



# Community Health Toolkit App Configuration: Best Practices

# Form Best Practices

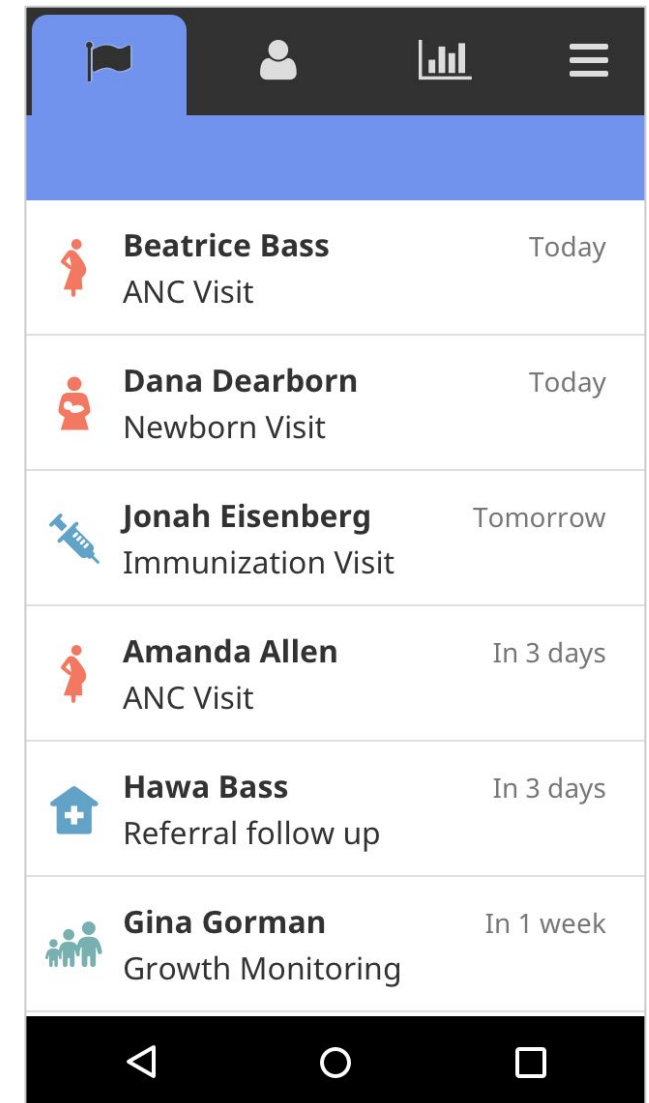
# Form Best Practices: Overview

We use forms to build the **Tasks**, **Care Guides**, and **Reports** that take health workers through care protocols and provide decision support for their interactions with patients.

In this context, a form is any document with questions and blank spaces or selectable options for answers. Forms can be found in many parts of your app including the **Tasks**, **People**, and **Reports** tabs

While both Tasks and Reports are build with forms, there are key differences. Tasks are blank forms that need to be completed, while Reports are forms that have already been submitted. When a Task is completed and submitted, it automatically becomes a Report.

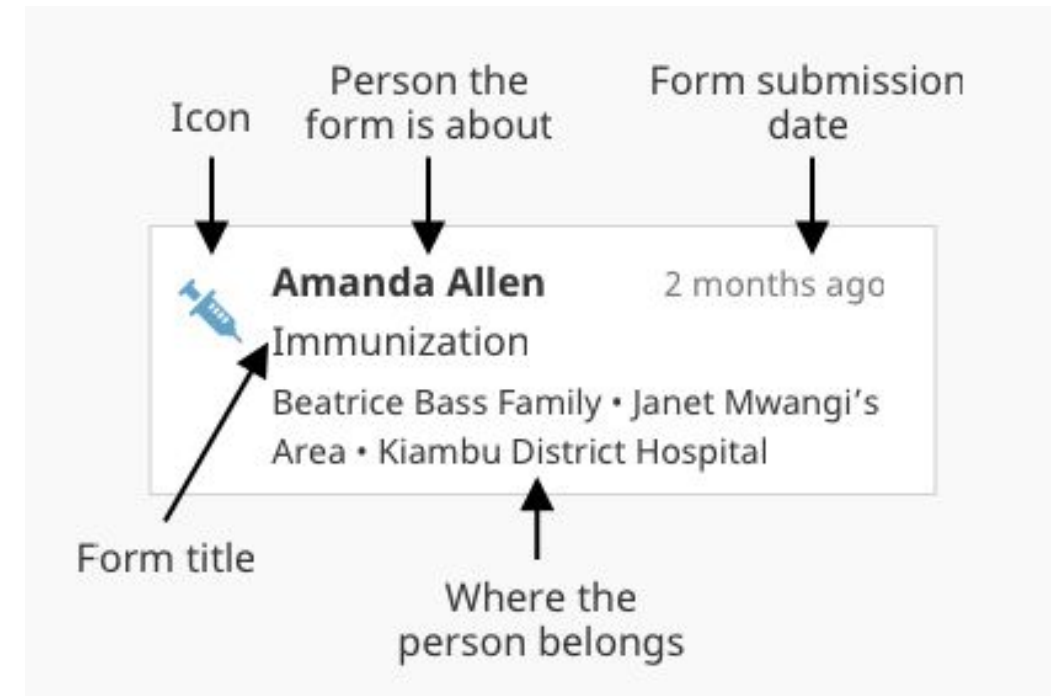
**Note:** The icons and titles you choose for Tasks remain the same when they become Reports.



# Form Best Practices: Anatomy of a Report

The first line of bold text is the **name** of the person whom the Report is about. The second line of text is the **title** of the Report, and the third line of text is the hierarchy of **place** to which that person belongs. In the upper right corner, a **timestamp** displays when the Report was submitted.

Reports are sorted by submission date, with the most recently submitted Reports at the top. If a Report is unread, the timestamp will be bold blue and there will be a horizontal blue line above it.

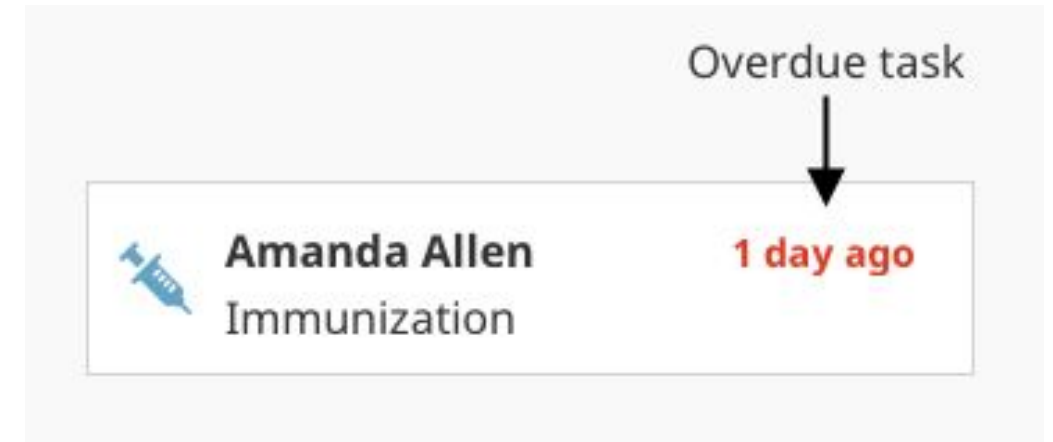
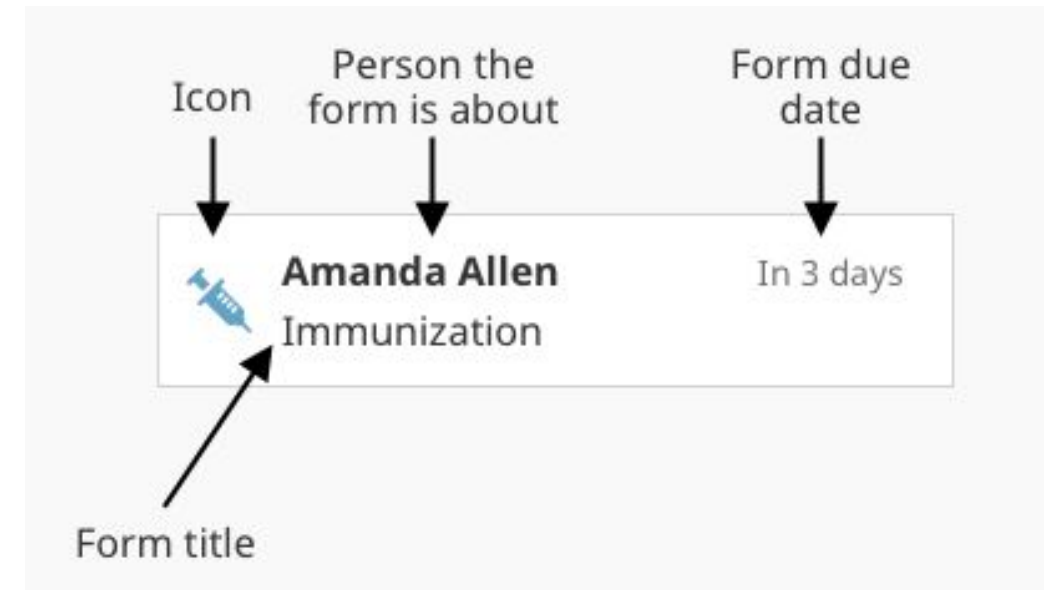


# Form Best Practices: Anatomy of a Task

The **Task** tab shows a list of upcoming visits, follow-ups, or other Tasks that need to be done. When a Task is finished, it will automatically clear from the **Tasks** list and move to **Reports**.

Each Task has an icon on the left side which indicates which type of Task it is. The first bold line of text is the **name** of the person or family that the Task is about. The second line of text is the **title** of the Task.

The **due date** for the Task is located in the upper right hand corner. If a Task is overdue, the due date will be red. Tasks are listed in order of due date.



# Form Best Practices: Form Titles

The patient's name should not be included in the form title:

**Don't Do This:** "Beatrice Bass Delivery Follow-Up"

**Do This Instead:** "Delivery Follow-Up"

Avoid generic words like "Visit" or "Report". Every form can be a Report and often involves a visit, so including these words in the title doesn't help differentiate it from other forms.

**Don't Do This:** "Delivery Follow-up Visit"

**Do This Instead:** "Delivery Follow-up"

Each word in a title should be capitalized (Title Case) Strive to keep form titles short and concise. Long titles will sometimes be truncated (cut off with an ellipsis) and the text at the end of the title might be lost. As a rough estimate, strive to keep titles no longer than 40 characters in length.

**Don't Do This:** "This Title Has Way More Than Forty Characters And Is Too Long"

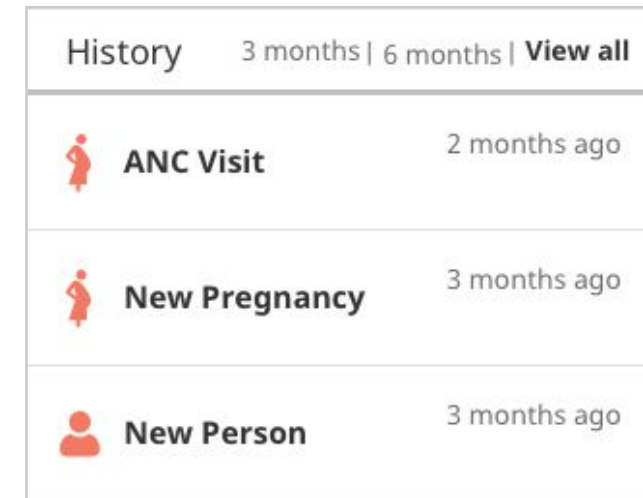
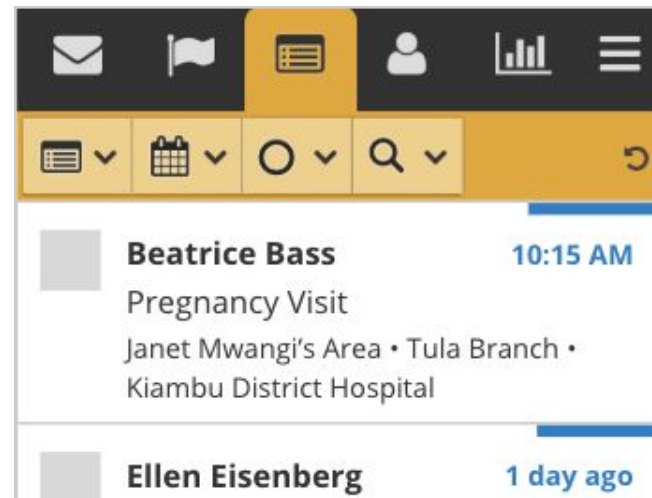
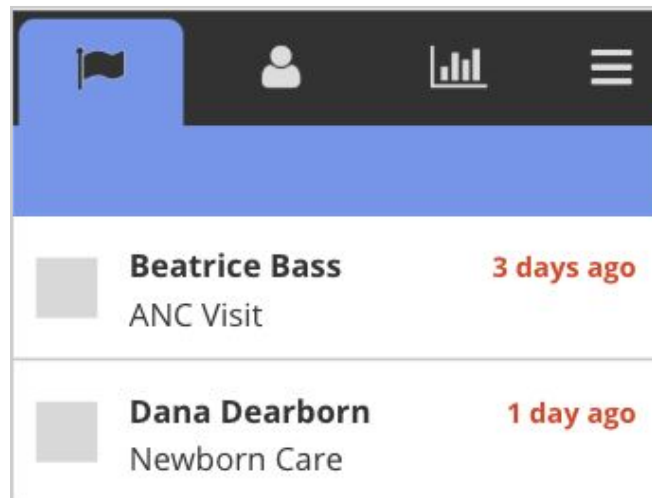
**Do This Instead:** "Title Is Less Than Forty Characters"

# Form Best Practices: Form Titles Continued

To help estimate how much text can be displayed before truncation, you can use our collection of [low-fi mockups](#). If you type your form title into the mockup you can get a rough idea of how much text will fit before truncation occurs.

**Please Note:** The mockups have been made with our smallest screen sizes in mind. Some users will have larger screens and will be able to display more text.

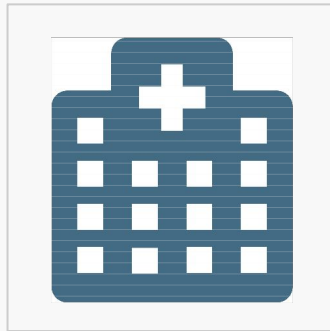
Alternately, the screenshots below represent some of the smallest phones our users have. As you can see, on both the **Tasks** and **Reports** tabs, titles less than about forty characters will fit in the space. Titles longer than about forty characters may be cut off with an ellipsis (...).



# Form Best Practices: Form Icons

The Community Health Toolkit includes a collection of 60+ free icons that represent key elements of different community health workflows and protocols. Please review the recommended usages that follow.

## Icons for Our People / Places Hierarchies



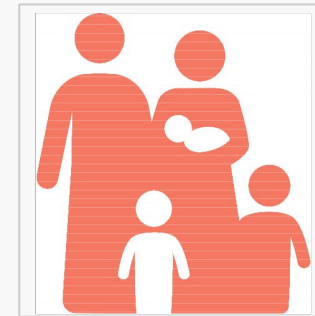
Hospital / District



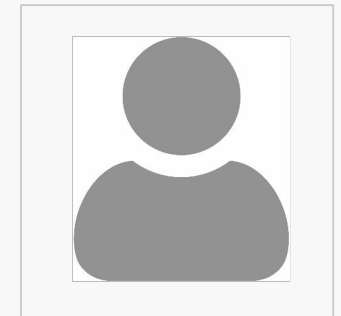
CHW Area



Branch / Health Facility



Family



Person / Individual

## Icons for Family Planning Forms



- Family Planning Screening
- Family Planning Referral or Follow-up



# Form Best Practices: Form Icons

## ANC Forms



- ANC Registration
- ANC Visit or Missed Visit
- ANC Follow-up

## ANC Danger Signs



- ANC Danger Sign
- ANC Danger Sign Follow-up

## PNC Forms



- ANC Registration
- ANC Visit or Missed Visit
- ANC Follow-up

## PNC Danger Signs



- ANC Danger Sign
- ANC Danger Sign Follow-up

## Delivery



- Various Uses

# Form Best Practices: Form Icons

## ICCM / Child Health Forms



- ICCM Assessment
- ICCM Treatment
- ICCM Referral or Follow-up

## ICCM / Child Health Danger Signs



- ICCM danger signs
- ICCM danger signs follow-up

## Immunization Forms



- Immunization Visit
- Immunization Follow-up

## Malnutrition



- Various Uses

## Growth Monitoring



- Various Uses

## Cognition



- Various Uses

# Form Best Practices: Form Icons

## Visits



- General Follow-up
- Proactive Visit
- Educational Visit

## Community



- Community Event
- Community Meeting

## General Forms



- Various Uses

## General Assessments



- Various Uses

## Equity Survey



- Various Uses

## Bed Net Distribution



- Various Uses

# Form Best Practices: Form Content and Layout

## Group Related Information

Users think in batches, and long forms can feel overwhelming. By creating logical groups the user will make sense of the form much faster.

## The Size Of A Field Should Reflect How Much Text The User Is Expected To Enter

Employ this for fields that have a defined character count like phone numbers, zip codes, etc. Ex: Field boxes for something like zip code should be shorter than field boxes for street address.

## Don't Put Placeholder Or Helper Text Inside The Form Fields

People go through forms quickly and if a field looks like it already has an answer they may accidentally miss it. Research shows that empty fields draw more attention than those with placeholder text.

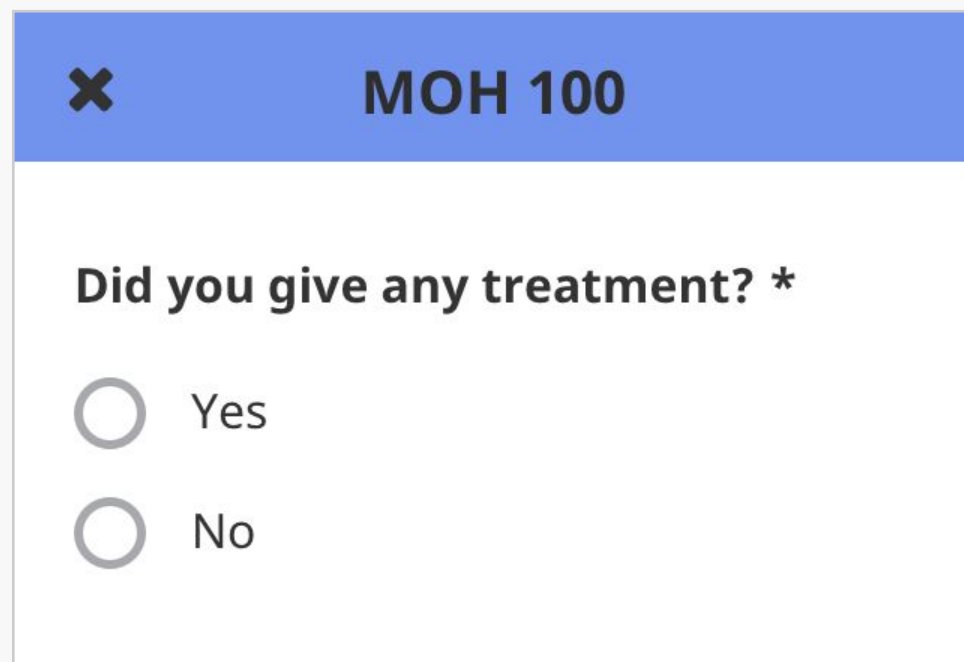
## Make Required Fields Very Clear

Users don't always know what is implied by the required field marker (\*). Instead, denoting what is optional is a preferred method, especially for forms with many required fields. If you do use asterisks, make the meaning of the symbol clear by stating "Fields with an asterisk (\*) are mandatory."

# Form Best Practices: Form Content and Layout

## Always Stack Radio Buttons And Checkboxes In A Single Vertical Column

Placing the options underneath each other allows for easy scanning and makes it less likely that a user will completely overlook one of the options.



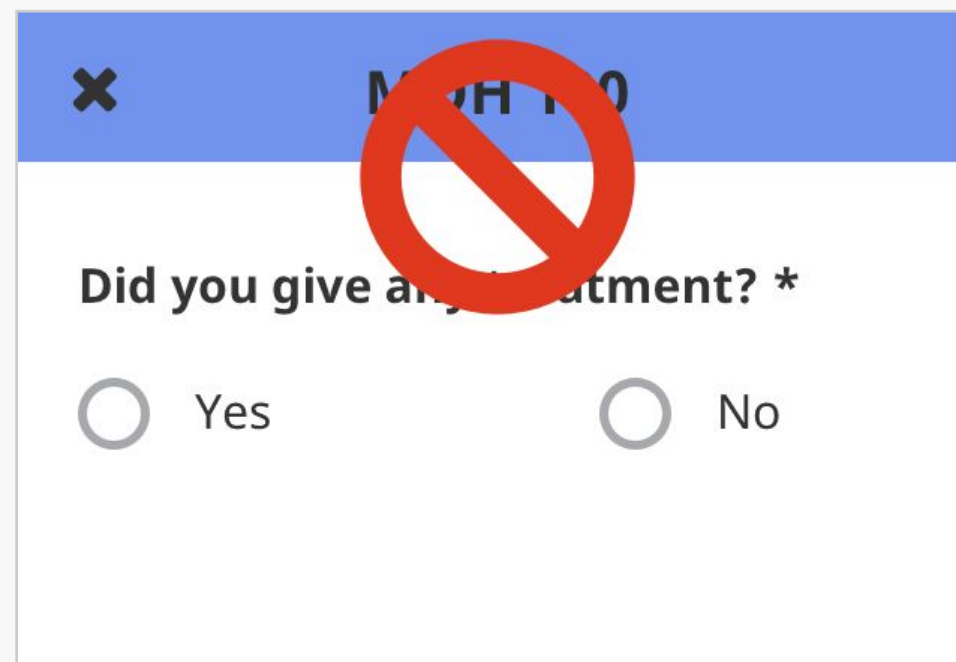
MOH 100

Did you give any treatment? \*

Yes

No

This form shows a blue header with a close button (X) and the text 'MOH 100'. Below the header is a question: 'Did you give any treatment? \*'. There are two radio button options stacked vertically: 'Yes' and 'No'.



MOH 100

Did you give any treatment? \*

Yes  No

This form is identical to the one on the left, but the radio buttons for 'Yes' and 'No' are placed side-by-side. A large red prohibition sign (a circle with a diagonal slash) is overlaid on the form, indicating that this layout is incorrect.

## Don't Use Dropdowns If There Are Less Than Seven Options

For smaller lists, use radio buttons instead of drop-down menus. Radio buttons have lower cognitive load because they make all options visible for easy comparison.


# Form Best Practices: Form Content and Layout

## Make Use Of Images


Where it makes sense, use images to aid in the understanding of a question

**mRDT Test Result**

**What is the result? \***



Positive




Negative


**mRDT Test Result**

**Examples of positive and negative mRDT results:**

Positive Result



Negative Result



**What is the result? \***

Positive

# Form Best Practices: Form Summary Page

After all of the required questions in a form are answered, a summary page is displayed. Here, health workers can review the information they entered into the form, receive instructions for treatment, care, and referrals, and relay detailed educational information to the patient.

**NOTE:** The form is not submitted until the user scrolls to the end of the page and clicks “Submit.”.

All care guides are defined using [ODK XForms](#), an XML definition of the structure and format for a set of questions. Since writing raw XML can be tedious, we suggest creating the forms using the [XLSForm standard](#), and using the [medic-conf](#) command line configurer tool to convert them to XForm format. Because the XLSForms are converted directly to XForms, they essentially are the form, and so it’s important that the XLS be set up properly and consistently. Read more about configuring forms [here](#).

## Page Sections

- The summary page is split into content sections which makes the page easier to scan and navigate
- There is a specific suggested order for these content sections (see the following page)

# Form Best Practices: Form Summary Page Sections

## General Section Order

These are some possible sections. Not all forms will have all sections, but the sections that are there should appear roughly in this order:

- Reminder: “To finish, be sure to click the Submit button at the bottom of the form.”
- Patient details (name, age etc.)
- Visit information (summarizes the info that was just captured in the form)
- Signs and symptoms (if applicable)
- Refer to a health facility warning message (if applicable)
- Diagnosis and treatment (if applicable)
- Healthy tips/educational info (if applicable)
- Follow-ups scheduled (if applicable)
- Submit button



# Form Best Practices: Form Summary Page Section Headers

## General

- Section headers are used to separate content sections of the summary page. They make the page easier to scan and they make it easier to find a specific section.
- There is a specific suggested order for these header sections (see below)
- There are also suggested colors and icons for each section header (see below)
- Each section header should have an icon (see below)
- A section header should only be visible if there is content for that section. In other words, headers should never be stacked directly on top of each other.
  - To ensure that headers only show when they have content the relevant condition for the section header should join the conditions of all the subfields. Eg {condition\_a} OR {condition\_b} OR {condition\_c}

## Header Text

- The text inside of the colored section headers should be designated “H1”, Noto Sans 18px bold
- The text should be centered vertically & horizontally in the bar
- Each section header title should be Title Case, meaning each word is capitalized e.g. “**Patient Details**”

# Form Best Practices: Form Summary Page Section Headers





















## Header Color

- Though it may be tempting to give each section has a unique color (e.g. “Patient Details” is yellow, “Healthy Tips” is blue etc), sometimes there are too many sections for each one to have its own color, other times the various colors just look jarring and confusing. In general, you should strive to use color in a way that adds meaning and improves understanding, and avoid using color in a purely decorative manner.
- **NOTE:** Only use the bright red color to call out important things like warnings and danger signs
- If you choose to use multiple header colors, ensure that every header is a unique color. For example:
  - yellow: #e2b100 - patient details
  - blue: #6b9acd - visit information and key health messages
  - lime: #b5bd21 - child health
  - red: #e00900 - warnings and danger signs
  - green: #75b2b2 - follow up (at the end)
- If you find you have more sections than you do colors, it may be best to just make all the headers a single color (with the exception of warnings or referral messages, which should remain red). In this case, blue is a good default color to fall back on.

# Form Best Practices: Form Summary Page Section Headers

## Header Icons

- Each section header should have an icon on the far left side
- The icons should all be colored white, and should all be the same size
- For the most part, these icons should be unique for each section (no repeat icons)
- Suggested icons for each section:

Section type	FontAwesome suggested icon	New icon library
Patient details	 fa-user [fa-user]	
Visit information	 fa-info-circle [fa-info-circle]	
Pregnancy-specific	 fa-female [fa-female]	
Child health-specific	 fa-child [fa-child]	
Signs and symptoms	 fa-exclamation-triangle [fa-exclamation-triangle]	
Warnings, referrals	 fa-exclamation-triangle [fa-exclamation-triangle]	
Diagnosis & treatment	 fa-medkit [fa-medkit]	
Educational info & tips	 fa-heart [fa-heart]	
Follow ups	 fa-flag [fa-flag]	
Anything else/general	 fa-plus-square [fa-plus-square]	

# Form Best Practices: Form Summary Page Text Styling

## Text Hierarchy And Style Guide

- H1: colored horizontal bars for section headers
- H2: text with a colored line under it, centered
- H3: left aligned text, simple grey line under it
- H4: normal body text

## Other Body Text Styling

- Bold text is indicated by **\*\*** or “bold” or `<strong>`; italic text is indicated by *\** or “italic” or `<em>`
- A list item is indicated by either specifying `li` in the appearance column or formatting the label using html
- H1, H2, H3 ..., `em`, `i`, `ul`, `li`, `p`, and `span` html tags and style attributes work as expected
- When making a list, you’ll need to compensate for the extra padding in the left margin by moving the list to the left generally by `<ol style=“margin-left:1em”></ol>`
- You can also customise the bullet style and position using HTML and CSS

## Other Text Suggestions

- Try to keep text on this page concise and split text into small readable paragraphs
- Use short bulleted lists whenever possible to aid in scanning

# Condition Card Best Practices

# Condition Card Best Practices: Overview

A condition card is a configurable card that can be displayed on a profile that shows information that was submitted in or calculated from a form or forms. Their purpose is to reveal important information in an easily viewable location.

This information can be organized into cards specific to a condition (e.g. pregnancy, malnutrition) as well as past conditions, and set to display for any length of time.

## Configurable Elements

- Title
- Label for each data point displayed
- Data point for the field
- Icon for the field, if desired

Immunizations	
<b>BCD</b> No	
<b>MMR (Measles, Mumps, Rubella)</b> 1 of 2	
<b>Oral Polio</b> 0 of 4	Active Pregnancy
<b>Pentavalent</b> 0 of 3	<b>Date recorded</b> 30 April
<b>Pneumococcal</b> 0 of 3	<b>Weeks pregnant</b> 15
	<b>Estimated delivery date</b> 11 December
	<b>Completed ANC visits</b> 1 of 4
	<b>Status</b> High risk 

# Condition Card Best Practices: Guidelines

## What Should Go In The Card Title

- Name of the condition, e.g. Pregnancy, Malnutrition, Malaria
- Define if condition is past, e.g. Past Pregnancies

## What Should Go In The Field Label

- Label for each data point displayed
- One line

## What Kind Of Field Can Be Displayed

- Can include any information that was collected in a form or multiple forms about the person
  - Examples: LMP, EDD, most recent case of malaria, past pregnancies and their delivery dates
  - Can display Notes

# Condition Card Best Practices: Guidelines (Continued)

- Data can be displayed in the following formats:
  - Number
  - Count towards a goal
  - Percentage
  - Date
  - Text field
- Fields in cards are dynamic and will update as new information is submitted
  - Examples: # of ANC visits so far, change in risk status
- Fields can include icons
  - Examples: High risk status on an Active Pregnancy card
  - Icons should be selected from Medic's icon library and should be displayed at our standard 30 x 30 px size



# Condition Card Best Practices: Guidelines

## Displaying Cards

- Can be configured to show and hide at the appropriate time
  - Examples: show the EDD of the current pregnancy until a delivery Report is received, show that a child is being treated for malnutrition until the treatment is complete, show that a child had malaria until 2 weeks after diagnosis
  - Condition cards can be configured to disappear at the end of the condition or persist for any length of time
- Can be added to a person or place profile
  - Examples: equity scorecard on household profile; CHW performance scorecard on CHW profile

# Condition Card Best Practices: Design Considerations

- Group information related to the same condition so that the user can easily understand the relevance of the data and find what they are looking for.
  - **Examples:** pregnancy card
- Consider how many cards may potentially appear on a person's profile, particularly if you have included past conditions
  - **Example:** child with immunization schedule, current malaria treatment, past treatments summary, and malnutrition
- Consider what a user will do with the information before deciding to display it.
  - **Example:** more info isn't necessarily better; what does a CHW need to know and how will they change their actions as a result?
- Past condition cards may be best displayed as a summary of multiple past conditions vs individual
  - **Examples:** summary of past pregnancies rather than card for each past pregnancy

# Target & Widget Best Practices

# Target & Widget Best Practices: Overview

The **Targets** tab shows key performance indicators. Progress numbers are calculated automatically by the app, and goals are set by the organization. We currently support two types of widgets:

## Counts

- Counts show current totals and will update as **Tasks** are performed.
- If there is a goal, it will be displayed to the right of the count. If the count is green, the goal has been met. If the count is red, the goal has not yet been met.

## Percentages

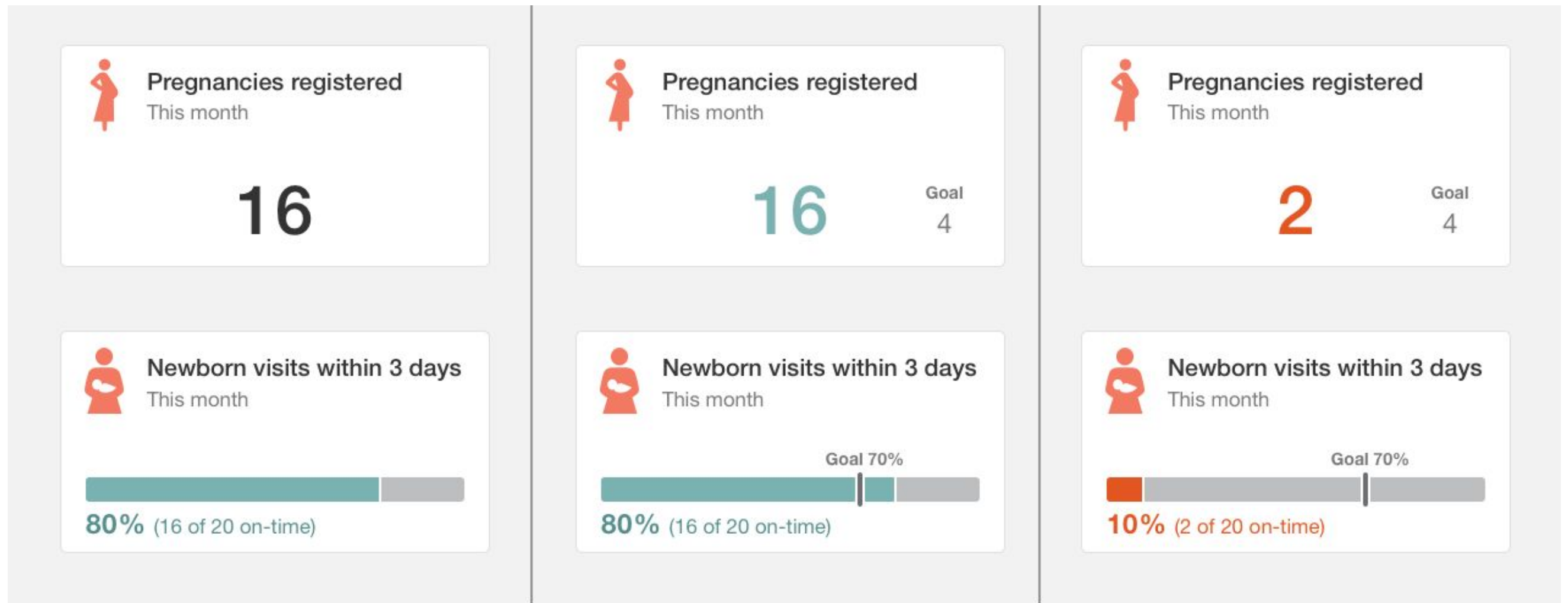
- Percentage bars show progress towards completing certain **Tasks**. The colored part of the bar will update as **Tasks** are performed.
- If there is a goal, a line will be on the bar to mark the goal. If the bar is green, the goal has been met. If the bar is red, the goal has not yet been met.
- The text below the bar shows how the percentage is calculated, displaying the number of **Reports** that met the requirement out of the total number of **Reports**.

# Target & Widget Best Practices: Examples

Widgets With  
No Goal

Widgets With  
Greater Than or Equal To  
Goal

Widgets With  
Less Than Goal



# Target & Widget Best Practices: Guidelines

## Configurable Elements

- Title & Subtitle Text
- Icons
- Number And Placement Of Widgets,
- Value Or Any Goals Present (Per Widget, Not Per User)

## What Goes In The Title

- The data point being measured. No need to include “%”, the word “percent”, or the word “count” (these are stated elsewhere) or any information on timeframe.
  - % Newborn Care Visit Within 72 hours → **Newborn visits within 3 days**
- Titles should be between 1 or 2 lines long. This is the equivalent of about 40-50 characters.
  - % of Under-5 Referrals Followed-up within 24 hours → **U5 referral follow-ups within 1 day**
- All text should be set in sentence case (meaning the first letter of first word is capitalized, all other words lowercase, except for acronyms)
  - % of Fever Tested with mRDT → **Fever tested with mRDT**

# Target & Widget Best Practices: Guidelines (Continued)

## What Goes In The Subtitle

- The subtitle is where timeframe information lives, expressed as either “This month” or “All-time”. These are the only two options available.
- All text should be set in sentence case.

## Rules For Bars

- Has to have a numerator and a denominator -- comparing two things, and not more than two
  - You can't do: % of deliveries at 1. home unskilled vs. 2. home skilled vs. 3. facility. Any two of these would work though, including 1. all home deliveries vs. 2. facility deliveries.
- Goal has to be a %; can't have a numeric goal because of issue of going over goal
- It is possible to account for things that haven't happened. For example, if you are measuring PNC visits that happened within 1 week of delivery, you can determine whether a particular woman should have had a PNC visit based on her EDD.

# Target & Widget Best Practices: Guidelines (Continued)

## Example Configurations For Visit Attendance:

- Of all the visits that happened, how many were on-time?
  - On Time = True, Late = False
- Of all the visits that were supposed to happen, how many were on-time?
  - On Time = True, Late + Didn't Happen = False
- Of all the visits that were supposed to happen, how many actually occurred? (includes late)
  - On Time + Late = True, Didn't Happen = False
- It's not possible to total up forms from all household members or check to see if any family member had a form submitted this week and count that as the household being visited. If you want to count the households visited this month, you need a form submitted at the household level like a household visit form or a household survey form.
- Denominator must be the same for both sides (e.g. kids in our immunization program). You can't split it into kids <2 yrs on one side and kids <5 years on the other side.



# Target & Widget Best Practices: Guidelines (Continued)

## Unique Considerations For Each Role That Affect Design

### CHWs:

- Will be viewing on a mobile device; keep in mind the number of widgets you display
- Information is related to their own individual achievement, not comparisons with peers or aggregates for their facility
- May have a difficult time understanding percentages (however certain partners like LG still focus on % based targets and therefore it still needs to be included). Percentages are good for evaluating performance, but difficult to “act on” because depending on how many actions you have already done / left to do, it may not always be clear or possible to “achieve” a percentage goal.
- Targets data is always up-to-date even when offline, but important to know when they’ve last synced and sent data to managers

# Target & Widget Best Practices: Guidelines (Continued)

## Unique Considerations For Each Role That Affect Design

### Managers:

- Could be viewing on desktop or mobile device; may be seeing widgets side-by-side
- Want to view overall summary of CHW goals, may also have their own personal goals
- Can only see widgets for which they have Report access
- Understand, and need, percentage information in order to evaluate performance
- Important to know how up-to-date the data is (will be addressed in a different feature for CHW last sync date)