT: Quitting smoking is not about what you are giving up, but what you are gaining. Confidence, pride, improved health, and investment in your future.	158
Q+9		QuitNowTXT: Smoking in cars is dangerous. You get 8 times more exposure even with the windows rolled down. Secondhand smoke is not safe. Text STOP 2 stop.	154
Q+10	MOOD	QuitNowTXT: It has been 9 days since you quit smoking. Congratulations! How are you feeling today? Text back: GOOD, OK, or BAD	126

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+10	GOOD	QuitNowTXT: Glad you are feeling good! Keep up that positive attitude and keep staying strong.	94
	ОК	QuitNowTXT: Hang in there! It could be worse. No one says it will be easy, but they do say it is worth it!	106
	BAD	QuitNowTXT: We know quitting is tough but stay strong! We all have bad days, and you will get through this. Do whatever to boost your mood-just do not smoke.	157
		QuitNowTXT: Cigarettes do not make the party better. Stay strong and say no when offered a cigarette. You will thank yourself later.	132
Q+11		QuitNowTXT: Do not substitute snacks for cigarettes. Try grapes or carrots if you need something in your mouth. For more information: http://www.nutrition.gov	158
Q+11		QuitNowTXT: Get a little extra support by calling the NCI Quitline: 1-877- 448-7848. It is free and anonymous. Or chat online using LiveHelp: https:// livehelp.cancer.gov	168
Q+11		QuitNowTXT: Smoking is like a bad romance, you have to know when to walk away! Don't sit around missing your old cigs. Curl up with a movie or a book instead.	159
Q+12		QuitNowTXT: Congratulations! Being smokefree means no longer cheating the things you love for something that does not love you. Text STOP 2 stop.	145
Q+12		QuitNowTXT: Almost 2 weeks smokefree! Between 2 weeks and 3 months after quitting, your lungs begin to improve and your heart attack risk begins to drop?	153
Q+12		QuitNowTXT: Play our WordWeather game to beat a craving and see if you can get to 10,000 points! Download the app here: http://go.usa.gov/PJ8	141
Q+13		QuitNowTXT: Remind your friends and family you are quitting. True friends want only what is best for youand that means staying smokefree.	139
Q+13		QuitNowTXT: Nobody likes a dirty mouth. After a few days without ciga- rettes, your smile will be brighter. Quitting smoking will keep your mouth healthy for years to come.	170
Q+13		QuitNowTXT: Many smokers say quitting is the hardest thing they have ever done. When it gets hard, you can text a friend or family member for support.	151
Q+14		QuitNowTXT: Rid yourself of negative energy by working out. Download a new workout app or go to the gym. You might even make a new friend.	138
Q+14		QuitNowTXT: Wow, 2 weeks smokefree! Think about how much time, energy, health, and money you have saved. You deserve to treat yourselfmake today great!	153

46

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+14	SMOKEFREE STATUS	QuitNowTXT: Are you still smokefree? Reply: YES or NO	53
	YES	QuitNowTXT: Great! Keep staying strong and smokefree. We know it is not easy, but it is totally worth it.	105
	NO	QuitNowTXT: We know quitting is hard and sometimes it takes a few tries. Do you want to continue or start over and set a new quit date? Reply: STAY or NEW	154
	STAY	QuitNowTXT: We are glad you stayed! Sometimes we slip, so now you can be prepared if tempted again. Remember, going smokefree is the way to go.	143
	NEW	QuitNowTXT: We will still be here when you are ready. Just visit Smokefree. gov and sign up with your new quit date. You can even sign up again today!	149
Q+15		QuitNowTXT: Loneliness can make it hard, but quitting is the way to go. Let a friend know how they can support you: http://smokefree.gov/social-sup- port.	152
Q+15	CRAVE	QuitNowTXT: Having just one puff of a cigarettes will only feed your cravings and make them stronger. What is your craving level today? Reply: HI, MED, or LOW.	159
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+16		QuitNowTXT: 16 days! Cigarettes never solved a problem for you. You did it yourself. You can do great things, so keep thinking positively. Text STOP 2 stop.	156
Q+16	MOOD	QuitNowTXT: How are you feeling today? Reply with: GOOD, OK, or BAD	67
	GOOD	QuitNowTXT: Glad you are feeling good! Keep up that positive attitude and keep staying strong.	94
	ОК	QuitNowTXT: Hang in there! It could be worse. No one says it will be easy, but they do say it is worth it!	106
	BAD	QuitNowTXT: We know quitting is tough but stay strong! We all have bad days, and you will get through this. Do whatever to boost your mood-just do not smoke.	157
Q+17		QuitNowTXT: You used to pay money for a product that kills you. Bet you are glad that is not you anymore!	105

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+17		QuitNowTXT: Reward the progress you've made! Spend time with friends who have supported you. Go to a smokefree place like the movies or a sporting event.	153
Q+18		QuitNowTXT: Stay away from people or places you associate with smoking. You will find it easier to cope that way (and you will avoid secondhand smoke!)	151
Q+18		QuitNowTXT: Don't smoke when you're bored. Do something you've been putting off instead. Finish that scrapbook, plan a vacation, or get together with a friend.	159
Q+19		QuitNowTXT: Smoking can cause you to miss out on important moments. Write down the things you don't want to miss out on. Add them to your reasons to quit list.	160
Q+19		QuitNowTXT: As Nelson Mandela said, "It always seems impossible until it is done." Never give up and do not be discouraged. Your motivation comes from within.	158
Q+20		QuitNowTXT: Lung capacity increases by 30% after a few weeks without cigarettes! Ride your bike or take a walk. Put your healthy lungs to good use!	147
Q+20		QuitNowTXT: Distract yourself during a craving with physical activity. Re- search shows it can help you stay smokefree and improve your mood.	140
Q+21		QuitNowTXT: 3 weeks smokefree! Reward yourself with a fun activity. Grab a friend and walk to buy some gum, mints, or even some low fat ice cream!	146
Q+21		QuitNowTXT: Some non-smokers find smoking unattractive. You may want to think about how smoking could be hurting your relationships before lighting up.	152
Q+21	SMOKEFREE STATUS	QuitNowTXT: Are you still smokefree? Text back: YES or NO	57
	YES	QuitNowTXT: Great! Keep staying strong and smokefree. We know it is not easy, but it is totally worth it.	105
	NO	QuitNowTXT: We know quitting is hard and sometimes it takes a few tries. Do you want to continue or start over and set a new quit date? Reply: STAY or NEW	154
	STAY	QuitNowTXT: We are glad you stayed! Sometimes we slip, so now you can be prepared if tempted again. Remember, going smokefree is the way to go.	143
	NEW	QuitNowTXT: We will still be here when you are ready. Just visit Smokefree. gov and sign up with your new quit date. You can even sign up again today!	149

48

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+22		QuitNowTXT: Tobacco companies spend more than \$34 million a day con- vincing people to smoke. Imagine all the positive things you could do with all that money!	157
Q+23		QuitNowTXT: The majority of smokers regret starting to smoke. Don't t let the decision to not quit smoking be a regret. Visit Smokefree.gov to quit today.	155
Q+23	MOOD	QuitNowTXT: How are you feeling today? Reply with: GOOD, OK, or BAD	67
	GOOD	QuitNowTXT: Glad you are feeling good! Keep up that positive attitude and keep staying strong.	94
	ОК	QuitNowTXT: Hang in there! It could be worse. No one says it will be easy, but they do say it is worth it!	106
	BAD	QuitNowTXT: We know quitting is tough but stay strong! We all have bad days, and you will get through this. Do whatever to boost your mood-just do not smoke.	157
Q+24		QuitNowTXT: Quitting smoking not only helps your lungs heal, but it also improves your night vision. Text STOP 2 stop.	118
Q+25	CRAVE	QuitNowTXT: Day 25! Congratulations! By this time, most peoples cravings start to fade. What is your craving level? Reply: HI, MED, or LOW	138
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+25		QuitNowTXT: Give your partner a smokefree kiss. They will love your fresh breath & be glad you quit.	100
Q+26		QuitNowTXT: Talk about what you are going through with someone who supports your quit. Remember, your feelings matter.	118
Q+27		QuitNowTXT: Be careful when you go to a party, game, or bar-do not let yourself slip. You have come too far.	108
Q+27		QuitNowTXT: Don't forget to reward yourself for staying smokefree! Use a non-food reward such as going to the movies, dancing, or on a vacation.	144
Q+28		QuitNowTXT: Congrats1 MONTH SMOKEFREE! Major milestone. Throw yourself a party! Tell us about it on Twitter @SmokefreeGov or @Smokefree- Women.	143

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+28		QuitNowTXT: "Today is preparation for someday. Make it count!" Do not forget this moment. Hold onto it for a tough day.	119
Q+28	SMOKEFREE STATUS	QuitNowTXT: Are you still smokefree? Text back: YES or NO	57
	YES	QuitNowTXT: Great! Keep staying strong and smokefree. We know it is not easy, but it is totally worth it.	105
	NO	QuitNowTXT: We know quitting is hard and sometimes it takes a few tries. Do you want to continue or start over and set a new quit date? Reply: STAY or NEW	154
	STAY	QuitNowTXT: We are glad you stayed! Sometimes we slip, so now you can be prepared if tempted again. Remember, going smokefree is the way to go.	143
	NEW	QuitNowTXT: We will still be here when you are ready. Just visit Smokefree. gov and sign up with your new quit date. You can even sign up again today!	149
Q+29		QuitNowTXT: Cigarettes affect your teeth, gums, and breath. Take a trip to the dentist so that others can notice your new bright smile.	135
Q+30		QuitNowTXT: Bad days happen. But smoking on top of a bad day makes it even worse. Do not let stress undo all your hard work. You can deal without smoking.	154
Q+30	MOOD	QuitNowTXT: How are you feeling today? Text back: GOOD, OK, or BAD	66
Q+30	GOOD	QuitNowTXT: Glad you are feeling good! Keep up that positive attitude and keep staying strong.	94
	ОК	QuitNowTXT: Hang in there! It could be worse. No one says it will be easy, but they do say it is worth it!	106
	BAD	QuitNowTXT: We know quitting is tough but stay strong! We all have bad days, and you will get through this. Do whatever to boost your mood-just do not smoke.	157
Q+31		QuitNowTXT: Smokers face an increased risk of sexual problems. Do not let this be you. Stay smokefree!	102
Q+32		QuitNowTXT: Alcohol makes the strongest quitter weak. It is all about choic- es. Your decisions, your health. Text STOP to stop.	126
Q+32	CRAVE	QuitNowTXT: Remember, quitting smoking happens one craving at a time! What is your craving level? Reply: HI, MED, or LOW	120
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141

Day Received	KEYWORD CATEGORY	Message	Character Count
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+33		QuitNowTXT: BREATHE! It might sound cliché, but your brain needs oxygen and deep breaths help. Inhale through nose, exhale through mouth, and repeat 10 times.	158
Q+34		QuitNowTXT: Smoking lite or low tar cigarettes does not lower the risk of heart attacks or lung disease. There is NO safe cigarette.	132
Q+35		QuitNowTXT: Even when you have come this far, triggers can still sneak up on you! Use the skills you have learned to get through your cravings without smoking.	159
Q+35	SMOKEFREE STATUS	QuitNowTXT: How are you doing? Are you still smokefree? Reply: YES or NO	72
	YES	QuitNowTXT: Great! Keep staying strong and smokefree. We know it is not easy, but it is totally worth it.	105
	NO	QuitNowTXT: We know quitting is hard and sometimes it takes a few tries. Do you want to continue or start over and set a new quit date? Reply: STAY or NEW	154
	STAY	QuitNowTXT: We are glad you stayed! Sometimes we slip, so now you can be prepared if tempted again. Remember, going smokefree is the way to go.	143
	NEW	QuitNowTXT: We will still be here when you are ready. Just visit Smokefree. gov and sign up with your new quit date. You can even sign up again today!	149
Q+36		QuitNowTXT: Life knocks you down sometimes but YOU make the choice to get back up. Quitting smoking is no different. Do not look back now.	138
Q+37		QuitNowTXT: Smoking 1 pack of cigarettes a day for a year is about \$2,000! Think about all the other things you could be spending that money on.	144
Q+37	MOOD	QuitNowTXT: You are on your way to being smokefree for good and nearing the end of the program! How are you feeling today? Text: GOOD, OK, or BAD	146
	GOOD	QuitNowTXT: Glad you are feeling good! Keep up that positive attitude and keep staying strong.	94
	ОК	QuitNowTXT: Hang in there! It could be worse. No one says it will be easy, but they do say it is worth it!	106
	BAD	QuitNowTXT: We know quitting is tough but stay strong! We all have bad days, and you will get through this. Do whatever to boost your mood-just do not smoke.	157
Q+38		QuitNowTXT: Arguments may still trigger cravings. For stress relief press your fingers between your eyes and above your nose. Hold for 30 seconds.	146

Day Received	KEYWORD CATEGORY	Message	Character Count
Q+39		QuitNowTXT: If you slip, keep trying to quit. Learn from your mistakes this time. Text STOP to stop.	100
Q+39	CRAVE	QuitNowTXT: Now that you are nearing the end of our text program, what is your craving level? Reply: HI, MED, or LOW.	117
	н	QuitNowTXT: Even the strongest cravings will go away after a few minutes. Focus on something else and remind yourself why you are smokefree.	140
	MED	QuitNowTXT: We know how you are feeling. Think about what you are gain- ing and why you want to quit smoking. Stay focused. It will get easier.	141
	LOW	QuitNowTXT: We are glad you are not missing those cigarettes. Keep staying strong and smokefree. You are on your way to a healthier new you!	140
Q+40		QuitNowTXT: Female smokers lose 13+ years of their life. Now that you are smokefree, encourage a woman to go smokefree, too! http://women. smokefree.gov.	152
Q+41		QuitNowTXT: "Energy & persistence conquer all things." This is the beginning of a new you. It may be hard to stay quit but now you have tools to succeed.	154
Q+42		QuitNowTXT: Congratulations! After 6 weeks, you have completed Quit- NowTXT! Do not forget to check Smokefree.gov for new tips, tools, and resources.	147
Q+42	FINAL DIFFICUL- TY STATUS	QuitNowTXT: You have come a long way and you should be proud of your- self. Do you think it will be hard to stay smokefree? Reply with: EASY, SO-SO, or HARD	154
	EASY	QuitNowTXT: You are on the right track! Quitting smoking is hard but stay confidentyou can do this. Thanks again for joining QuitNowTXT!	138
	SO-SO	QuitNowTXT: Take it 1 day at a time and practice avoiding your triggers. Half of Americans who ever smoked are now ex-smokers. That can be you!	143
	HARD	QuitNowTXT: We know it is hard, but it is a decision you will not regret. Get the support you need and remind yourself of your reasons for being smokefree.	155
Q+72	SMOKEFREE STATUS	Hi, it is QuitNowTXT just checking in! It has been a month. Are you smoke- free or back to smoking? Reply with FREE or BACK. (Text STOP to stop)	142
	FREE	QuitNowTXT: Keep staying strong & smokefreeyou can do it! We know it is not easy but it is worth it. Check Smokefree.gov for new tools, apps, and contests.	157

Day Received	KEYWORD CATEGORY	Message	Character Count
	ВАСК	QuitNowTXT: Sometimes it takes a few tries. Think why you slipped last time and sign up again! Check Smokefree.gov for new tools, apps, and contests!	149
Q+132	SMOKEFREE STATUS	Hi, it is QuitNowTXT again! It has been 3 months. Are you smokefree or back to smoking? Reply with FREE or BACK. (Text STOP to stop)	132
	FREE	QuitNowTXT: Keep staying strong & smokefree-you can do it! We know it is not easy but it is worth it. Check Smokefree.gov for new tools, apps, and contests.	156
	ВАСК	QuitNowTXT: Sometimes it takes a few tries. Think why you slipped last time and sign up again! Check Smokefree.gov for new tools, apps, and contests!	149
Q+222	SMOKEFREE STATUS	QuitNowTXT checking in for the LAST time! It has been 6 months. Are you smokefree or back to smoking? Reply with FREE or BACK. (Text STOP 2 stop)	145
	FREE	QuitNowTXT: Keep staying strong & smokefreeyou can do it! We know it is not easy but it is worth it. Check Smokefree.gov for new tools, apps, and contests.	157
	ВАСК	QuitNowTXT: Sometimes it takes a few tries. Think why you slipped last time and sign up again! Check Smokefree.gov for new tools, apps, and contests!	149

ENGLISH ADULT SMOKEFREETXT LIBRARY Dated 03012013

	User signed up with web form	day	hour	Ch#
	SmokefreeTXT: Welcome to SmokefreeTXT. Congratulations on your decision to quit smoking. To end this program, text STOP to 47848. Standard Message Rates Apply			159
	User signed up with shortcode			
	SmokefreeTXT: Let's get started. We need some info to send msgs that best fit you. Reply with your age & gender (ex. 33 male). Or sign up online: ((http://smokefree. gov/smokefreetxt/Signup.aspx))			157
	SmokefreeTXT: Now it's time to set a quit date. Reply with a date within the next 14 days that you plan to quit smoking (ex. Jan 1). To quit today, text TODAY			160
	SmokefreeTXT: Ok, you are a ((age)) year old ((gender)) who plans to quit on ((Quit Date)). Reply CORRECT or resend your age, gender or quit date.			146
	SmokefreeTXT: Last question. When do you usually smoke cigarettes? (A) Every day; (B) Most days; (C) Some days; or (D) Less than that. Reply A, B, C or D.			153
id	body	day	hour	Ch#
393282	SmokefreeTXT: The countdown begins! 2 weeks until you quit smoking. We are here to help you prepare & follow through. Visit ((smokefree.gov)) to get more info.	-14	9	160
393292	SmokefreeTXT: It is normal to be nervous about quitting. You do not have to rely on willpower alone. We will show you how to quit one craving at a time.	-14	12	152
393302	SmokefreeTXT: Try quitting with a friend. You will have someone to talk to about how you feel, and this support can help keep you on track and motivated.	-13	9	153
393312	SmokefreeTXT: Counseling and medication can double your chances of quitting. Visit ((http://smokefree.gov/methodsexplorer/)) to see your options and decide what is right for you.	-13	12	148
393332	SmokefreeTXT: Stress can make you want to smoke. Knowing your smoking trig- gers will help you stay smokefree. Write down your top 3 & make a plan to avoid them.	-12	9	160
393322	SmokefreeTXT: In the US, tobacco kills more people than AIDS, alcohol, car acci- dents, murders, suicides, drugs and fires combined. Don't be a statistic - quit	-12	12	160
393352	SmokefreeTXT: No tobacco is safe. Cigars, black & milds, hookah, snus & dip have many of the same dangerous health effects as cigarettes, including addiction.	-11	9	159

	User signed up with web form	day	hour	Ch#
393342	SmokefreeTXT: Challenge yourself next time you have the urge to smoke a ciga- rette. Try to resist for 5 minutes or skip it. Think of it as practice for quit day.	-11	12	160
393362	SmokefreeTXT: 10 days until your quit day. Value your future. Quitting at any age adds years to your life. You are not going to regret this. Text STOP to end.	-10	9	158
393372	SmokefreeTXT: Move your body. Exercise is good for you & can help you beat crav- ings. Walking up stairs burns 7 to 10 calories per minute. Take the stairs today!	-10	12	160
393382	SmokefreeTXT: Think of healthy ways to deal with stress & boredom instead of smoking. Go to the gym, take a jog, or walk the dog.	-9	9	130
393392	SmokefreeTXT: Motivation is key. Make a list of your reasons for quitting. Put it in a place you can see it every day. Don't forget why you want to quit.	-9	12	150
393402	SmokefreeTXT: No cigarette is safe. Every puff is doing your body damage. Quitting is the only way to protect yourself. Get the facts: ((http://smokefree.gov/ healthconsequences/)).	-8	9	146
393412	SmokefreeTXT: Tobacco companies spend over a million dollars an hour in the US to market their products. Fight back by quitting smoking. Text STOP to end.	-8	12	154
393432	SmokefreeTXT: One week until quit day! You can learn how to live without ciga- rettes and smoking. You learned to crawl before you walked. It takes time.	-7	9	151
393442	SmokefreeTXT: Calculate how much money you spend on cigs every week, every month, & every year: ((http://smokefree.gov/savings-future.aspx)). Soon, you can use that money for something else.	-7	12	108
393422	SmokefreeTXT: Make them proud! Quitting smoking will set a great example for your friends and family.	-7	15	101
393462	SmokefreeTXT: Life is full of ups & downs. People with friends & family they can count on are happier & healthier. Talk to people you trust if you need support.	-6	9	160
393452	SmokefreeTXT: Guess what, your dog, cat, bird, or iguana can get sick & die from secondhand smoke. It sinks into their fur, feathers, eyes, & skin.	-6	12	148
393482	SmokefreeTXT: You may feel strange when you quit - this is withdrawal. You are addicted to nicotine & your body is used to smoking. These feelings will go away.	-5	9	160
393472	SmokefreeTXT: You are getting closer to the big day. It may help to cut back on the number of cigarettes you smoke. Give it a try.	-5	12	130
393502	SmokefreeTXT: Whether smoked, chewed, or sniffed, tobacco contains nicotine. Nicotine is very addictive. When you quit you will break the cycle of addiction.	-4	9	157
393492	SmokefreeTXT: Smoking makes your breath, clothes, & hands stink. It can also cause you to age more quickly. Learn the benefits of quitting: ((http://smokefree. gov/healthconsequences)).	-4	12	152
393512	SmokefreeTXT: There are people, places, and things that make you want to smoke. Identify your triggers and make a plan to deal with them on quit day.	-3	9	150
393522	SmokefreeTXT: 3 days left until quit day! Eat healthy and exercise. It will reduce stress, boost confidence, & help you feel better all around. Text STOP to end	-3	12	160

	User signed up with web form	day	hour	Ch#
393532	SmokefreeTXT: Take anything that reminds you of smoking out of your home, car, office, etc. Lighters, matches, and ashtrays too. Everything.	-2	9	140
393542	SmokefreeTXT: 2 days to go. Do laundry today. Get that smoky smell out now so you will smell and feel fresh on quit day. Don't forget your jackets.	-2	12	147
393552	SmokefreeTXT: Drinking lots of water on quit day will help you fight off cravings and stay hydrated. Get a water bottle you can refill & carry it with you.	-1	9	155
393562	SmokefreeTXT: Tomorrow is quit day! Toss your pack in the trash & get plenty of sleep. For extra support, text these keywords at any time: CRAVE, MOOD, or SLIP	-1	12	159
393592	SmokefreeTXT: Today is your quit day. The big day is here- you can do this! You are stronger than you think so stay positive. Are you ready? Reply: READY or NOT	0	9	160
393582	SmokefreeTXT: Text your supporters & remind them of the big day. Make sure they have your back. We do! Text back CRAVE, MOOD, or SLIP for more support anytime.	0	12	159
393602	SmokefreeTXT: It is very important to get rid of your cigarettes & lighters. Throw them away now if you are still holding onto them. No excuses.	0	15	145
393572	SmokefreeTXT: Day 1 is almost over. Get step-by-step quit info anytime with the QuitGuide: ((http://smokefree.gov/apps/quitguideApp.aspx)). Did you quit today? Reply with: YES or NO	0	18	143
393622	SmokefreeTXT: 24 hours smokefree. That is a MAJOR milestone! Be sure to reward yourself. Give, say, or do something nice for yourself to celebrate your success.	1	9	160
393632	SmokefreeTXT: Cravings are real. They will not go away immediately, but giving in will only make them stronger. Any cravings today? Reply: HI, MED, or LOW	1	12	154
393612	SmokefreeTXT: You have good reasons for quitting. Say them out loud daily to help keep you on track, especially when you are feeling low.	1	15	137
393642	SmokefreeTXT: The first days are the hardest. Don't forget to visit ((Smokefree.gov)) or ((Women.Smokefree.gov)) for extra help and more information.	1	18	128
393672	SmokefreeTXT: Feelings can be a smoking trigger. If you feel cranky or grouchy, it is only temporary, so stay strong. How is your mood? Reply: GOOD, OK, or BAD	2	9	159
393662	SmokefreeTXT: Do not do it alone. Tell your friends how they can help. They may not know how unless you tell them. For more info on social support: ((http://smokefree.gov/helpQuit.aspx))	2	12	159
393652	SmokefreeTXT: You can get extra help anytime you need it. Text one of these key- words at any time & you will receive a special message: CRAVE, MOOD, or SLIP	2	15	155
393692	SmokefreeTXT: 3 days smokefree! Smoking dulls taste buds. Luckily, your taste buds regenerate after 48 hours without cigarettes. Treat yourself to a nice meal.	3	9	159
393702	SmokefreeTXT: Wait 5 minutes for cravings to pass. Keep your mouth busy with mints, straws, or sunflower seeds. Any cravings today? Reply with: HI, MED, or LOW	3	12	159

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	User signed up with web form	day	hour	Ch#
393682	SmokefreeTXT: Stay away from people/places that make you think of smoking. You will find it easier to cope that way (and you will avoid secondhand smoke).	3	15	154
393712	SmokefreeTXT: You might slip and smoke. Don't let one slip be an excuse to start smoking again. Learn from the situation ASAP and move on.	3	18	139
393742	SmokefreeTXT: 4 days smokefree. You got this. Try to relax. Find an activity that is relaxing to you like listening to music, walking, or a hot bath.	4	9	150
393732	SmokefreeTXT: ""It's hard to fail, but worse to never have tried to succeed."" If you need motivation connect with @SmokefreeGov or @SmokefreeWomen on Twitter.	4	12	159
393722	SmokefreeTXT: If you feel jittery, avoid drinking coffee or caffeinated beverages. Caffeine can make symptoms of nicotine withdrawal worse.	4	15	139
393762	SmokefreeTXT: Day 5 - stay positive. Don't let things get you down. Your journey to smokefree-dom might be a struggle, but looking back will be amazing.	5	9	152
393752	SmokefreeTXT: Cravings will get weaker and less frequent with every day that you don't smoke. How strong are your urges to smoke? Reply: HI, MED, or LOW	5	12	152
393772	SmokefreeTXT: If friends and family smoke, ask them not to smoke or leave their cigs near you. Change the scenery. Go for a bike ride to ride out the craving.	5	15	158
393792	SmokefreeTXT: Stress and anger are smoking triggers. Try a good laugh. Watch a comedy on TV or check out some funny videos on YouTube.	6	9	134
393802	SmokefreeTXT: 6 days & counting. Make time to exercise each day. Try yoga - it increases oxygen to the brain, lowers stress, calms nerves, & improves your mood.	6	12	160
393812	SmokefreeTXT: Counseling & medication can increase your chances of quitting. Talk to your doctor about your best options & visit ((http://smokefree.gov/method- sexplorer/)) for more info.	6	15	155
393782	SmokefreeTXT: The road to quitting can be bumpy, but supportive friends/family and new hobbies can help. Text CRAVE, MOOD, or SLIP any time for extra support.	6	18	158
393822	SmokefreeTXT: 1 week smokefree! Don't look back now. Mark your calendar and do something special today to celebrate this huge milestone. You deserve it.	7	9	152
393832	SmokefreeTXT: When you need a distraction, grab a friend, head to the theater, and enjoy a handful of popcorn. And bonus: movie theaters are smokefree.	7	12	151
393842	SmokefreeTXT: Hey there, are you still smokefree? Let us know. Text back: YES or NO	7	15	83
393852	SmokefreeTXT: True friends support your choice to stay smokefree. The wise Dr. Seuss once said, ""Those who mind don't matter & those who matter don't mind.""	8	9	158
393862	SmokefreeTXT: Try this trick to deal w/ cravings. Breathe in. Hold for 5 seconds. Breathe out. Repeat. What is your craving level now? Reply: HI, MED, or LOW	8	12	157

	User signed up with web form	day	hour	Ch#
393872	SmokefreeTXT: Athletes & sports fans, you will want to know that quitting smoking not only makes your lungs stronger, but speeds up recovery time from injuries.	8	15	160
393882	SmokefreeTXT: Quitting isn't about what you are giving up; it's about what you are gaining. Confidence, pride, improved health, & an investment in your future.	9	9	159
393892	SmokefreeTXT: Good thing being smokefree means no more smoking in cars. You get 8 times more exposure in a car even with the windows rolled down.	9	12	145
393902	SmokefreeTXT: Jab, jab, punch! Visit your local gym or YMCA. Try taking boxing classes. Not only is it a great stress reliever but it's also an awesome workout.	9	15	160
393912	SmokefreeTXT: It has been 9 days since you gave up smoking. Congrats! How is your mood today? Text back: GOOD, OK, or BAD	10	9	121
393922	SmokefreeTXT: Cigarettes don't make the bar or party any better. Say no or walk away when your friends or family light up. You will thank yourself later.	10	12	153
393932	SmokefreeTXT: When cravings hit, focus on something else. Say the alphabet back- wards or list all 50 states along with their capitals. Try it. Text STOP to end.	10	15	159
393942	SmokefreeTXT: If you want more than texts, call the NCI Quitline: 1-877-448-7848. It is free and anonymous. Or chat online with LiveHelp: ((https://livehelp.cancer. gov))	11	9	159
393952	SmokefreeTXT: Smoking is like a bad romance - you have to know when to walk away. If you still miss your old cigs, curl up with a good book/movie instead.	11	12	154
393962	SmokefreeTXT: Don't substitute junk food for cigarettes. Try grapes, carrots, or gum if you need something in your mouth. More on healthy eating: ((www.nutrition. gov)).	11	15	158
393972	SmokefreeTXT: Congratulations! Being smokefree means no longer cheating the things you love for something that doesn't love you back.	12	9	134
393982	SmokefreeTXT: Almost 2 weeks smokefree. By now your lungs are beginning to improve and your risk of having a heart attack has dropped.	12	12	134
393992	SmokefreeTXT: Play our WordWeather game to beat a craving. Download it today: ((http://teen.smokefree.gov/wordWeatherApp.aspx)). Game on!	12	15	96
394002	SmokefreeTXT: Remind your friends and family that you are quitting. True friends want only what is best for you - and that means staying smokefree.	13	9	147
394012	SmokefreeTXT: Nobody likes a dirty mouth. Quitting smoking helps clean it out, keeping it healthy and kissable for years to come.	13	12	130
394022	SmokefreeTXT: Many smokers say quitting is the hardest thing they have ever done. When it gets hard, you can text CRAVE, MOOD, or SLIP for support.	13	15	147
394032	SmokefreeTXT: Wow, 2 weeks smokefree! Think about how much time, energy, health, & money you have saved. You deserve to treat yourself - make today awesome.	14	9	156

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	User signed up with web form	day	hour	Ch#
394042	SmokefreeTXT: Get physical. Rid yourself of negative energy by working up a sweat. Download a new workout app or hit the gym to get your stress down.	14	12	149
394052	SmokefreeTXT: Hi there. Are you still smokefree? Reply: YES or NO	14	15	65
394072	SmokefreeTXT: Loneliness can make quitting hard, but smokefree is the way to go. Send a friend an e-card to ask for their company & support: ((http://smokefree.gov/ ecards/index.aspx)).	15	9	152
394062	SmokefreeTXT: You may be tempted to have just 1 puff. Don't. It'll only feed your craving & make it stronger. How are your cravings? Text back: HI, MED, or LOW	15	12	159
394082	SmokefreeTXT: 16 days down! Cigs never solved a problem for you. You did it your- self. You can do great things, so keep thinking positively. Text STOP to end.	16	9	157
394092	SmokefreeTXT: How is your mood today? Let us know. Reply: GOOD, OK, or BAD	16	12	74
394102	SmokefreeTXT: Sweet dreams. Quitting smoking can help you get a better night's sleep. Non-smokers sleep more deeply and wake up feeling more rested.	17	9	148
394112	SmokefreeTXT: Reward yourself for the progress you made. Spend time with sup- portive friends this weekend. Try a movie, sporting event, or a smokefree dinner.	17	12	157
394122	SmokefreeTXT: Triggers may still tempt you, but you know better by now. Stop smoky thinking by talking back: ((http://smokefree.gov/topic-benefits-smoky. aspx)).	18	9	122
394132	SmokefreeTXT: Don't let boredom get you down. Finish a project you have been putting off, like a photo album or home improvement project.	18	12	137
394142	SmokefreeTXT: Most smokers spend about an hour per day smoking. Now that you don't have to take smoke breaks, you have more time for activities that you enjoy.	19	9	159
394152	SmokefreeTXT: As Nelson Mandela says, ""It always seems impossible until it's done."" Never give up & don't be discouraged. Your motivation comes from within.	19	12	156
394162	SmokefreeTXT: You should be breathing easier after a few weeks without ciga- rettes. Put your healthy lungs to good use and take a walk, jog, or bike ride.	20	9	153
394172	SmokefreeTXT: Stay positive. Try not to blame or punish yourself if you slip. Don't think of quitting as all or none. Take it one day at a time.	20	12	144
394202	SmokefreeTXT: Wow 3 weeks smokefree. Treat yourself to something new as a reward, like new shoes. Just don't light up to celebrate; that is a slippery slope.	21	9	157
394182	SmokefreeTXT: Smokers have bigger bellies than non-smokers. Quitting can help reduce belly fat and lower your risk of diabetes. Text STOP to end.	21	12	145
394192	SmokefreeTXT: Checking in again. Are you still quit? Text back: YES or NO	21	15	73
394212	SmokefreeTXT: Tobacco companies spend more than \$34 million a day encour- aging people to smoke. Imagine the positive things that could be done with that	22	9	158

money!

	User signed up with web form	day	hour	Ch#
394232	SmokefreeTXT: Over half of all smokers in the US have already quit. If they did it, you can too!	23	9	98
394222	SmokefreeTXT: Hi! How is your mood today? Text back: GOOD, OK, or BAD	23	12	69
394242	SmokefreeTXT: Strong healthy bones are another benefit of quitting. Quitting smoking reduces your risk of bone fractures now & later in life. Text STOP to end.	24	9	159
394252	SmokefreeTXT: It is day 25. By this time, most people's cravings start to fade. Still having cravings? Text back with: HI, MED, or LOW	25	9	134
394262	SmokefreeTXT: Every single puff of a cigarette causes damage to your DNA, which can cause cancer. Stay quit to lower your chances of getting cancer.	25	12	149
394272	SmokefreeTXT: Talk about what you are going through. Your feelings matter. Share your struggles & successes, both big & small, with someone who supports you.	26	9	157
394292	SmokefreeTXT: Celebrations can be a smoking trigger. Be careful when you go to a party, game, or bar. Don't let yourself slip. You have come too far.	27	9	149
394282	SmokefreeTXT: Rewarding yourself for staying smokefree can keep you motivated. Use a non-food reward such as going to the movies, dancing, or on a vacation.	27	12	156
394312	SmokefreeTXT: Congratulations - 1 month smokefree! That is a major milestone. Tell us about it on Twitter @SmokefreeGov or @SmokefreeWomen	28	9	138
394322	SmokefreeTXT: ""Today is preparation for someday. Make it count!"" Don't forget this moment. Hold onto it and remind yourself of it on a tough day.	28	12	147
394302	SmokefreeTXT: Hey are you still smokefree? Text back: YES or NO	28	15	63
394332	SmokefreeTXT: Smokers are more likely to have cavities & lose teeth at a younger age. Visit your dentist to stay on top of your oral health since you quit.	29	9	156
394352	SmokefreeTXT: Bad days happen. But smoking on top of a bad day makes it even worse. Don't let stress undo all your hard work. You can deal without cigarettes.	30	9	159
394342	SmokefreeTXT: We hope your mood is improving with time & you are feeling better about staying quit. How is your mood today? Text back: GOOD, OK, or BAD	30	12	151
394362	SmokefreeTXT: Smokers face an increased risk of sexual problems. Quitting can improve the chances of having a healthy sexual life for men & women.	31	9	148
394372	SmokefreeTXT: Alcohol can make the strongest quitter weak. Remember, it is all about choices. Your decisions - your health.	32	9	123
394382	SmokefreeTXT: Remember, quitting smoking happens one craving at a time. Hav- ing any cravings? Reply: HI, MED, or LOW	32	12	115
394392	SmokefreeTXT: Next time you are bored, enjoy some good food & company. Light up your BBQ grills or stove instead of a cig, and have a potluck with friends.	33	9	156

	User signed up with web form	day	hour	Ch#
394402	SmokefreeTXT: Light, low tar, and natural cigarettes are not safer. These do not low- er the risk of heart attacks or lung disease. There is NO safe cigarette.	34	9	157
394422	SmokefreeTXT: Even when you have come this far, triggers can still sneak up on you. Identify any triggers that you still have & make a plan to overcome them.	35	9	157
394412	SmokefreeTXT: Hang in there. Are you still smokefree? Reply: YES or NO	35	12	71
394432	SmokefreeTXT: Life knocks you down sometimes but YOU make the choice to get back up. Quitting smoking is no different. Keep on keeping on. Don't look back now.	36	9	159
394452	SmokefreeTXT: Think of how much money have you saved by not smoking. One pack a day for a year is over \$1,900. ((http://smokefree.gov/savings-future.aspx)) Text STOP to end	37	9	143
394442	SmokefreeTXT: You are well on your way to being smokefree for good & nearing the end of the SmokefreeTXT program. How is your mood today? Text: GOOD, OK, or BAD	37	12	160
394462	SmokefreeTXT: Arguments with friends & family may still trigger you. For stress relief, press your fingers between your eyes & above nose. Hold for 30 seconds.	38	9	159
394472	SmokefreeTXT: Remember, if you slip & smoke a cigarette, don't use it as a reason to give up. You have come too far. Learn from the mistake and keep going.	39	9	156
394482	SmokefreeTXT: Last time we are going to ask - having any cravings now that you are nearing the end of the SmokefreeTXT program? Reply: HI, MED, or LOW	39	12	150
394492	SmokefreeTXT: On average, smokers die 10 years earlier than non-smokers. Now that you are smokefree, pay it forward. Encourage someone else to go smokefree.	40	9	156
394502	SmokefreeTXT: ""Energy & persistence conquer all things."" This is the beginning of a new you. It may be hard to stay quit, but now you have tools to succeed.	41	9	156
394512	SmokefreeTXT: You have come a long way, and you should be proud of yourself. Do you think it will be hard to stay smokefree? Reply with: EASY, SO SO, or HARD	42	9	145
394522	SmokefreeTXT: Congrats! After 6 weeks, you have completed SmokefreeTXT! Visit ((http://smokefree.gov/)) for more tools. Are you still smokefree? Reply YES or NO	42	12	145
394532	Hi, it is SmokefreeTXT just checking in! It has been a month. Are you smokefree or back to smoking? Reply with FREE or BACK. (Text STOP to end)	72	9	143
394542	Hi, it is SmokefreeTXT again! It has been 3 months. Are you smokefree or back to smoking? Reply with FREE or BACK. (Text STOP to end)	132	9	133
394552	SmokefreeTXT checking in for the LAST time! It has been 6 months. Are you smoke- free or back to smoking? Reply with FREE or BACK. (Text STOP to end)	222	9	147

Unprompted Keywords: Crave, Mood, Slip

Craving Random Responses (10 total)

SmokefreeTXT: Cravings are tough, but you can do this. Avoid big triggers for now & focus on beating smaller ones. Practice makes perfect.

SmokefreeTXT: If you need extra support, call 1-877-448-7848 & talk to a quit coach. It's free & anonymous. Or chat online using LiveHelp: ((https://livehelp.cancer.gov))

SmokefreeTXT: We know the urge to smoke can be overwhelming at times. Hang in there! Cravings get weaker and less frequent with every day that you don't smoke.

SmokefreeTXT: Smoking just 1 cig may seem like the answer, but you know better. Stay strong. Cravings fade without smoking, & you will be proud you stayed quit.

SmokefreeTXT: Don't let a craving stop you in your tracks. Run, walk, or do jumping jacks. Get your blood pumping to make the urge to smoke pass more quickly.

SmokefreeTXT: Cravings are not the boss of you. Fight back! Crush the urge to smoke. Drink cold water, have a strong mint, or use mouthwash. It really works.

SmokefreeTXT: Don't feed a craving by smoking! Starve it. Every time you resist the urge to smoke, your cravings get weaker. So stick to your smokefree plan!

SmokefreeTXT: If your cravings always hit at the same time, then mix up your routine. Knowing your triggers will help you beat them & the cravings.

SmokefreeTXT: Deep breaths. Even the strongest craving will go away in a few minutes. Quitting smoking happens one craving at a time, one day at a time.

SmokefreeTXT: The urge to smoke will pass. Focus on something else. Distract yourself for 10 min & see how you feel. If the urge is still there, try again.

Slip Random Responses (10 total)

SmokefreeTXT: Hey, quitting smoking is a tough process & there are going to be bumps along the way. Don't give up. Look how far you have already come!

SmokefreeTXT: Do not let one slip be an excuse to give up. Try again. Figure out what triggered your slip and find ways to avoid it next time.

SmokefreeTXT: Slips happen. Don't beat yourself up over it. Like anything tough, you learn as you go. Use right now as a time to restart & get back on track.

SmokefreeTXT: So you slipped. Quitting is not easy, & many people need several attempts before they win the battle over cigarettes. We are here for you.

SmokefreeTXT: Quitting is tough & mistakes are bound to happen. The most important thing is to keep going. Learn from this slip. Forgive yourself. Now move on.

SmokefreeTXT: Don't smoke that next cig. Get back on track. Call 1-877-448-7848 & talk to a quit coach. Or chat online using LiveHelp: ((https://livehelp.cancer.gov))

SmokefreeTXT: Whatever the reason for slipping, it isn't good enough to keep smoking for the rest of your life. Pick yourself up & avoid the temptation next time.

SmokefreeTXT: Don't let one cigarette lead to another. Learning your triggers will help you stay on track. Keep on going. You CAN do this.

SmokefreeTXT: So you slipped. That does not mean you failed. Take this opportunity to learn from your mistake. You will be stronger next time.

SmokefreeTXT: One slip is no reason to go back to smoking. You have come too far to give up now. We can help. For more support visit ((http://smokefree.gov/)).

Mood Random Responses (10 total)

SmokefreeTXT: When stress has you down, turning to cigarettes is not the answer. Call/text family or friends instead. Ask them to help you stay on track.

SmokefreeTXT: Feeling stressed is the #1 reason people start smoking again after they quit. Take a 5 min break & step back from what is happening.

SmokefreeTXT: Quitting is too important to let stress wear you down. Take control! Build up your strength by eating veggies, drinking water, & getting sleep.

SmokefreeTXT: Feeling cranky is normal. But smoking isn't the answer. Find healthy ways to blow off steam. Take a walk, crank your iPod, or call a friend.

SmokefreeTXT: We know it's hard, but hang in there. Remember, a smokefree life means a lower risk of heart attacks, lung cancer, cavities, and wrinkles.

SmokefreeTXT: Make time to work out. Exercise will boost your mood & keep you fit. Challenge yourself to exercise for 10 minutes right now.

SmokefreeTXT: We know it's tempting to smoke when you feel like this. But smoking will make things worse, not better. Stay focused - you can do this.

SmokefreeTXT: Quitting isn't easy, but the problems from smoking are worse. Remind yourself why you are smokefree. All your hard work will lead to huge rewards.

SmokefreeTXT: Do what makes you happy. Listen to music, spend time with your pet, or text a friend. Whatever it is - DO IT. Just do not smoke.

SmokefreeTXT: If you are feeling down, call 1-877-448-7848 & talk to a quit coach. Its free & anonymous. Or chat online using LiveHelp: ((https://livehelp.cancer.gov)) Be He@lthy

Be Mobile

Annex 3: mHealth for NCDs initiative Technical Workshop: Template Agenda

Workshop objectives

- Develop a complete understanding of the mHealth intervention among all stakeholders
- Discuss and review the first draft of the mHealth Planning and Implementation Document
- Discuss and develop a working plan for the implementation of the mHealth intervention
- Present the mHealth project plan to a wider group of potential partners and stakeholders and discuss specific collaboration opportunities.

Expected Results

- First complete draft of the country implementation plan based on the template PID
- Agreed plan for the pilot and launch
- Detailed action plan for the next quarter

Pre-requirements

- Technical working group established
- Working draft of the plan developed based on the PID
- Background documents and working draft shared with all participants at least a week ahead of the workshop

Suggested List of participants

- MoH Senior Program Lead
- MoH coordinating team from specific NCD Disease Program, eHealth , Health promotion and other relevant groups
- MoH technical focal points

- MoICT focal point and support team
- eGovernance/MoPlanning (if relevant)
- Main Public Health Academic agency/ies participants
- Key Civil society participants relevant to the intervention
- Any other in country champions
- WHO and ITU country focal point, regional and/or HQ representative
- Consumer/Patient organization representatives
- · Any other relevant stakeholders

Suggested structure of the workshop:

The workshop should be structured ideally over a period of $2\frac{1}{2}$ days .

Day1 (first half)

Keynote and invitation followed by:

Presentations on:

- » Overview of the NCD burden
- » Overview of the mHealth for NCDs initiative
- » Key objectives of the workshop and expected outcomes
- » (This presentation should set out the break out groups and the relevant sections for each of the following broad topic areas of the PID)
 - Needs Assessment
 - Understanding Technical Advisory Group roles and responsibilities

- Understanding Project management team composition and its roles and responsibilities
- Operational plan
- Content adaptation / algorithm design and adaptation
- Technology adaptation and regulatory needs
- Promotion, marketing and launch event
- Financing
- Monitoring and evaluation

The participants need to be split out into 2 or 3 groups with relevant expertise

The topics listed above should be split between these groups based on relevant expertise

Each group should have a moderator and a note taker

Each group would work on their specific sections from the above topics building on the zero draft document which would have been shared already.

In each session half time should be used to work through 1 or 2 sections, the second half should be to bring together the group to review the discussion as a whole

The recommended approach is to use human centric design approach

Day 1 (second half)

For the first hour of this session

Group 1 works on detailing the needs assessment section,

Group 2 works on Technical advisory group roles and responsibilities

Group 3 works on understanding Project management team composition

In the second hour and half of the session, all groups come together and each moderator presents the section and shares the questions/discussion with the group, this allows a full understanding between all stakeholders

Day 2 (1st quarter)

Opening with a couple of presentations on actual implementation and technical content from experts in the group

(2nd and 3rd quarter)

Group work in the same pattern as from day 1 with the objective to complete the document by 2nd Tea break of the day.

(4th quarter)

The last session of the day after the 2nd Tea break would focus on compiling all the feedback in

Day 3

Using the plan, this may entail working in a smaller focused group or the complete group to:

- Development of timeline, budget and operational milestones for the year
- Development of plan for the pilot and launch
- Development of a detailed action plan for the next quarter

If of relevance, a session or half day could be planned to invite private sector and other donor agencies for raising interest in supporting the national program.

Resources and recommended reading

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