

# Height/Weight/Blood

Slide Title	Slide Text
<b>Introduction</b>	<p>This HuBERT on-demand training module is provided by the MN Department of Health WIC Program.</p> <p>It is an overview of the height, weight and blood portions of the anthropometric functionality. Growth grids are covered in a separate module.</p>
<b>Height/Weight</b>	
<b>HtWt</b>	<p>All height and weight measurements must be entered into the Guided Script if a certification or mid-certification assessment (MCA) is due; not the Participant Folder.</p> <p>When measurements are entered into the Guided Script, they are associated with a specific certification or MCA attempt; those entered into the Participant Folder are not and are therefore not recognized as part of the certification or MCA.</p> <p>It's important to note that HuBERT only saves one measurement record per contact date regardless of whether it was entered into the CGS, MCA Guided Script or the Participant Folder.</p>
<Details>	Let's take a look at Fern's current cert information. Click the <b>Show Details</b> button.
<Details2>	Today is 9/21/15 and her most recent certification ended on 8/31/2015. Go ahead and open Fern's Participant Folder.
<Demo>	We are going to take a look at the Ht/Wt/Blood tab. Click on the tab.
<HtWt1>	<p>The Height/Weight/Blood tab always opens to the Height/Weight screen.</p> <p>We can switch between Height/Weight and Blood by clicking the tabs on the right.</p>
<HtWt2>	We can add measurements and view growth grids at any time in the Participant Folder.
<HtWt3>	<p>Since Fern is due for a recert, we must enter her height/weight measurements into the CGS and since the screens are the same we are going to review the rest of the Height/Weight tab in the CGS.</p> <p>Let's start a cert for Fern; click the icon to open the CGS.</p>
<CertYes>	<no script>
<CGS1>	Since our focus is Ht/Wt/Blood...
<CGS2>	<p>...we've already completed Demographics and Health Information.</p> <p>Click the link to open <b>Height, Weight, and Blood</b>.</p>
<Overview>	<p>Looks the same as the Participant Folder, doesn't it?</p> <p>The <b>Height/Weight</b> grid displays all of the participant's measurements with the most recent record at the top.</p>

Each record includes the date the measurement was performed, the participant's age when the measurement was taken, her height or length, whether she was standing or lying down when measured, and her weight.

To view the rest of the grid, click to the right of the scroll bar.

<Overview2>

The **Body Mass Index**, or BMI, is calculated by the system for children two and older who are measured while standing and for women based on their current weight.

The **Percent Weight Change** is not useful information and should not be used because the appropriate rate of weight gain varies by children's age and the value is meaningless without standards to compare it to.

The **Plot** column displays "No" if a measurement has been marked "Do Not Plot".

The **Possible Incorrect Measurement Reason** provides a short explanation of why a measurement may be inaccurate and should always be accompanied by further explanation in a note.

The last column, **Measurement Source**, indicates where the measurement was taken.

We will see the other options for the Possible Incorrect Measurements and Measurement Source shortly.

### Add Measurement

<Add>

A height/weight record is required to complete the CGS so let's add one; click the **Add** button.

<Add1>

The **Measurement Date** defaults to the current date.

It can be changed to a date within the past 60 days to record referral data as long as the date entered is after the last measurement date recorded.

Press the **Tab** key on your keyboard or click into the **Height Inches** field.

<AddAge>

As soon as the screen focus is past the Measurement Date field the system calculates and displays the participant's **Age at Measurement**.

For infants, children and postpartum women, the system calculates the age by taking the difference between the measurement date and the participant's date of birth.

<PregCalc>

For pregnant women, the system will calculate and display the number of weeks gestation as long as the LMP Start Date has been completed in the Health Information screen. Otherwise, it will display her age.

<Add2>

Both fields are required for Height and Weight measurements.

If the measurement is a whole number, a value of 0 can be entered into both the Eighths and Ounces fields.

HtWt2	The system has parameters that it validates against for both height and weight to ensure the measurement entered is reasonable based on the participant's WIC Category.
HtWt3	If the value is not within the limits a message displays informing us of the allowable range for that type of participant.
<AddInches>	Fern's measurement today was <b>33</b> and <b>5/8</b> inches. Type <b>33</b> into the <b>Inches</b> field and press the <b>Tab</b> key.
<AddEighths>	The incremental arrows in the <b>Eighths</b> field can be used to enter a value of 0 and increase it up to 7.  Let's type <b>5</b> and again press the <b>Tab</b> key.
<AddPosition>	The <b>Measurement Position</b> allows us to indicate if the participant was lying down or standing while being measured.  For women and children 2 years and older, the <b>Standing</b> radio button is the default; for infants and children under 2 years old, <b>Recumbent</b> is the default.  For children two to three years old, the Recumbent radio button is enabled so that it can be selected in instances where the child is uncooperative and can't be measured standing.  Moving on. Press the <b>Tab</b> key or click into the <b>Pounds</b> field.
<AddPounds>	Fern's weight was <b>26</b> pounds and <b>15</b> ounces today. Type <b>26</b> into the <b>Pounds</b> field and press the <b>Tab</b> key.
<AddOunces>	The incremental arrows in the <b>Ounces</b> field can be used to enter a value of 0 and increase it up to 15.  Let's type <b>15</b> into the field and then press the <b>Tab</b> key.
<AddBMI>	Once the height and weight have been entered, the system auto-calculates the <b>Body Mass Index</b> , or BMI, for women and all children two and older.
BMI	There are two things to take note of about the BMI in the Height/Weight screen:  First, the system calculates the BMI for children 2 and older measured recumbent, despite it not being appropriate to assess because the child wasn't measured standing.  Second, the BMI measurement for pregnant women is based on their current weight and not their pre-pregnancy weight.  The Pre-pregnancy BMI is displayed in the Health Information screen once a height record has been added in the CGS.
<AddReason>	The next field is the <b>Possible Incorrect Measurement Reason</b> drop-down. Click on it to view the options.
<AddReason1>	The options include <b>Participant Disability (describe in notes)</b> , which would be appropriate to select if, for example, the participant were in a wheel chair or had scoliosis;

**Other (explain in notes)**, which we might select if the participant were wearing a cast;

and **Participant Uncooperative (explain in notes)**, which would be appropriate to select if, for example, a child won't calm down enough for us to be able to ensure a valid measurement.

Notice that all of these reasons require further documentation in a note if selected.

Press the **Tab** key to close the list and move to the next field:

**Measurement Source.**

<AddSource>

This last field indicates where the measurement is from and defaults to WIC Clinic since this is where the majority of our measurements are taken.

Click the drop-down to view the other options...

<AddSource1>

...which are **Medical Clinic, Child & Teen Check-Up, and Home Visit.**

Since we are using a measurement performed at the WIC Clinic, click the drop-down again to close the menu.

<AddSave>

Go ahead and click **OK** to save the measurement.

<AddNew>

Our new measurement has been added to the top of the grid.

The **Add** button is now disabled because we can only add one measurement per date and since our most recent measurement date is today, we can't add any others.

This means that if we have referral data, and are also adding a measurement for today, we would need to make sure to enter the referral data first.

### Edit Measurement

<Edit>

Measurements can be edited on the same date they are created.

Let's take a look at the edit function. Click the **Edit** button.

<Edit1>

The Edit screen looks similar to the Add screen except for a couple key differences.

First, the **Measurement Date** is disabled and cannot be edited. Otherwise, we can edit all other fields.

The other difference, is an additional checkbox called **Do Not Plot.**

We can select this checkbox if we don't want this measurement to be plotted on the growth grids.

Let's take a closer look at this.

<DoNotPlot>

This is a participant who has an odd looking growth curve on the BMI grid.

The **Do Not Plot** checkbox should be used any time a measurement appears to be incorrect based on the surrounding plot points, as shown on this growth grid.

We can see that the measurement taken on 6/28/13 looks incorrect based on the other plot points.

- <DoNotPlot1> OK. We're back in the Height/Weight tab so let's click on the **6/28/2013** measurement to highlight it.
- <DoNotPlot2> Notice that the **Edit** button is still enabled.
- Although we can only edit measurements on the date they are recorded, we can edit whether or not a plot point should display on the growth grids at any time. Click the **Edit** button.
- <DoNotPlot3> The only enabled field in the Edit screen is the **Do Not Plot** checkbox. Go ahead and click on it.
- <DoNotPlot4> Click **OK** to save our change.
- <DoNotPlot5> Let's click to the right of the scroll bar.
- <DoNotPlot6> Our **Plot** column now reads "No".
- Now let's check out the change in the BMI grid. Click the **Growth Grids** button...
- <DoNotPlot7> ...and click on the **BMI** tab.
- <DoNotPlot8> This growth curve looks much better and we can see that the 6/28/13 measurement wasn't plotted in the grid below.

#### Unknown Ht/Wt

- Unknown** There is one more function in this screen: the **Unknown Ht/Wt** button, As we know, the Height and Weight are required to complete the CGS. However, there may be rare instances when it may not be possible to measure a participant. An example of this might be if a participant were too medically fragile to come to clinic. If referral data also isn't available, we need to be able to complete the height/weight requirement in order to complete the CGS.
- The Unknown Ht/Wt button can be used in this sort of instance.
- If used, we should fully describe the situation in a note. And if possible, we should obtain measurements when referral data becomes available or the situation is resolved.
- <Unknown> Let's take a look at how the **Unknown Ht/Wt** works. Click the button.
- <unknown1> The function simply asks whether we want to enter a placeholder for the height/weight.
- Click the **Yes** button to insert the unknown record.
- <unknown2> The record will appear in the history grid with its measurement date and the participant's calculated age but all other applicable columns will display the word "Unknown".
- Let's click the **Edit** button.
- <Unknown3> Like other records, the measurements, which are values of 0, in the Unknown record can only be edited on the date it's created.
- However, unlike other measurements, we don't have to indicate that it shouldn't be plotted on the growth grids...
- <Unknown4> ...it automatically doesn't plot.

That's all for the Height/Weight tab since **Growth Grids** are covered in a separate module.

### Blood

- Bld** HuBERT's bloodwork requirements are slightly different from our MN WIC Program requirements for blood work.
- HuBERT requires a blood work contact to complete the guided script for every certification and Mid-certification Assessment (MCA) for all women, children and infants 9 months and older.
- Bld1** To meet MN WIC Program requirements, a Hemoglobin or Hematocrit value is required for all women at their certification. If a woman provides referral data, the measurement must have been taken at a time that reflects her current status. For instance, if she is postpartum, the measurement must have been taken after she had her baby.
- For breastfeeding women who are certified for a year, a second bloodwork measurement is required if low at their postpartum certification. This can be taken at a high-risk follow-up or at the MCA.
- For infants, a bloodwork is required at the 9-month MCA or if they are certified between 9-12 months of age.
- Bld2** For children, blood work is required at the 1 year certification if blood work was not performed when the child was between 9 and 12 months old or if the blood value taken between 9 and 12 months was low.
- A blood value is also required at the MCA after the one year cert (typically around 18 months of age), regardless of whether the blood value was OK or low.
- For children certified for the first time after their first birthday, blood work is required at the certification.
- Once a child is 24 months old, a blood value is required only once per year as long as the most recent blood value wasn't low.
- <Blood1>** Go ahead and click on the **Blood** tab to open the screen.
- <Blood2>** The Blood history grid displays a list of all blood records with the most recent record at the top.
- It displays the date the blood was taken; the participant's age or the number of week's gestation if the participant is pregnant; and the **Hemoglobin, Hematocrit, Lead** or **E.P.** values entered.
- Let's click to the right of the scroll bar to see the rest of the columns.
- <Blood3>** The **Delayed Blood Work** column is grayed out because we don't use that function in MN.
- The last column is the **Reason Blood Work Was Not Collected**, which we're going to talk about in another minute.
- Click to the left of the scroll bar to scroll back.
- <Blood4>** Since Fern is over 24 months old, we know that she only has to have her blood checked every year as long as her last measurement wasn't low.

We can see in the grid that her last hemoglobin was 11.6, which is within the normal limits.

However, we also know that HuBERT requires a hemoglobin value in order to complete the CGS. So, we know we have to add a blood record. Go ahead and click the **Add** button.

<BloodDate> Just like in the add Height/Weight screen, the **Measurement Date** defaults to the current date.

Again, this date is modifiable and it will accept a date up to **90 days** in the past for blood measurement referral data.

Press the **Tab** key on the keyboard.

<BloodAge> The **Age at Measurement** is again calculated just as it was for Ht/Wt once the focus moves from the Measurement Date field.

Hemoglobin, Hematocrit, Lead and E.P. are all available to record values; HuBERT will accept a value entered into any one these to meet the system's certification requirement.

However, the intent of the MN WIC Program's blood requirement is to evaluate a participant's **iron** status at certification...

...and only Hemoglobin or Hematocrit is considered to be appropriate to meet our blood requirement.

It should be noted that Lead and E.P. are valuable for additional assessment but neither is used as part of the criteria for the assessment of iron status.

So, remember, we opened this screen because we have to enter a blood record to complete the CGS, but...

... we are not required by MN WIC to check the hemoglobin today.

The **Reason Blood Work Was Not Collected** drop-down list allows us to meet both these requirements. Click on the drop-down.

<BloodReason> The first option listed, **CPA determined not due for blood work**, can be selected to meet the system's requirements.

Notice that there are other reasons available for rare situations where a participant is due for blood work but it is inappropriate to perform the check. (See MOM 5.3.2 for more details.)

If any of the other reasons are selected, a **General Note** with the subject **Height/Weight/Blood** is required with more information regarding why blood work was not performed.

CPA determined does **NOT** require additional documentation.

Go ahead and select the appropriate option.

<BloodHight> <no script>

<BloodOK> Click **OK** to save our blood record.

<Blood0> Notice that the system enters 0 for the Hemoglobin value and when we click to the right of the scroll bar (go ahead)...

...we can see why.

<BloodEdit>

Again, the **Add** button is disabled since we already have a measurement recorded for today and the **Edit** button is enabled.

Let's take a look at another scenario: What if we were working with Fern and her sister, one of whom needed a hemoglobin today, and accidentally saved the **Reason Blood Work Not Collected** for the wrong sister?

Since we already have the scenario set up in Fern's folder, let's just proceed as if we shouldn't have selected the reason for Fern.

How do you think we could correct this? What would be our first step? Go ahead.

<BloodEdit1>

Right!

The only thing we can do; edit the blood record.

We can only edit a blood record on the date it was created and the date cannot be changed.

Notice that all of our blood fields are disabled. In order to enable them, we need to remove our selection from the drop-down.

Go ahead and click the drop-down.

<BloodBlank>

To remove our selection, we have to select the blank option above it. Go ahead and do that.

<BloodHighlight1>

<no script>

<BloodLow>

OK. Now that our blood fields are once again enabled, let's take a look at another scenario. This time we are going to enter a blood value.

The **Hemoglobin** field accepts up to three digits and doesn't require us to put in the decimal; it'll do that for us.

We've tested Fern's hemoglobin and it was an alarmingly low 4. Go ahead and type **4** into the Hemoglobin field and click the **OK** button to save it.

<BloodLimits>

The **Hemoglobin** field has parameters just like the height and weight fields and must fall within a range of 6-23.9.

So, how do we document the value if the hemoglobin is below 6?

In this instance, we would enter 6 in the field for the blood work contact and...

<BloodNote>

...document the true value in a General Note with the subject of Height Weight Blood.

### Guided Script Work-around

<WorkAround1>

We have one final thing to cover. We know that measurements should always be entered into the Guided Script if a cert or MCA is due. But what if they get entered in the Participant Folder?

Obviously, this isn't part of our best practices but mistakes happen, and if this situation occurs, there is a work-around.

- Bobby Socks is here for a recertification. Go ahead and open his folder.
- <WorkAround2> We usually need to check whether a blood measurement is required today, so go ahead and click on the **HT/WT/Blood** tab.
- <WorkAround3> Instead of just checking, we're going to incorrectly add the height/weight into the participant folder for today.
- <WorkAround4> Click **OK**.
- <WorkAround5> We'll do the same in the **Blood** tab. Go ahead and click on it.
- <WorkAround6> <no script>
- <WorkAround7> Click **OK**.
- <WorkAround8> Now, go ahead and start the certification.
- <WorkAround9> <no script>
- <WorkAround10> We'll complete the Demographics and Health Information...
- <WorkAround11> Notice that even though we already Bobby's height, weight and blood in the participant folder, we do not have a checkmark indicating that the section in the CGS is complete.
- Review Certification for Errors** shows us what information is missing in order for the CGS to be considered complete. Let's click the icon and take a look at it.
- <WorkAround12> We can see from this that there isn't a height/weight or blood measurement currently associated with the certification.
- Go ahead and close this screen.
- <WorkAround13> Let's open up the **Height, Weight, and Blood** link.
- <WorkAround14> We know we can't add another measurement but we can **edit** the one we entered in the Participant Folder so click the **Edit** button.
- <WorkAround15> By using the edit function to open this measurement in the CGS, we effectively prompt HuBERT into recognizing the measurement and associating it with the CGS.
- We don't need to change anything; just click **OK**.
- <WorkAround16> Go ahead and do the same for the blood measurement.
- <WorkAround17> <no script>
- <WorkAround18> <no script>
- <WorkAround19> <pause for image> Click **Close**.
- <WorkAround20> Notice we now have a checkmark in front of the **Height, Weight and Blood** link.
- And when we open **Review the Certification for Errors** (click the icon)...
- <WorkAround21> ...we are good to go.

**End Slide**

This concludes our training on the Height, Weight and Blood tabs in HuBERT. We appreciate you taking the time to review this HuBERT on-demand training module presented by the MN Department of Health WIC Program.