

PhenX Toolkit Tutorial

This tutorial demonstrates using the PhenX Toolkit to plan a genetic epidemiology study of cardiovascular disease, specifically myocardial infarction. The following steps provide a guide for general use of the Toolkit.

1. Browse Research Domains
2. Search the Toolkit
3. Annotate Measures
4. Review My Toolkit
5. Generate Report
6. Generate Data Collection Worksheet and Data Dictionary

1. Browse Research Domains

To browse the research domains we scroll over 'Browse' on the top toolbar and click on 'Browse Domains.'

The screenshot shows the PhenX Toolkit website. At the top left is the logo with three stylized figures and a DNA helix. The main title "PhenX Toolkit" is in large, bold letters. A navigation bar below the title contains links for Home, Browse (highlighted with a red arrow), Search, Registration, Resources, Help, and About. On the right side of the header, there is a "My Toolkit" button and links for "Register" and "Log In".

The main content area is titled "Welcome to the PhenX Toolkit". It contains a paragraph about the toolkit's purpose, a list of actions for users, and a "More »" link. A dashed box highlights a "Please Read Toolkit Guidance" section with citation information. Below this are links for "PhenX Toolkit Release Notes" and a survey link. A summary states there are 295 measures in the toolkit.

Two side-by-side boxes show "Top 5 Measures - Release 4.5" and "Top 5 Domains - Release 4.5".

Top 5 Measures - Release 4.5	Top 5 Domains - Release 4.5
1. Current Age	1. Demographics
2. Alcohol - 30-Day Quantity and Frequency	2. Alcohol, Tobacco and Other Substances
3. Gender	3. Cancer
4. Personal Perception and Knowledge of Smoking...	4. Social Environments
5. Smoking Quit Attempts	5. Anthropometrics

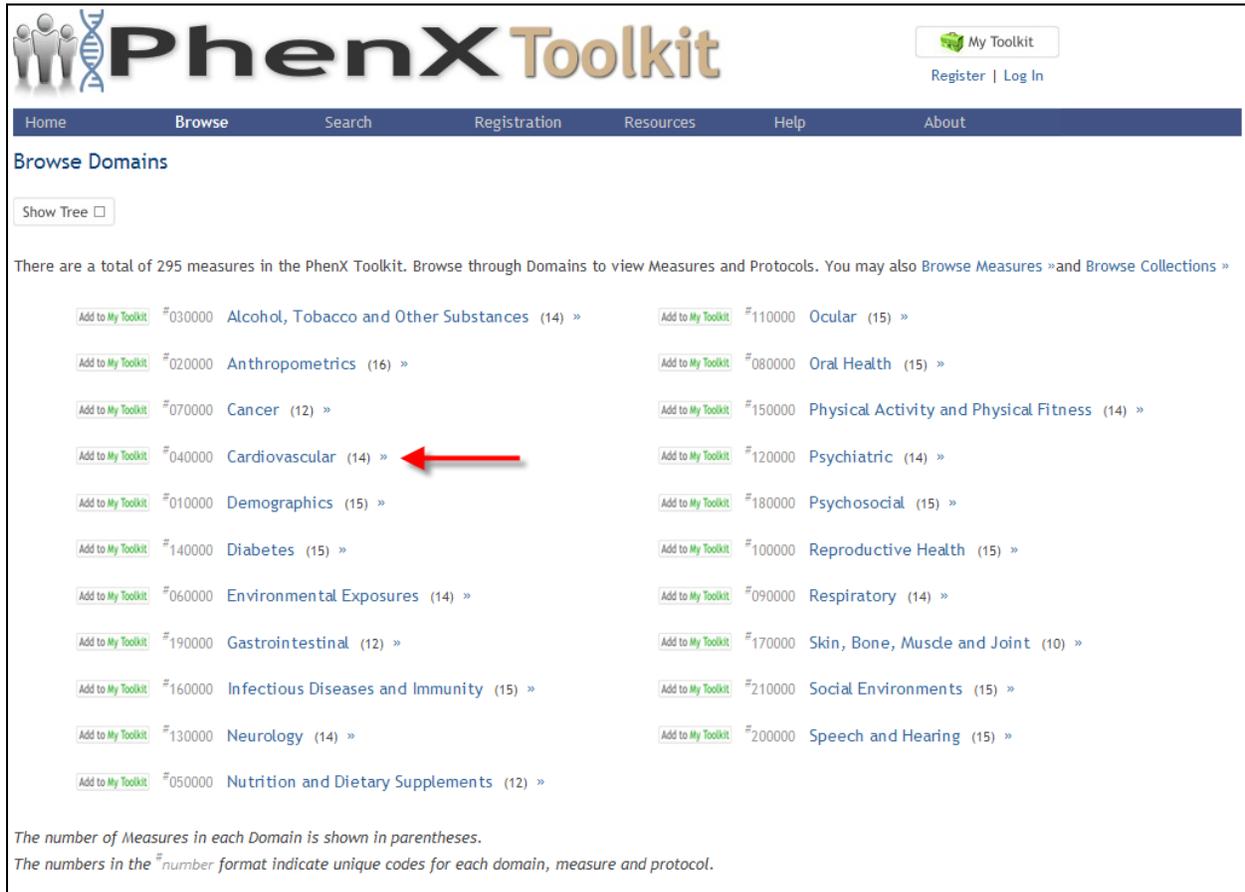
A "View Top 20 Measures" link is located below the measures list.

At the bottom of the main content area are four icons: "QuickStart", "Tutorial", a flowchart, and a diagram showing "Domain", "Collection", "Measure", and "Protocol".

On the right side, there is a "Registration" section with a login form (User ID, Password, Log In button) and links for "Forgot Password", "Forgot User ID", and "Help With Login". Below this is the PhenX logo and a "PhenX Updates" section with "Subscribe" and "Unsubscribe" links.

1.1 Review measures in the Cardiovascular Domain

To review available Cardiovascular measures we click on the 'Cardiovascular' link.



The screenshot shows the PhenX Toolkit website interface. At the top, there is a navigation bar with links for Home, Browse, Search, Registration, Resources, Help, and About. Below the navigation bar, the 'Browse Domains' section is displayed. A 'Show Tree' button is visible. The main content area lists 20 domains, each with an 'Add to My Toolkit' button, a unique code, the domain name, and the number of measures in parentheses. A red arrow points to the 'Cardiovascular (14)' link. Below the list, there is a note explaining the format of the domain names and the number of measures.

PhenX Toolkit

My Toolkit
Register | Log In

Home Browse Search Registration Resources Help About

Browse Domains

Show Tree

There are a total of 295 measures in the PhenX Toolkit. Browse through Domains to view Measures and Protocols. You may also Browse Measures » and Browse Collections »

Add to My Toolkit #030000 Alcohol, Tobacco and Other Substances (14) »	Add to My Toolkit #110000 Ocular (15) »
Add to My Toolkit #020000 Anthropometrics (16) »	Add to My Toolkit #080000 Oral Health (15) »
Add to My Toolkit #070000 Cancer (12) »	Add to My Toolkit #150000 Physical Activity and Physical Fitness (14) »
Add to My Toolkit #040000 Cardiovascular (14) »	Add to My Toolkit #120000 Psychiatric (14) »
Add to My Toolkit #010000 Demographics (15) »	Add to My Toolkit #180000 Psychosocial (15) »
Add to My Toolkit #140000 Diabetes (15) »	Add to My Toolkit #100000 Reproductive Health (15) »
Add to My Toolkit #060000 Environmental Exposures (14) »	Add to My Toolkit #090000 Respiratory (14) »
Add to My Toolkit #190000 Gastrointestinal (12) »	Add to My Toolkit #170000 Skin, Bone, Muscle and Joint (10) »
Add to My Toolkit #160000 Infectious Diseases and Immunity (15) »	Add to My Toolkit #210000 Social Environments (15) »
Add to My Toolkit #130000 Neurology (14) »	Add to My Toolkit #200000 Speech and Hearing (15) »
Add to My Toolkit #050000 Nutrition and Dietary Supplements (12) »	

The number of Measures in each Domain is shown in parentheses.
The numbers in the #number format indicate unique codes for each domain, measure and protocol.

There are 14 measures in the Cardiovascular domain, including Myocardial Infarction. Let's click on Myocardial Infarction to review this measure.

Browse Measures

Show Tree

Browse through Measures to view Protocols.

Browse » Domains » Cardiovascular

DOMAIN: Cardiovascular #040000
Release Date: September 9 2009
[View scope of domain »](#)
[View Supplemental Information »](#) ⓘ
[View Working Group Roster »](#)

Add to My Toolkit #041000 Abdominal Aortic Aneurysm »	Add to My Toolkit #040400 High Blood Pressure During Pregnancy »
Add to My Toolkit #040600 Angina »	Add to My Toolkit #040200 Lipid Profile »
Add to My Toolkit #041100 Arrhythmia (Atrial and Ventricular) »	Add to My Toolkit #040800 Myocardial Infarction » 
Add to My Toolkit #040300 Blood Pressure (Adult/Primary) »	Add to My Toolkit #040900 Peripheral Arterial Disease »
Add to My Toolkit #041200 Deep Venous Thrombosis »	Add to My Toolkit #041300 Pulmonary Embolism »
Add to My Toolkit #040100 Family History of Heart Attack »	Add to My Toolkit #041400 Rheumatic Fever/Rheumatic Heart Disease »
Add to My Toolkit #040500 Heart Valve Function »	Add to My Toolkit #040700 Sudden Cardiac Arrest »

The numbers in the #number format indicate unique codes for each domain, measure and protocol.

[« Back To Domains List](#)

This screen provides the definition and purpose of the measure, as well as other information. The definition, “Measure to assess if patient had a myocardial infarction (heart attack)”, indicates that this measure is suitable for measuring our study outcome.

Let’s click on the Myocardial Infarction link under “Protocols” to review the protocol.

Review Measure

Show Tree

Browse » Domains » Cardiovascular » Myocardial Infarction

MEASURE: Myocardial Infarction [Ⓡ]040800

Definition: Measure to assess if patient had a myocardial infarction (heart attack).

Purpose: Myocardial infarction (heart attack) is a leading cause of death for both men and women in the United States, which makes myocardial infarction a prevalent health issue for investigators to study.

Protocols:

[Add to My Toolkit](#) [Ⓡ]040801 Myocardial Infarction » 

Essential Measures [?]	Related Measures [?]
Current Age Gender	Blood Pressure (Adult/Primary) Lipid Profile Tobacco - Smoking Status Weight

Keywords: cardiovascular, myocardial infarction, heart attack, Multi-Ethnic Study of Atherosclerosis, MESA, Cardiovascular Health Study, CHS, Women’s Health Initiative, WHI, chest pain, percutaneous transluminal coronary angioplasty, PTCA, coronary angioplasty, atherectomy, hospitalization, coronary stent, thrombolytic therapy, electrocardiogram, ECG, EKG, myocardial ischemia, ST-elevation myocardial infarction, STEMI, anticoagulation, coronary bypass surgery, personal history

Measure Release Date: September 9, 2009

 [Add this Measure* to My Toolkit](#)

 [Add this Measure* and all Essential Measures to My Toolkit](#)

* Adding this measure to the cart will add all protocols associated with this measure (listed below)

[« Back To Measures List](#)

Protocol Overview

Show Tree

Browse » Domains » Cardiovascular » Myocardial Infarction » Myocardial Infarction Protocol

Note: Some Protocols contain images. You may click the thumbnails to preview the full image. To print Protocols with full size images, please add those Protocols to your Toolkit and [Generate a Report](#).

MYOCARDIAL INFARCTION #040801

Jump to section:

- Protocol Release Date
- Description of Protocol
- Specific Instructions
- Protocol Text
- Selection Rationale
- Source
- Personnel and Training Required
- Equipment Needs
- Common Data Elements
- General References
- Protocol Type
- Protocol Life Stage
- Derived Variables
- Requirements

Please cite use of the PhenX Toolkit as: <http://www.phenxtoolkit.org> - July 29 2011, Ver 4.5

 Add this protocol to My Toolkit

After reviewing the protocol, we decide whether or not to select this measure based on the following considerations:

- Does the protocol include the information needed to assess whether or not the patient meets our case definition? Yes
- The protocol requires access to both the patient and his/her medical records. Will we have the needed access? Yes
- Now, navigate to Protocol Life Stage to confirm the protocol is appropriate for our population. We see that the measure is valid for all adults.
- The myocardial infarction measure is appropriate for our study. Click the 'Back To Measure' link at the bottom of the page to return to the measure.

1.2 Select the Measure by adding it to My Toolkit

After returning to the Myocardial Infarction measure screen, we will select the measure by adding it to My Toolkit. We do not have to log in to select measures, but we will only be able to save our selection and share My Toolkit with others if we are logged in. To be sure we collect all the information required to use and interpret the measure, we will also add the Essential Measures recommended for this measure (Current Age and Gender) to My Toolkit. To do this, we click on ‘Add this Measure to My Toolkit’ and ‘Add this Measure and all Essential Measures to My Toolkit’.

MEASURE: Myocardial Infarction #040800

Definition: Measure to assess if patient had a myocardial infarction (heart attack).

Purpose: Myocardial infarction (heart attack) is a leading cause of death for both men and women in the United States, which makes myocardial infarction a prevalent health issue for investigators to study.

Protocols:

[Add to My Toolkit](#) #040801 Myocardial Infarction »

Essential Measures [?]	Related Measures [?]
Current Age Gender	Blood Pressure (Adult/Primary) Lipid Profile Tobacco - Smoking Status Weight

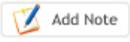
Keywords: cardiovascular, myocardial infarction, heart attack, Multi-Ethnic Study of Atherosclerosis, MESA, Cardiovascular Health Study, CHS, Women's Health Initiative, WHI, chest pain, percutaneous transluminal coronary angioplasty, PTCA, coronary angioplasty, atherectomy, hospitalization, coronary stent, thrombolytic therapy, electrocardiogram, ECG, EKG, myocardial ischemia, ST-elevation myocardial infarction, STEMI, anticoagulation, coronary bypass surgery, personal history

Measure Release Date: September 9, 2009

 [Add this Measure* to My Toolkit](#)

 [Add this Measure* and all Essential Measures to My Toolkit](#)

* Adding this measure to the cart will add all protocols associated with this measure (listed below)

[View your notes for this measure »](#) 

The Toolkit will then generate My Toolkit, which includes the Myocardial Infarction measure along with the measures of Current Age and Gender.

My Toolkit

Show Tree

« Return to last visited browse page

USERS WHO CHOSE THIS MEASURE ALSO CHOSE:

- [Add to My Toolkit](#) Ethnicity (Demographics)
- [Add to My Toolkit](#) Current Educational Attainment (Demographics)
- [Add to My Toolkit](#) Race (Demographics)
- [Add to My Toolkit](#) Current Employment Status (Demographics)
- [Add to My Toolkit](#) Annual Family Income (Demographics)

[Empty My Toolkit](#)

Measure	Protocol	Requirements	Essential Measures
<input checked="" type="checkbox"/> Current Age Find related measures »	Current Age		
<input checked="" type="checkbox"/> Gender Find related measures »	Gender		
<input checked="" type="checkbox"/> Myocardial Infarction Find related measures »	Myocardial Infarction	<input type="checkbox"/>	<input checked="" type="checkbox"/> Current Age <input checked="" type="checkbox"/> Gender

✓ All Essential Measures have been added to your Cart

You must click on to review Special Requirements.

Continue selection: [Browse](#) [Search](#) [Generate Report](#) [Generate DCW/DD](#) [Share this Toolkit »](#)

Measures: 3 Protocols: 3

1.3 Review additional Measures in the Cardiovascular Domain

Now, let's go back to the Cardiovascular domain and consider if there are other outcome measures we want to include in our study. From My Toolkit, we click 'Return to last visited browse page'.

The screenshot shows the 'My Toolkit' interface. At the top left, there is a 'Show Tree' button. Below it, a link 'Return to last visited browse page' is highlighted with a red arrow. A box titled 'USERS WHO CHOSE THIS MEASURE ALSO CHOSE:' contains a list of measures with 'Add to My Toolkit' buttons: Ethnicity (Demographics), Current Educational Attainment (Demographics), Race (Demographics), Current Employment Status (Demographics), and Annual Family Income (Demographics). Below this is a section titled 'Empty My Toolkit' which contains a table with columns: Measure, Protocol, Requirements, and Essential Measures. The table lists three measures: Current Age, Gender, and Myocardial In farction. The Myocardial In farction row shows requirements for Current Age and Gender. A message states 'All Essential Measures have been added to your Cart' and 'You must click on [i] to review Special Requirements.' At the bottom, there are buttons for 'Continue selection: Browse', 'Search', 'Generate Report', 'Generate DCW/DD', and 'Share this Toolkit'.

My Toolkit

Show Tree

[Return to last visited browse page](#)

USERS WHO CHOSE THIS MEASURE ALSO CHOSE:

- [Add to My Toolkit](#) Ethnicity (Demographics)
- [Add to My Toolkit](#) Current Educational Attainment (Demographics)
- [Add to My Toolkit](#) Race (Demographics)
- [Add to My Toolkit](#) Current Employment Status (Demographics)
- [Add to My Toolkit](#) Annual Family Income (Demographics)

Empty My Toolkit

Measure	Protocol	Requirements	Essential Measures
<input checked="" type="checkbox"/> Current Age Find related measures -	Current Age		
<input checked="" type="checkbox"/> Gender Find related measures -	Gender		
<input checked="" type="checkbox"/> Myocardial In farction Find related measures -	Myocardial In farction	<input type="checkbox"/>	<input checked="" type="checkbox"/> Current Age <input checked="" type="checkbox"/> Gender

All Essential Measures have been added to your Cart

You must click on to review Special Requirements.

Continue selection: [Share this Toolkit](#)

Measures: 3 Protocols: 3

From the top of the Myocardial Infarction page, we click the 'Cardiovascular' link.

Browse » Domains » [Cardiovascular](#) » Myocardial Infarction

MEASURE: Myocardial Infarction #040800

Definition: Measure to assess if patient had a myocardial infarction (heart attack).

Purpose: Myocardial infarction (heart attack) is a leading cause of death for both men and women in the United States, which makes myocardial infarction a prevalent health issue for investigators to study.

Protocols:

[Add to My Toolkit](#) #040801 [Myocardial Infarction »](#)

Essential Measures [?]	Related Measures [?]
Current Age Gender	Blood Pressure (Adult/Primary) Lipid Profile Tobacco - Smoking Status Weight

Keywords: cardiovascular, myocardial infarction, heart attack, Multi-Ethnic Study of Atherosclerosis, MESA, Cardiovascular Health Study, CHS, Women's Health Initiative, WHI, chest pain, percutaneous transluminal coronary angioplasty, PTCA, coronary angioplasty, atherectomy, hospitalization, coronary stent, thrombolytic therapy, electrocardiogram, ECG, EKG, myocardial ischemia, ST-elevation myocardial infarction, STEMI, anticoagulation, coronary bypass surgery, personal history

Measure Release Date: September 9, 2009

[+ Add this Measure* to My Toolkit](#)

[+ Add this Measure* and all Essential Measures to My Toolkit](#)

* Adding this measure to the cart will add all protocols associated with this measure (listed below)

[View your notes for this measure »](#) [Add Note](#)

We then review the measures and determine if there are other measures we could include in our study. We decide to add Sudden Cardiac Arrest, Lipid Profile, and Family History of Heart Attack to My Toolkit. We add these to My Toolkit by following the steps above.

Browse Measures

Show Tree

Browse through Measures to view Protocols.

Browse » Domains » Cardiovascular

◀ **DOMAIN:** Cardiovascular #040000 ▶

Release Date: September 9 2009

[View scope of domain »](#)

[View Supplemental Information » ?](#)

[View Working Group Roster »](#)

Add to My Toolkit #041000 Abdominal Aortic Aneurysm »	Add to My Toolkit #040400 High Blood Pressure During Pregnancy »
Add to My Toolkit #040600 Angina »	Add to My Toolkit #040200 Lipid Profile » 
Add to My Toolkit #041100 Arrhythmia (Atrial and Ventricular) »	Add to My Toolkit #040800 Myocardial Infarction »
Add to My Toolkit #040300 Blood Pressure (Adult/Primary) »	Add to My Toolkit #040900 Peripheral Arterial Disease »
Add to My Toolkit #041200 Deep Venous Thrombosis »	Add to My Toolkit #041300 Pulmonary Embolism »
Add to My Toolkit #040100 Family History of Heart Attack » 	Add to My Toolkit #041400 Rheumatic Fever/Rheumatic Heart Disease »
Add to My Toolkit #040500 Heart Valve Function »	Add to My Toolkit #040700 Sudden Cardiac Arrest » 

The numbers in the #number format indicate unique codes for each domain, measure and protocol.

[« Back To Domains List](#)

My Toolkit now contains the six PhenX Measures we have selected.

The screenshot shows the 'My Toolkit' interface. At the top, there is a 'Show Tree' checkbox and a link to 'Return to last visited browse page'. Below this is a section titled 'USERS WHO CHOSE THIS MEASURE ALSO CHOSE:' with a close button. It lists four related measures: Psychopathy (Psychiatric), Posttraumatic Stress Disorder (PTSD) (Psychiatric), Attention-Deficit/Hyperactivity Disorder Symptoms (Psychiatric), and General Distress Screener (Psychiatric). Each has an 'Add to My Toolkit' button.

The main section is titled 'Empty My Toolkit' and contains a table of measures. The table has four columns: Measure, Protocol, Requirements, and Essential Measures. The measures listed are:

Measure	Protocol	Requirements	Essential Measures
Current Age	Current Age		
Gender	Gender		
Family History of Heart Attack	Family History of Heart Attack		<input checked="" type="checkbox"/> Current Age <input checked="" type="checkbox"/> Gender
Lipid Profile	Lipid Profile	!	<input checked="" type="checkbox"/> Current Age <input checked="" type="checkbox"/> Gender Review additional Essential Measures: <input type="checkbox"/> Ethnicity <input type="checkbox"/> Race
Sudden Cardiac Arrest	Sudden Cardiac Arrest	!	<input checked="" type="checkbox"/> Current Age Review additional Essential Measures: <input type="checkbox"/> Ethnicity
Myocardial Infarction	Myocardial Infarction	!	<input checked="" type="checkbox"/> Current Age <input checked="" type="checkbox"/> Gender

At the bottom of the table, there is a warning message: 'Essential Measures are needed to interpret your data. Add all Essential Measures to your Toolkit'. Below this is a note: 'You must click on ! to review Special Requirements.' At the very bottom, there are buttons for 'Continue selection', 'Browse', 'Search', 'Generate Report', 'Generate DCW/DD', and 'Share this Toolkit'.

For the Lipid Profile and Sudden Cardiac Arrest measures in My Toolkit we see some red measures under the 'Essential Measures' header. The notice in the My Toolkit view regarding Essential Measures will be discussed in Section 4, Review My Toolkit.

Under the Requirements heading we notice an "!" beside certain measures (see image above). This indicates that there are Special Requirements associated with the measure. We can click on the "!" icon for each measure to review the requirements. The information provided can help us decide whether to accept and keep the measure or remove it from My Toolkit. Following are the requirements for the Sudden Cardiac Arrest Measure.

My Toolkit - Review Requirements

Please review the requirements for Sudden Cardiac Arrest:

Requirement Category	Required
Average time of greater than 15 minutes in an unaffected individual Average time of greater than 15 minutes in an unaffected individual	No
Major equipment This measure requires a specialized measurement device that may not be readily available in every setting where genome wide association studies are being conducted. Examples of specialized equipment are DEXA, Echocardiography, and Spirometry	No
Specialized requirements for biospecimen collection This protocol requires that blood, urine, etc. be collected from the study participants.	No
Specialized training This measure requires staff training in the protocol methodology and/or in the conduct of the data analysis.	Yes

This protocol has special requirements. Please note the applicable category or categories (marked Yes).

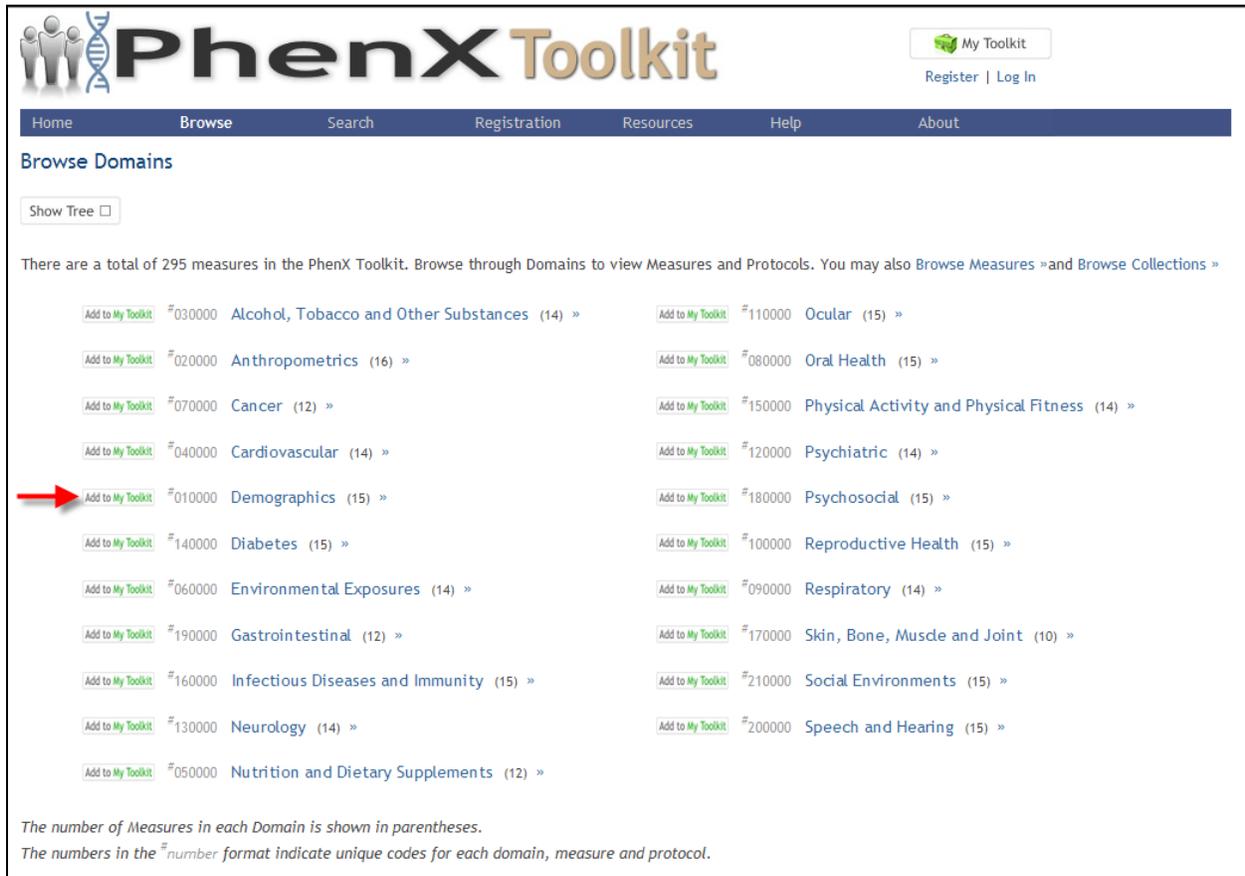
Accept and keep in My Toolkit

Remove from My Toolkit

Decide later

1.4 Adding Measures by Domain

If we want to select all of the measures in a domain, for instance all the measures in the Demographics Domain, we select 'Add to My Toolkit' on the Browse Domains page as shown below.



PhenX Toolkit My Toolkit [Register](#) | [Log In](#)

Home Browse Search Registration Resources Help About

Browse Domains

Show Tree

There are a total of 295 measures in the PhenX Toolkit. Browse through Domains to view Measures and Protocols. You may also [Browse Measures](#) » and [Browse Collections](#) »

Add to My Toolkit #030000 Alcohol, Tobacco and Other Substances (14) »	Add to My Toolkit #110000 Ocular (15) »
Add to My Toolkit #020000 Anthropometrics (16) »	Add to My Toolkit #080000 Oral Health (15) »
Add to My Toolkit #070000 Cancer (12) »	Add to My Toolkit #150000 Physical Activity and Physical Fitness (14) »
Add to My Toolkit #040000 Cardiovascular (14) »	Add to My Toolkit #120000 Psychiatric (14) »
Add to My Toolkit #010000 Demographics (15) »	Add to My Toolkit #180000 Psychosocial (15) »
Add to My Toolkit #140000 Diabetes (15) »	Add to My Toolkit #100000 Reproductive Health (15) »
Add to My Toolkit #060000 Environmental Exposures (14) »	Add to My Toolkit #090000 Respiratory (14) »
Add to My Toolkit #190000 Gastrointestinal (12) »	Add to My Toolkit #170000 Skin, Bone, Muscle and Joint (10) »
Add to My Toolkit #160000 Infectious Diseases and Immunity (15) »	Add to My Toolkit #210000 Social Environments (15) »
Add to My Toolkit #130000 Neurology (14) »	Add to My Toolkit #200000 Speech and Hearing (15) »
Add to My Toolkit #050000 Nutrition and Dietary Supplements (12) »	

*The number of Measures in each Domain is shown in parentheses.
The numbers in the #number format indicate unique codes for each domain, measure and protocol.*

2. Search the Toolkit

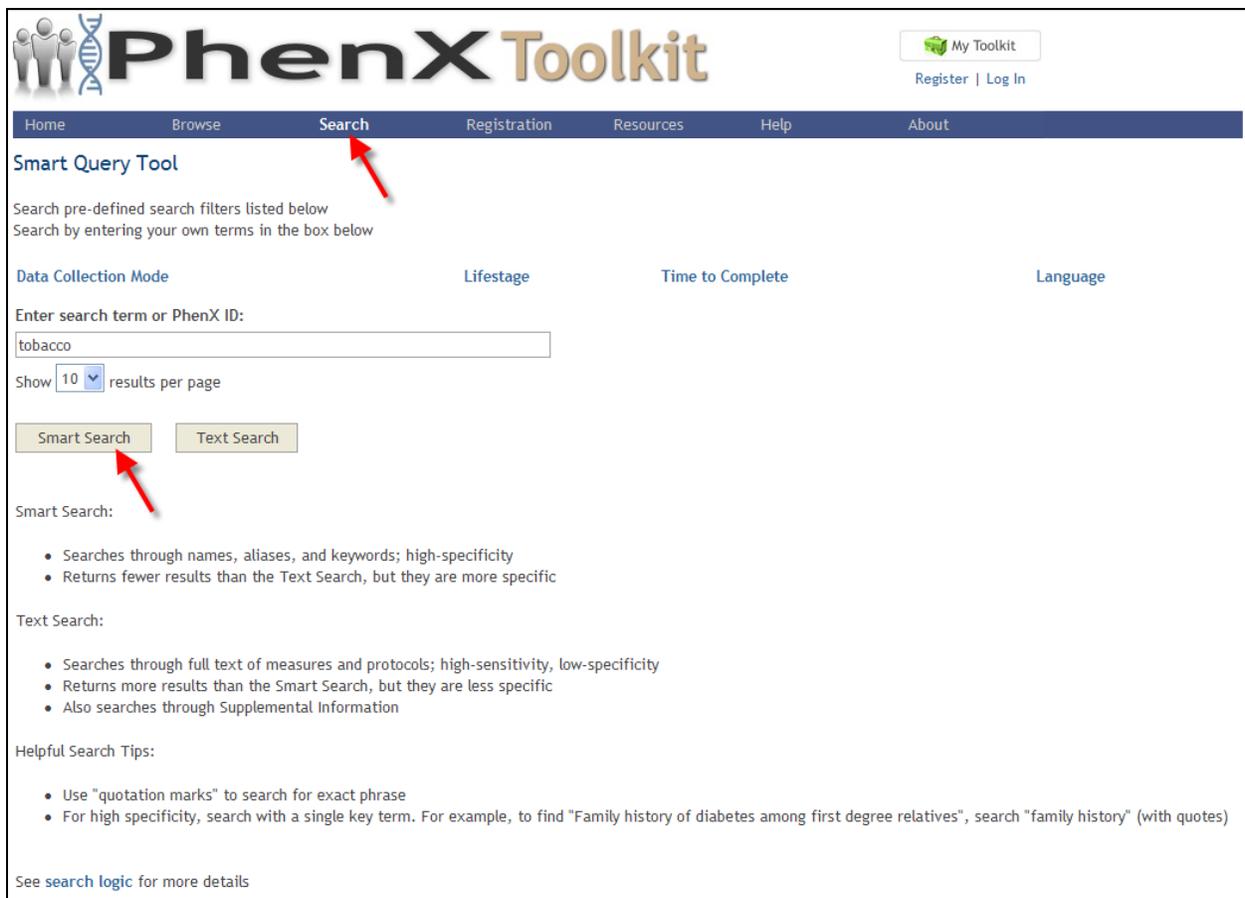
The Browse function we reviewed above is a domain-centric view of the Toolkit. The Search function is cross-cutting across all domains. You can limit your search to measures for a specific data collection type, life stage, completion time, or language by using the filters. Let's use the Search function to identify and choose environmental exposure measures. First let's search for tobacco exposure methods. From the toolbar at the top of the page, we click 'Search'.

There are two search options available:

- The Smart Search option is a high-specificity search of the measure and protocol names, aliases, and keywords.
- The Text Search option is a high-sensitivity, low-specificity search of the full text of the measures and protocols.

2.1 Smart Search

We enter "tobacco" in the search box and click 'Smart Search' as shown below.



The screenshot displays the PhenX Toolkit search interface. At the top, the logo "PhenX Toolkit" is visible alongside a navigation menu with options: Home, Browse, Search, Registration, Resources, Help, and About. A "My Toolkit" button with "Register | Log In" links is also present. The "Search" menu item is highlighted with a red arrow. Below the navigation, the "Smart Query Tool" section is active. It includes instructions to search pre-defined filters and a search box containing the term "tobacco". A dropdown menu shows "10" results per page. Two buttons, "Smart Search" and "Text Search", are visible, with a red arrow pointing to the "Smart Search" button. Below these buttons, the "Smart Search" section is expanded, showing a list of search criteria: "Searches through names, aliases, and keywords; high-specificity" and "Returns fewer results than the Text Search, but they are more specific". The "Text Search" section is also visible, listing: "Searches through full text of measures and protocols; high-sensitivity, low-specificity", "Returns more results than the Smart Search, but they are less specific", and "Also searches through Supplemental Information". A "Helpful Search Tips" section provides advice on using quotation marks and single key terms. At the bottom, a link to "search logic" is provided for more details.

2.2 Text Search

To search for a word or phrase within the text of the measures and protocols, we enter the word “tobacco” as before, and click on ‘Text Search’.

Text Search also searches through Supplemental Information. Supplemental Information presents the elements that were selected by the Steering Committee to define the scope of the domain and the elements that are represented by the measures in the Toolkit. It includes measures that were considered by the Working Group but not ultimately selected for the Toolkit.

Smart Query Tool

Search pre-defined search filters listed below
Search by entering your own terms in the box below

Data Collection Mode	Lifestage	Time to Complete	Language
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Enter search term or PhenX ID:

Show results per page

Smart Search:

- Searches through names, aliases, and keywords; high-specificity
- Returns fewer results than the Text Search, but they are more specific

Text Search:

- Searches through full text of measures and protocols; high-sensitivity, low-specificity
- Returns more results than the Smart Search, but they are less specific
- Also searches through Supplemental Information

Helpful Search Tips:

- Use "quotation marks" to search for exact phrase
- For high specificity, search with a single key term. For example, to find "Family history of diabetes among first degree relatives", search "family history" (with quotes)

See [search logic](#) for more details

Search result 1 - 10 of 24 results

PhenX Measure	Definition	Domain Name
<input type="checkbox"/> Tobacco - 30-Day Quantity and Frequency	Questions asking the respondent about quantity and frequency of cigarette smoking during the past 30 days.	Alcohol, Tobacco and Other Substances
<input type="checkbox"/> Tobacco - Smoking Status	Questions asking the respondent about smoking status in his or her entire life.	Alcohol, Tobacco and Other Substances
<input type="checkbox"/> Tobacco - Age of Initiation of Use	Questions asking the respondent how old s/he was when s/he first smoked cigarettes and first smoked cigarettes regularly.	Alcohol, Tobacco and Other Substances
<input type="checkbox"/> Tobacco - Age of Offset of Use	Questions asking a former smoker respondent how long it has been since s/he has quit smoking.	Alcohol, Tobacco and Other Substances
<input type="checkbox"/> Tobacco (non-cigarette) - Product Use	A measure to assess participant use of tobacco products other than cigarettes in his or her lifetime.	Oral Health
<input type="checkbox"/> Urine Assay for Tobacco Smoke Exposure	Cotinine is a biomarker to quantify recent exposure to tobacco smoke.	Respiratory
<input type="checkbox"/> Current Environmental Tobacco Smoke Exposure	Questions that ask about smoking at the respondent's home and at work.	Environmental Exposures
<input type="checkbox"/> Tobacco - Nicotine Dependence	Questions query respondent on whether s/he has symptoms of nicotine dependence.	Alcohol, Tobacco and Other Substances
<input type="checkbox"/> Passive Smoke Exposure	Measure to determine exposure to environmental tobacco smoke (ETS)	Cancer
<input type="checkbox"/> Personal Perception and Knowledge of Smoking-related Cancer Risk	Measure to assess concerns and perceived risk of being diagnosed with lung cancer	Cancer

3. Annotate Measures

We know we want at least one measure of diet as other potential risk factors but we're not sure what. Let's browse the measures in the Nutrition and Dietary Supplements domain.

We find Total Dietary Intake but we're concerned about licensing costs and the time required to complete the protocol.

Browse through Measures to view Protocols.

Browse » Domains » Nutrition and Dietary Supplements

◀ **DOMAIN:** Nutrition and Dietary Supplements #050000 ▶

Release Date: October 20 2009

[View scope of domain »](#)

[View Supplemental Information » ?](#)

[View Working Group Roster »](#)

Add to My Toolkit #050100 Breastfeeding »	Add to My Toolkit #050700 Fruits and Vegetables Intake »
Add to My Toolkit #050300 Caffeine Intake »	Add to My Toolkit #050800 Percent Energy from Fat »
Add to My Toolkit #050200 Calcium Intake (Daily) »	Add to My Toolkit #050900 Selenium »
Add to My Toolkit #050400 Dairy Food Intake (Daily Servings) »	Add to My Toolkit #051000 Sugar Intake (Added) »
Add to My Toolkit #050500 Dietary Supplements Use »	Add to My Toolkit #051200 Total Dietary Intake »
Add to My Toolkit #050600 Fiber Intake »	Add to My Toolkit #051100 Vitamin D »

The numbers in the #number format indicate unique codes for each domain, measure and protocol.

[« Back To Domains List](#)

Before we add this measure to My Toolkit, let's annotate that by clicking on 'Add Note' at the bottom of the protocol, typing a note that says "I don't know. I like this measure but the license is expensive and it looks somewhat burdensome for our participants. Should we consider alternatives?" and clicking on the gray 'Add Note' button below the text box.



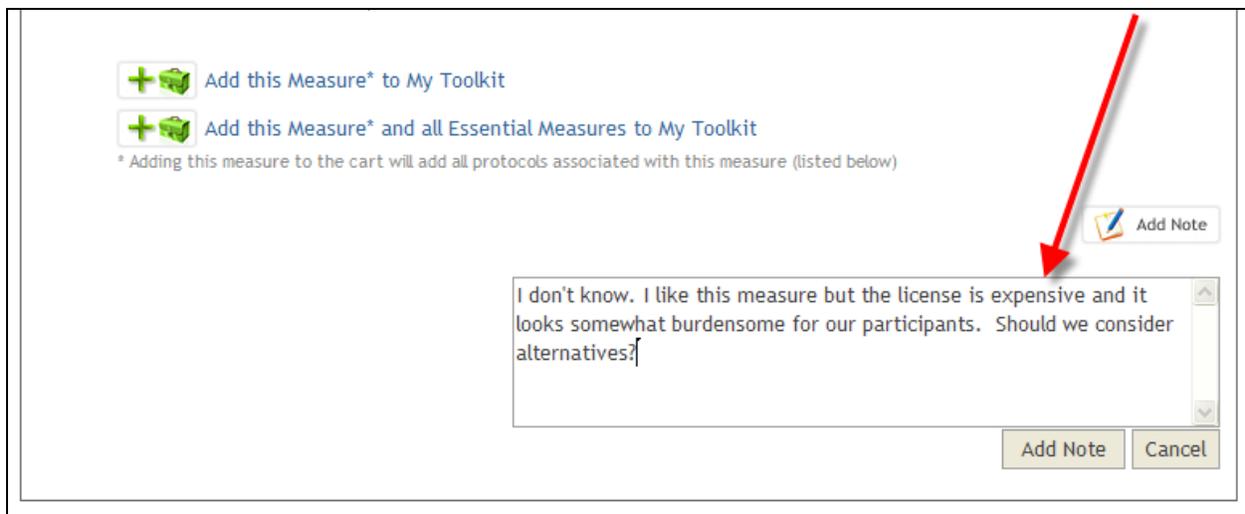
Measure Release Date: September 9, 2009

  Add this Measure* to My Toolkit

  Add this Measure* and all Essential Measures to My Toolkit

* Adding this measure to the cart will add all protocols associated with this measure (listed below)

 Add Note



  Add this Measure* to My Toolkit

  Add this Measure* and all Essential Measures to My Toolkit

* Adding this measure to the cart will add all protocols associated with this measure (listed below)

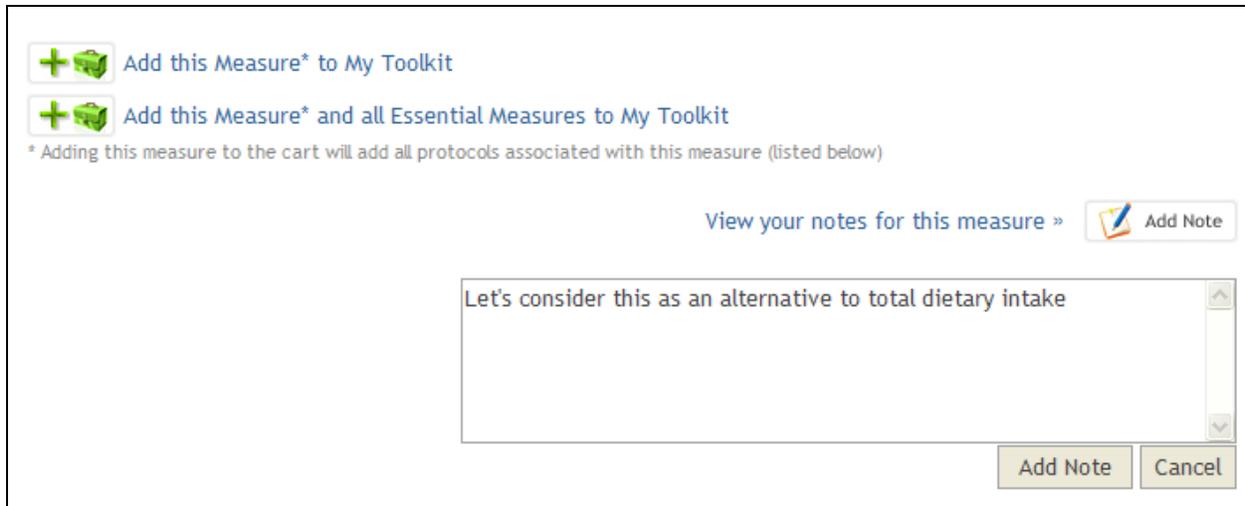
 Add Note

I don't know. I like this measure but the license is expensive and it looks somewhat burdensome for our participants. Should we consider alternatives?

Add Note Cancel

We also find Percent of Energy from Fat, which may be more relevant, and is both free and brief. Let's note this and include it as a possible alternative.

At the bottom right of the information box on the measure screen, we click on the 'Add Note' button, type "Let's consider this as an alternative to total dietary intake" and click on the gray 'Add Note' button below the text box to add the note. Then we click 'Add this measure and all Essential Measures to My Toolkit' to include it in My Toolkit.



The screenshot shows a user interface for adding a measure to a toolkit. At the top left, there are two options, each with a green plus icon and a small green cube icon:

- [Add this Measure* to My Toolkit](#)
- [Add this Measure* and all Essential Measures to My Toolkit](#)

Below these options is a small gray note: ** Adding this measure to the cart will add all protocols associated with this measure (listed below)*

To the right, there is a link: [View your notes for this measure »](#) and a button with a notepad icon labeled [Add Note](#).

In the center, there is a text input box containing the text: "Let's consider this as an alternative to total dietary intake".

At the bottom right of the text box, there are two buttons: [Add Note](#) and [Cancel](#).

4. Review My Toolkit

Now that we have selected several measures, let's review My Toolkit. Click on the 'My Toolkit' button on the top right of the page.

The screenshot displays the 'My Toolkit' interface. At the top, there is a navigation bar with links for Home, Browse, Search, Registration, Resources, Help, and About. Below this, the 'My Toolkit' section includes a 'Show Tree' button and a 'Return to the last visited page' link. The main content area is a table with columns for Measure, Protocol, Requirements, and Essential Measures. The table lists several measures, including Current Age, Gender, Family History of Heart Attack, Lipid Profile, Sudden Cardiac Arrest, and Myocardial Infarction. The 'Essential Measures' column for 'Lipid Profile' shows 'Current Age' and 'Gender' checked, while 'Ethnicity' and 'Race' are unchecked. A warning bar at the bottom of the table states: 'Essential Measures are needed to interpret your data. Add all Essential Measures to your Toolkit'. Below this bar, a message says: 'You must click on [i] to review Special Requirements.' At the bottom of the page, there are buttons for 'Continue selection: Browse', 'Search', 'Generate Report', 'Generate DCW/DD', 'My Saved Toolkits', and 'Share this Toolkit'.

In My Toolkit, we can see the measures and associated protocols we have selected. On the right-hand side, under the Essential Measures heading, the Lipid Profile Measure has Current Age and Gender listed with a check beside them. This indicates that these measures are also in My Toolkit. However, Ethnicity, and Race do not have checks because they are not in My Toolkit. To add them, we click in the empty box beside each measure. Essential Measures are other measures that are critical to the collection or interpretation of the selected measure. We can click on the 'Add all Essential Measures to My Toolkit' link below the bar to add the missing Measures. The Measures listed above the bar are Essential Measures that have already been added to My Toolkit.

At this point, we can save this by clicking on 'My Saved Toolkits' and exit or go back and continue choosing measures. We can also 'Share My Toolkit' with others. Before we produce the reports for My Toolkit, let's ask our co-investigators to review it by sending them a Toolkit-generated request to review My Toolkit. To do this we click the 'Share this Toolkit' button at the bottom of the My Toolkit page. We can copy the auto-generated text into a new email, edit it as desired and send it to our colleagues.



Share My Toolkit

To share your toolkit selection, copy & paste the text below into a new email message and send it to your friends and colleagues:

A PhenX Toolkit user has invited you to view their Toolkit. Please visit the following link:

<http://phenxtoolkitstage.rti.org/sharecart.php?c=10101,10701,40101,40201,40701,40801>

The PhenX Toolkit is a catalog of high-priority measures for consideration and inclusion in genome-wide association studies (GWAS) and other large-scale genomic research efforts.

Please visit the PhenX Toolkit at: <http://phenxtoolkitstage.rti.org>
(Toolkit version: July 29 2011, Ver 4.5)

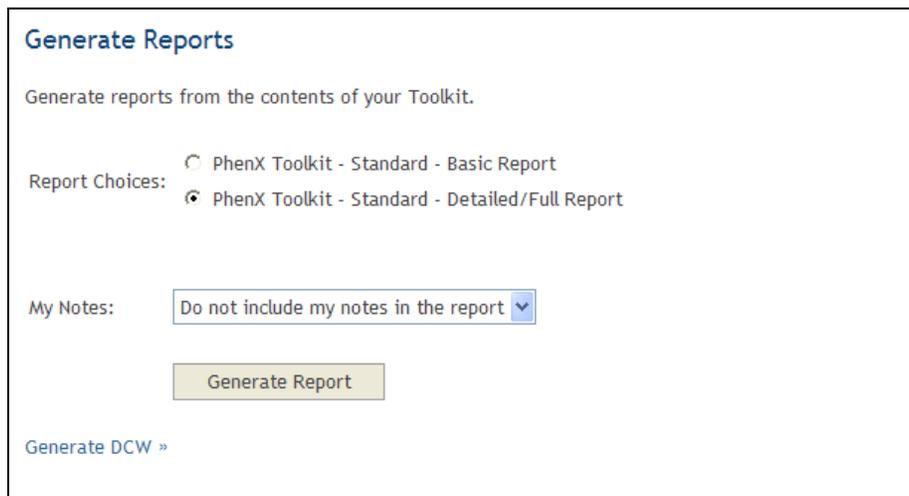
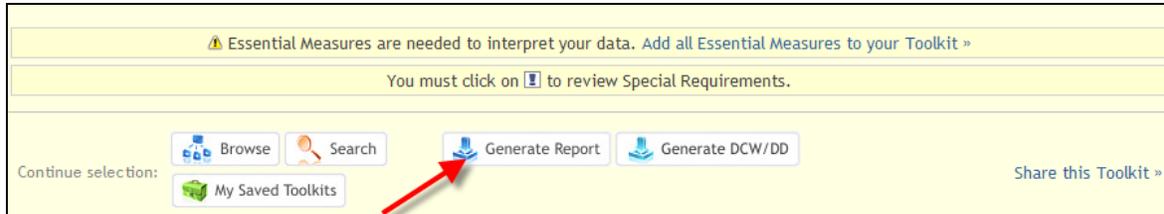
Or, just click the "Send to my email" button to send the link information to your own email address; then it will be easy to forward on to a colleague.

[Send to my email](#)

[\(Linking to PhenX Toolkit\)](#)

5. Generate Report

After we have completed My Toolkit we can generate a Basic Report or a Full Report for the measures we have included.

A screenshot of the "Generate Reports" form. The title is "Generate Reports". Below the title is the text: "Generate reports from the contents of your Toolkit.". Under "Report Choices:", there are two radio buttons: "PhenX Toolkit - Standard - Basic Report" (unselected) and "PhenX Toolkit - Standard - Detailed/Full Report" (selected). Below this is a "My Notes:" section with a dropdown menu set to "Do not include my notes in the report". At the bottom, there is a "Generate Report" button and a "Generate DCW »" link.

The Basic Report includes a Table of Contents; the ID, name, description and purpose for each measure; and the ID, description, specific instructions, and text for each protocol.

In addition to the information in the Basic Report, the Full Report also lists the Essential Measures and the associated keywords for each measure. For each protocol, the Full Report lists the selection rationale; the source; the languages it is available in; the participant age range for which it is valid; the personnel, training, and equipment requirements for implementing the protocol; the type of protocol and the modes by which it may be administered; the associated Common Data Elements; any variables that are derived from the measure; and a short list of general references that may be valuable to the user.

To generate our report, we click on the generate report icon at the bottom of the My Toolkit page.

- Choose full report
- Choose include notes
- Click the generate report button
- Click yes to show both the secure and non-secure items
- Click Open or Save
- Save or print the file (The reports can be quite lengthy; you may want to consider this if you plan to print)

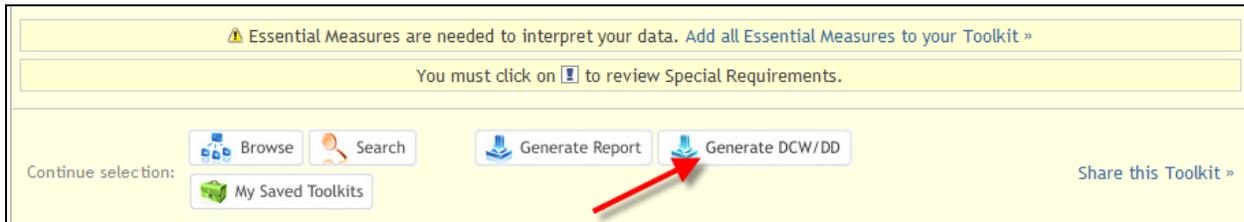
6. Generate Data Collection Worksheet and Data Dictionary

In addition to the Report, we can also generate Data Collection Worksheets (DCW) and Data Dictionaries (DD) for protocols in My Toolkit. The Data Collection Worksheet (DCW) is a tool to help investigators integrate their chosen collection of PhenX measures into a study. The PhenX measures that we selected and added to My Toolkit are presented in the DCW in alphabetical order. The DCW includes worksheets for data collection. Variables derived from the collected data are shown in the Data Dictionary (DD) with variable names and unique PhenX variable identifiers. The collection of DCWs produced by the Toolkit is not designed as a data collection instrument. Each investigator will decide how to integrate PhenX measures into the data collection for their study.

DCW specifies the data to be collected and recorded, and DD provides data dictionary in two formats: a Microsoft Word file format that captures skip patterns, and a Comma-separated value (CSV) file format that is compatible with the dbGaP data submission packet.

To generate DCW and DD we click on the ‘Generate DCW’ icon at the bottom of My Toolkit page and select the protocols we want to include.

- Download DCW (word)” button will generate DCW in word
- Download DD (word)” button will generate DD in word
- Download DD (csv) button will generate DD in csv



Select All

Select by protocol type:

Unselect All

Bioassay

Questionnaire

Physical Examination

Record Abstraction

Measure

Protocol

Protocol Type

Current Age

Current Age

Questionnaire

Family History of Heart Attack

Family History of Heart Attack

Questionnaire

Gender

Gender

Questionnaire

Lipid Profile

Lipid Profile

Bioassay

Myocardial Infarction

Myocardial Infarction

Questionnaire

Sudden Cardiac Arrest

Sudden Cardiac Arrest

Questionnaire

 Download DCW
in Word format

Click here to download the Data Collection Worksheets (DCW) for the selected protocols in Word format. View [sample of DCW](#) before downloading.

 Download DD
in Word format

Click here to download the Data Dictionary (DD) for the selected protocols in Word format. This format captures skip patterns. View a [sample of DD](#) before downloading.

 Download DD
in CSV format

Click here to download the Data Dictionary (DD) for the selected protocols in CSV format. This format is compatible with the database of Genotypes and Phenotypes (dbGaP) data submission packet. View a [sample of DD](#) before downloading. Please find the description of the column headers as specified in the dbGaP data submission packet.

 My Saved Toolkits