



MHERO MESSAGE AND FLOW DEVELOPMENT TIPS: ASKING THE RIGHT QUESTIONS

DESIGNING QUESTIONS IN RAPIDPRO

When creating your questions, think about the data analysis process. Will you have time to review a lot of free text responses, or would you rather have multiple choice responses or Yes/No answers which are faster to analyze?

When you ask a question in the workflow, **be sure to only ask one question at a time.** For example:

- A poorly written question is: *"Is your health facility providing family planning and child wellness services?"*
- A better question would be: *"Is your health facility providing family planning services?"* followed by a second question asking whether the facility is providing child wellness services.

Make sure there are no ambiguous words in your questions. For example:

- An ambiguous question is *"What commodities do you use regularly? a) male condoms b) IUDs c) pills?"* as the term "regularly" is not defined and can be interpreted many different ways by health workers.
- A better question would be *"What commodities do you use on a monthly basis? a) male condoms b) IUDs c) pills?"*

Always include guidance on how to answer a question. Try to be clear regarding the types of responses you're looking for. We advise including detailed instructions on how the health worker should respond in each question to increase response accuracy.

- Think about the exact information you are hoping to receive from health workers and ask very clear and concise questions that will elicit this information. To illustrate:
 - With a multiple-choice question, explain that the response should be only the letter that corresponds to the choice:



What was the main reason you did not reach your weekly targets?

- A) Illness B) Family Issues C) Other professional responsibilities
- D) Patient hesitancy E) Lack of transportation F) Curfew
- G) Something else

Please reply with the letter that corresponds to the most significant reason.

- If you would like the health worker to respond “Yes” or “No,” end the message with:

Have you experienced any of the following symptoms in the last 24 hours?

Loss of taste/smell, headache, fever, persistent cough, shortness of breath, chest pain, diarrhea, unusual fatigue, or loss of appetite

Please reply with YES if you have experienced one or more of these symptoms or reply with NO if you have not experienced any of these symptoms.

- Give the date format when asking a question about date:

Please provide the patient’s birth date in this format: DDMMYYYY

- Don’t ask an open-ended question but then tell respondents to respond with either Yes or No.
- In the “Wait for Response” node you can set rules for responses to ensure responses are realistic and relevant, as well as formatted correctly. To illustrate:
 - For a question that asks the age of a person, you can limit responses to being between the numbers 0 and 100.

- For a question that asks the birth date of the health worker, you can limit responses to be before a certain date (input as today + ___ days). Since we would assume that a health worker is over 18 years old ($365 * 18 = 6,570$), you would input “today + 6,570 days.”
- For questions that ask the health worker to add or confirm a contact field, the text they input will need to match exactly.

When creating response types, **be sure to include multiple spelling variations.** For example, if you are looking for “Yes,” include “Ye,” “Y,” and “Yea” as accepted responses for the answer “Yes.” RapidPro is not case sensitive so upper- and lower-case answers are accepted.

Wait for Response

When a contact arrives at this point in your flow...

Wait for the contact to respond

If the message response...

has any of the words: Yes, Y, Ye, Yea, Yeah categorize as: Yes

has any of the words: No, N, Nope, None categorize as: No

has any of the words: categorize as:

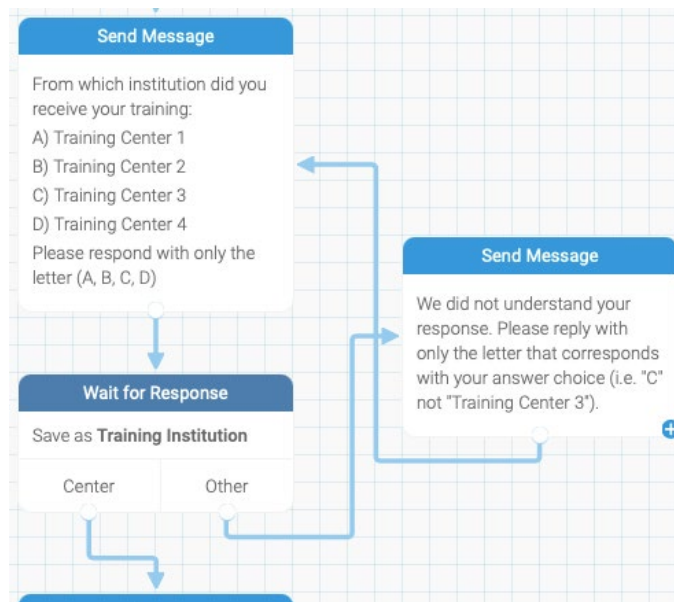
Result Name: Direct patient contact

By naming the result, you can reference it later using @results.direct_patient_contact

Continue when there is no response...

Cancel **Ok**

Redirect errant responses: In rare instances, a contact may misinterpret a question or command and respond with a value that doesn't match the response rules you've created. To redirect responses, you may create a connection from the "Other" category to a node that reiterates the correct response format and then creates a connection back to the initial node:



- When designing questions with multiple choice responses, pay attention to the "Other" response category that is generated under "Wait for Response," as this gives you the option to re-ask questions when the responses received do not conform to response options you define. Include a text box with a response that says something similar to "We are sorry. We do not understand your response. Please answer Yes or No." or "We are sorry. We do not understand your response. Please answer A, B, C, or D." Connect this response back to the original question so the health worker can answer again.
- This will ensure that all responses will be correctly formatted, and you will not have to do intensive data cleaning or analysis of responses.

Name each response so it is easy to identify which question they belong to when doing analysis. For example, if you ask, "How many COVID vaccinations did your facility deliver last week?" the response title could be "COVID vaccinations delivered."

Wait for Response

When a contact arrives at this point in your flow...

Wait for the contact to respond

If the message response...

has some text categorize as

has any of the words categorize as

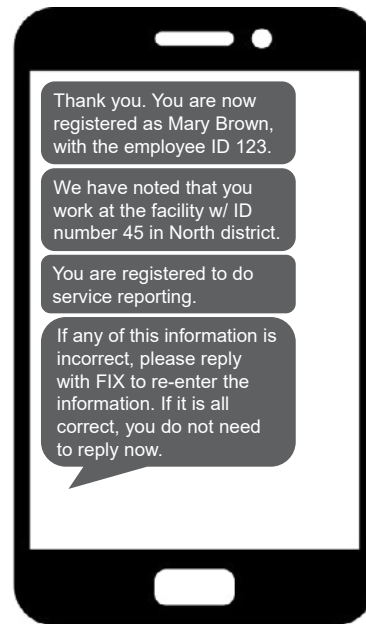
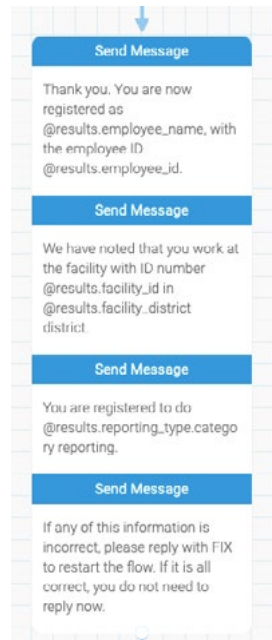
Result Name

Family planning methods provided

By naming the result, you can reference it later using @results.family_planning_methods_provided

Continue when there is no response... Cancel Ok

At the end of the flow **you can send a message that restates the responses submitted by the health worker** so that they can review the information they submitted. This is done by using the @results.[result name] variable.

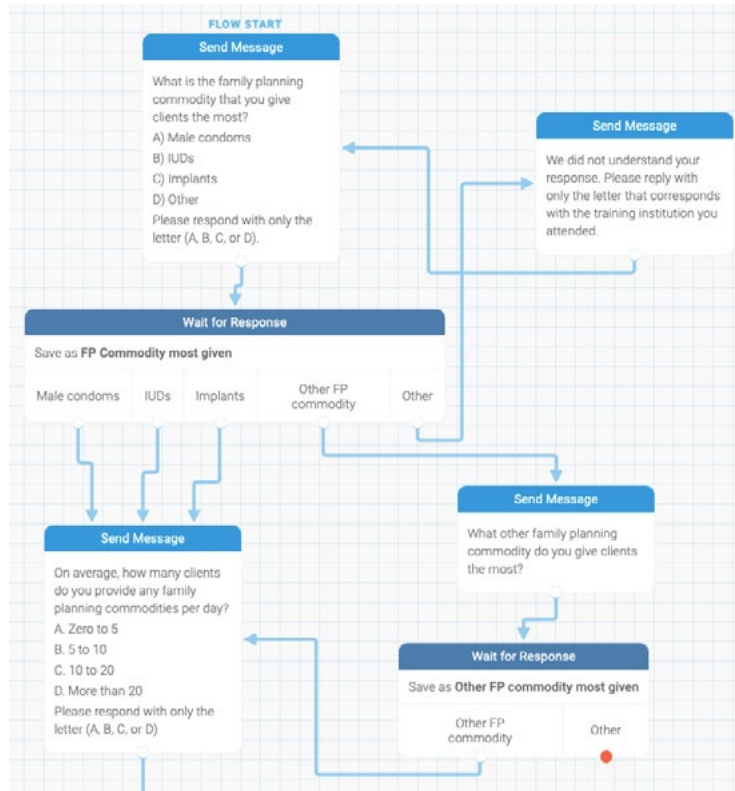


Best question types for SMS	Challenging question types via SMS
<ul style="list-style-type: none"> • Dichotomous (Yes/No, True/False) • Multiple choice • Likert scale (very unlikely to very likely, very dissatisfied to very satisfied) • Numerical • Date/time • Categorical (keyword/phrase) • Contact field 	<ul style="list-style-type: none"> • Multiple choice with an option to select all that apply • Rank order • Open-ended (text or numeric)

TIPS RELATED TO SPECIFIC QUESTION TYPES

You can create multiple choice questions in RapidPro. To do so, ask a question and then label the choices with letters that health workers can respond with, making it easy to analyze their responses. For example, you can ask: *“What is the family planning commodity that you give clients the most? A. Male condoms B. IUDs C. Implants or D. other.”*

- Health workers should respond with A, B, C, or D for easy analysis.
- Your “Wait for Response” node for this question should be set up to capture the responses A, B, C, and D.
- You could also create a follow-up question for health workers who answer D, so that they can explain what other family planning commodities are distributed.



For questions that ask users to select multiple options from a list of choices, **you can either break the question into multiple yes/no questions or ask an open-ended question.** RapidPro does not have the capability to capture more than one multiple choice response. For example, if you want to ask, *“Which of the following family planning methods do you experience stockouts with? A. Implants, B. IUDs, or C. Male condoms?”* You could do one of the following:

- Ask the following three Yes/No questions:
 - *“Do you experience stockouts with implants? Please answer Yes or No.”*
 - *“Do you experience stockouts with IUDs? Please answer Yes or No.”*
 - *“Do you experience stockouts with male condoms? Please answer Yes or No.”*
- Ask: *“Which family planning methods do you experience stockouts with? Please write out the names of all methods.”* Note: this question will require more data cleaning (analysis of free text answers).

Contact field questions allow you to confirm or add information to a health worker's record. This can be done by asking a Yes/No question (*"In our records, your name is @contact.name. If this is correct, please reply with YES. If it is incorrect, reply with NO."*) or asking a health worker to send the information that should populate their record (*"Please send the name of the facility where you work."*). Note that if you ask the health worker to input information for a particular field, the text that they write will be automatically added to their record without any kind of verification. However, you can go back to review new information added to contact records to ensure that it is valid (relevant, spelled/formatted correctly, etc.).

In our records, your name is John Johnson. If this is correct, please reply with YES. If it is incorrect, reply with NO.

For open-ended questions, the response rules should be only "has some text" or "has a number."

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