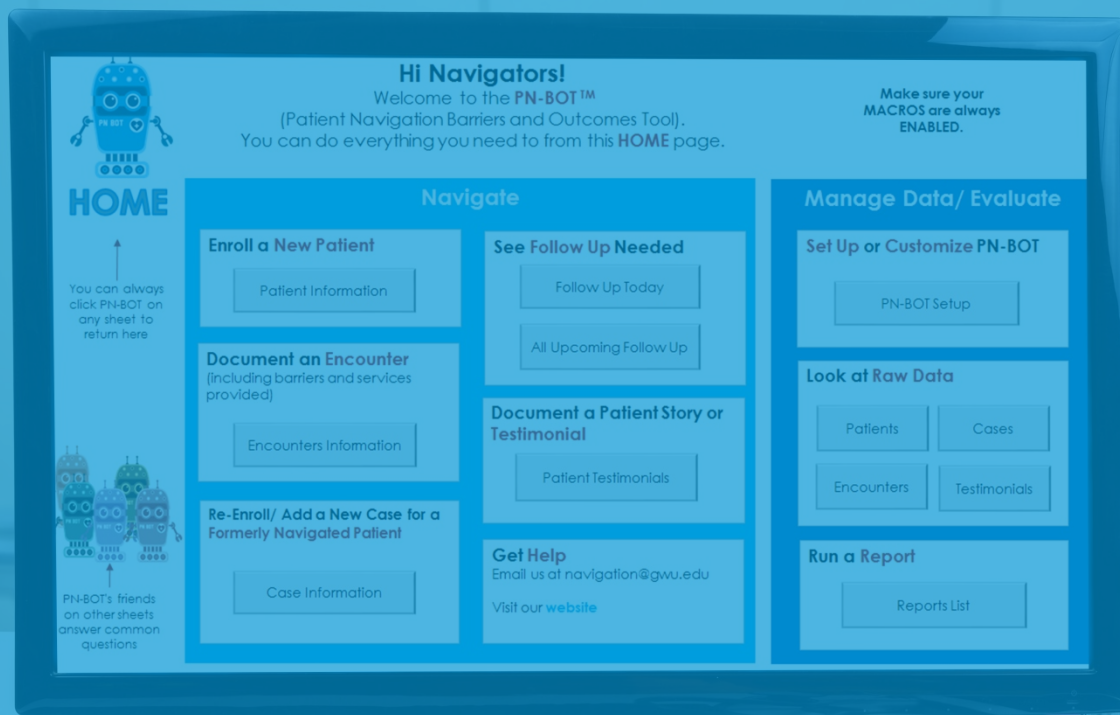


# Patient Navigation Barriers and Outcomes Tool™ (PN-BOT™)

## Version 1.1 Quick Start Guide



September 2016

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If you need technical assistance or would like more information, please contact us at [navigation@gwu.edu](mailto:navigation@gwu.edu).

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First published September 29, 2016

**Suggested Citation:** Phillips, S., Raskin, S., Pratt-Chapman, M. (2016). Patient Navigation Barriers and Outcomes Tool: Version 1.1 Quick Start Guide. The George Washington University Cancer Center. Washington, DC.

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## ABOUT THE INSTITUTE FOR PATIENT-CENTERED INITIATIVES AND HEALTH EQUITY AT THE GW CANCER CENTER

The mission of the Institute for Patient-Centered Initiatives and Health Equity at the GW Cancer Center is to foster healthy communities, prepared patients, responsive health care professionals and supportive health care systems through applied cancer research, education, advocacy and translation of evidence to practice. Our vision is a cancer-free world and health care that is patient-centered, accessible and equitable.

The GW Cancer Center is a collaboration between the GW Hospital, the GW Medical Faculty Associates, and the GW School of Medicine and Health Sciences to expand GW's efforts in the fight against cancer. The GW Cancer Center also partners with the Milken Institute School of Public Health at GW, and incorporates all existing cancer-related activities at GW, serving as a platform for future cancer services and research development.

## ACKNOWLEDGMENTS

We would like to thank Genentech for its generous support of this project.

We would also like to thank all of the navigation professionals who pilot-tested the PN-BOT™ and offered invaluable feedback during the PN-BOT™ development process, including:

- St. Peter's Hospital, Cancer Treatment Center, Helena, Montana: Emily Burton, RN OCN and Pam Sasser, RN, BAN
- Hunterdon Regional Cancer Center: Barbara Tofani, MSN, RN, NEA-BC; Jessica Danik, BSN, RN, CBCN; and Samantha Geiger, RN
- Pacific Cancer Foundation, Maui, Hawaii: Nancy La Joy and Shari Osajima
- Six other navigation programs

We would also like to thank the hundreds of navigation staff and oncology administrators who participated in interviews, focus groups and surveys with us to help inform the content of PN-BOT™.

## WHERE TO GO FOR MORE INFORMATION

Did you know there's even more helpful information and resources on using PN-BOT™ available on our [website](#)? The following "how to" [videos](#) may help with more in-depth information than is covered in this Quick Start Guide:

- Orientation Video
- Transferring Data from Version 1.0 to Version 1.1
- Don't Lose Your Data! 3 Important Types of "Saves" to Know About
- How to Add a New Patient to PN-BOT™
- How to Enter and Track Information About Encounters, Barriers and Navigator Actions
- How to Use the Patient Selection Interface and Look Up Previously Entered Information
- Understanding and Using ID Numbers in PN-BOT™

# Patient Navigation Barriers and Outcomes Tool™ (PN-BOT™)

Version 1.1 Quick Start Guide

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## WHAT IS PN-BOT™?

The Patient Navigation Barriers and Outcomes Tool™ (PN-BOT™) is a free, customizable, evidence and practice-informed, Excel-based tool designed to help oncology patient navigation programs manage data and generate reports.

The PN-BOT™ contains:

- Data entry forms
- Database shells
- Reports templates

The PN-BOT™ helps track and generate reports on information such as:

- Patient volume
- Patient demographic profiles
- Cancer treatment profiles
- Timeliness of cancer care
- Barriers to care
- Navigator caseload and time spent
- Navigation services provided
- Patient outcomes

PN-BOT™ is an Excel workbook composed of 22 sheets that serve five main purposes:



To use PN-BOT™, you must have a PC operating system with a copy of Microsoft Excel (ideally 2010 or later) installed. Please note that PN-BOT™ is not currently compatible with Mac systems.

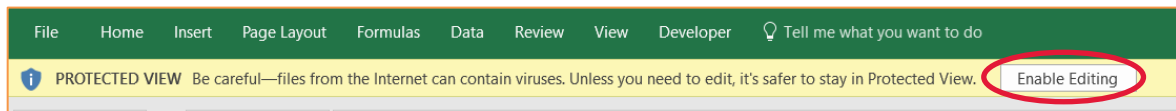
## Step 1: Download

Register and download PN-BOT™ from <http://bit.ly/AboutPNBOT>

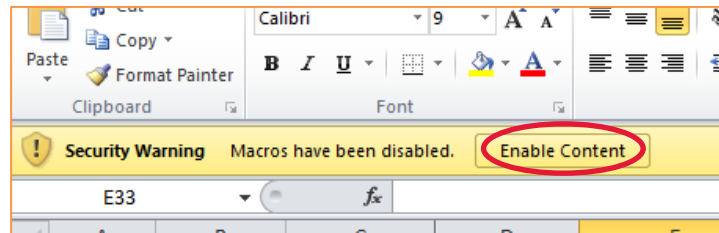
## Step 2: Enable Editing and Enable Macros

Open PN-BOT™ in Microsoft Excel using your PC. There may be one or two warning messages at the top of your screen because your computer wants to protect you from downloading files it doesn't recognize. The wording may vary depending on your version of Excel.

Click "Enable Editing" or a similar button for the "Protected View" message to allow edits to the document

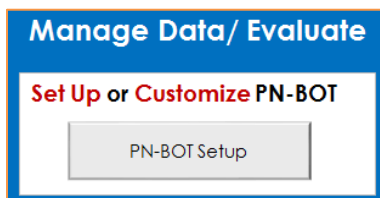


Click "Enable Content" or a similar button to enable macros. **Macros MUST be enabled for PN-BOT™ to function properly.**



## Step 3: Customize

PN-BOT™ is pre-programmed with a large number of variables to accommodate the information needs for a wide variety of oncology navigation programs. Your navigation program can choose to opt in or out of using as many variables as you wish.



To pick your variables, click on the "PN-BOT Setup" button from your **Home** sheet. Then, on the **Set Up** sheet, check all the variables that your navigation program would like to collect and uncheck those that you want to skip.

Checking or unchecking variables will show or hide them in **Data Entry** or **List** sheets. When setting up PN-BOT™ and selecting variables, please keep in mind:

- **Desired reports:** Consult the **Reports List** sheet in PN-BOT™ for a full list of reports and the variables needed for each. If you want to be able to run a specific report, make sure you have checked off the variables needed for that report in the **Set Up** sheet.
- **Uniformity across multiple copies of PN-BOT™:** If you have multiple navigators entering into multiple copies of PN-BOT™, make sure the SAME set of variables are checked in ALL copies of PN-BOT™. Failure to ensure consistent data collection across staff can result in incomplete or inaccurate reports using combined data.
- **Diverse data needs.** Different types of staff will want to know different information for different reasons (e.g., navigators tracking information to provide patient services, those generating reports to track program performance and those using the reports to make resource allocation decisions). We recommend a group conversation to build consensus around which variables to use to ensure that everyone’s needs are met and data entry burden is feasible.

If you want to track a variable not included in the **Set Up** sheet, you may design your own.

#### Step 4: Save

Once you are happy with your PN-BOT™ set up, save the PN-BOT™ file by using keyboard shortcut Ctrl+S or clicking the file save button at the top of your screen. PN-BOT™ should be saved somewhere safe, secure and appropriate for storing patient health information. It will use the “.xism” file extension because it is a macro-enabled Excel workbook.

All done! You’re ready to start navigating with PN-BOT™. We entered two example entries into each form to get you started. Please don’t delete the example entries until you have added at least two entries of your own in each format.



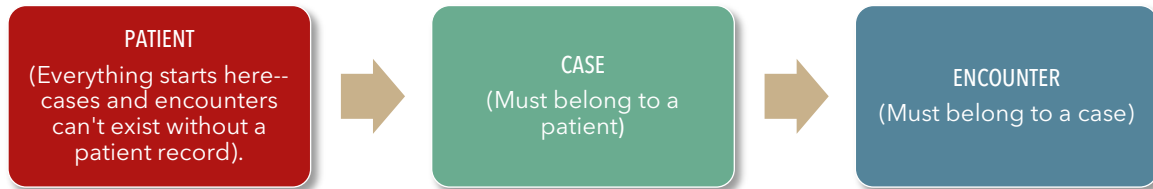
Go to the **Home** sheet in PN-BOT™ to get started. You can always click on the PN-BOT™ “home” icon to get back to the **Home** sheet.



## SECTION 1: TYPES OF INFORMATION COLLECTED BY PN-BOT™

PN-BOT™ collects and reports on information at the following three hierarchical levels:

**Patient, Case and Encounter.**

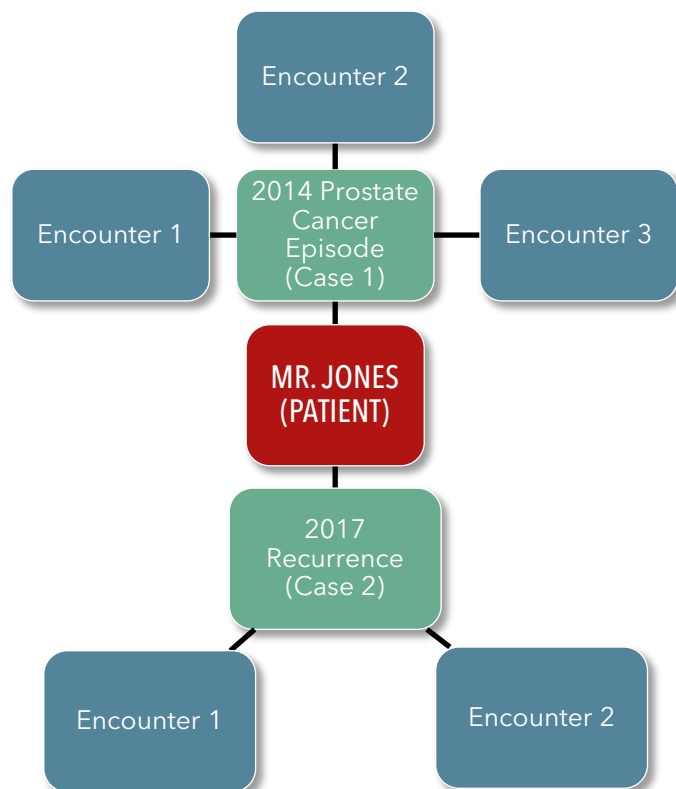


- Patient-level data are about each unique person served by the navigation program.
- Case-level data are about each period of navigation, lasting from the start to the end of active navigation services. Case-level data includes cancer details.
- Encounter-level data are about what happened during each instance that a navigator met with or provided services to a patient.

In the example below, Mr. Jones is the *patient*. He can only ever have one patient record in PN-BOT™ because he is always the same person no matter how many times he has cancer.

Mr. Jones has two case records, because he had two discrete cancer episodes; a 2014 bout with prostate cancer that was resolved and a recurrence three years later. He must have a PN-BOT™ patient record created before a case record.

The navigation program had five instances of contact, or *encounters*, with Mr. Jones or on his behalf. Mr. Jones met with a navigator three times for his first case in 2014. Mr. Jones also met with a navigator two times for his recurrence in 2017, including a 10-minute phone call to Mr. Jones' insurance to facilitate the approval of physical therapy, then a meeting to help him set up an appointment. He must have patient and case records in PN-BOT™ before encounters can be added for him.



Each data level (Patient, Case and Encounter) has a variety of variables available. These variables form the basis of the reports pre-programmed into PN-BOT™.

## Patient-Level

Patient-level data are about each unique person served by the navigation program.

All data entry starts at the patient level. No case or encounter information can be entered about a patient if he or she does not first have a patient record created in PN-BOT™.

### Important:

Each patient must have only one record entered at the patient level and only one Client ID number that is permanently theirs and no one else's.

## Where to Look in PN-BOT™

For the patient level, enter data in the **Patient Data Entry** sheet, see raw data in the **Patient List** sheet, generate automatic reports in the **Patient Reports** sheet and create custom reports in the **Patient Pivot** sheet.

## Default Patient-Level Variables

Default patient-level variables include:

- Client ID (mandatory)
- First Name (mandatory), Last Name
- Date of Birth/Age
- Navigation Intake Date (mandatory)

**Client ID** numbers get assigned at the patient level. Client ID numbers are PN-BOT™'s unique identifier variable, or way of knowing who's who, even when patients have the same names or birthdates. You may choose to have PN-BOT™ automatically generate a unique Client ID or type in your own alpha-numerical Client ID (for example, the patient record number that you use elsewhere).

**Navigation Intake Date** refers to the date that a patient first starts services with the navigation program.

## Optional Patient-Level Variables

You may choose to opt into 31 optional variables at the patient level, such as:

- Primary insurance
- Email
- Caregiver/Primary Contact Phone
- Ethnicity
- Literacy Level

- Gender
- Notes

### Patient-Level Reports

There are 24 automatic reports available at the patient level, such as:

- Number of Clients by Intake Month
- Number of Clients by Current Age, by Intake Month (Summary Statistics)
- Number of Clients by Race, by Intake Month (Disaggregated)

### Use of Patient-Level Data

#### For PN-BOT™ Functionality

Patient-level data are fundamental and necessary for the creation and maintenance of PN-BOT™ records. Even if your navigation program is not interested in capturing demographics or contact information, PN-BOT™ needs three pieces of essential information at the patient level (Client ID, First Name, Intake Date) to function at all other levels.

#### For Seeing Trends in Patient Populations Served by Your Navigation Program

Patient-level data may be used to generate reports and gain a more nuanced understanding of the patients served by the navigation program. Patient-level data comprehensively cover demographic information such as ethnicity, race, sex, gender, sexual orientation, religious views, insurance coverage, education and literacy level of patients and household size and income. Example questions answerable through reports at this level: How many unique patients did the navigation program serve for the first time in 2015? How many were African American? How many were over 65?

Reports using patient-level data can be used for a variety of purposes including but not limited to:

- Identifying gaps in patient populations as compared with community demographics in order to guide outreach efforts
- Demonstrating program reach in funding applications and reports
- Identifying opportunities in navigation program services to better address the needs of specific populations (i.e. advocating for additional resources in Mandarin Chinese, training navigation staff in how to provide LGBTQ-affirming care)

## For Keeping Track of Information Important to Day-to-Day Navigation Work

Navigators contact patients often and can use PN-BOT™ to log and look up contact information (e.g., phone number, email, mailing address) and specifics about caregivers or others important to the patient. Navigators can also use the general “Notes” field to narratively document and remind themselves of important details about the patient.

### Case-Level

Case-level data are about each period of navigation, lasting from the start to the end of active navigation services. Case-level data includes cancer details.

The definition of a “case” and when precisely a case starts or ends, will depend on each navigation program’s setting and protocols. Generally speaking:

- A case “starts” when contact between the patient and navigation program begins and services are initiated.
- A case “closes” when the patient no longer receives regular contact and services from the navigation program. This may be due to a patient completing the prescribed treatment regiment, a patient unwilling to receive any more services, death of a patient or if a patient relocates to another city or is referred to a different facility.
- One case will usually (but does not have to) coincide with one cancer episode.

A case record cannot be created for a patient until he or she has a patient record in the system.

No encounter information can be entered about a patient until he or she has a case record created in the PN-BOT™.

#### Important:

Each navigated patient should have at least one case but could have more than one if they exit and then re-enter navigation services later (e.g., for a second episode of cancer)

### Where to Look in PN-BOT™

For the case level, enter data into the **Case Data Entry** sheet, see raw data in the **Case List** sheet, generate automatic reports in the **Case Reports** sheet and create custom reports in the **Case Pivot** sheet.

### Default Case-Level Variables

Default case-level variables include:

- Case ID
- Case Instance (i.e. first, second, third case with the navigation program)
- Case Start Date (mandatory)
- Case Close Date

**Case ID** is the number automatically assigned by PN-BOT™ to help it uniquely identify each case.

**Case Instance** refers to whether the case is the patient's fist (1), second (2), third (3), etc. with the navigation program. PN-BOT™ automatically figures this out by counting the number of cases previously entered for the patient. Many of your patients may only have one case and therefore a case instance of one.

### Optional Case-Level Variables

You may choose to opt into 45 optional case and cancer variables at the case level, such as:

- Referral Source
- Case Close Reason
- Cancer Type
- Current Stage
- Treatment Types
- Date of Treatment Initiation
- Oncologist Name
- Notes on Family History

### Case-Level Reports

There are 36 automatic reports available at the case level, such as:

- Number of Cases Active During Selected Year
- Number of Cases per Navigator, by Case Start Month
- Number of Cases by Cancer Type, by Case Start Month
- Number of Cases by Clinical Trial Enrollment Status, by Case Start Month
- Days Between Diagnosis and Treatment Initiation
- Number of Cases with Survivorship Care Plans Delivered by Curative Intent, by Plan Delivery Month

### Use of Case-Level Data

#### For PN-BOT™ Functionality

Case-level data are fundamental and necessary for the creation and maintenance of PN-BOT™ records. Even if your navigation program is not interested in capturing case or cancer information, PN-BOT™ needs one of essential information at the case level (Case ID) to enable capture of encounters-level data.

## For Seeing Trends in Patient Volume and Movement Through Your Navigation Program

Case-level data can help you understand important programmatic trends including how patients are hearing about your navigation program, how long they stay in the patient navigation program and why they leave. Through reports, you can also receive answers to patient volume-related questions such as: How many new cases were started in 2016? How many new cases were assigned to each navigator in May 2016?

You can use these data to identify referral sources important to your program, spot trends in patient outmigration and support navigation staffing and administrative decisions or requests with evidence.

## For Seeing Trends in the Clinical Profiles of Patients Served by Your Navigation Program

All cancer details get captured at the case level, making case-level data entry critical for navigation programs interested in evaluating clinical outcomes or tracking data for medical research.

Reports using case-level data can be used for a variety of purposes including but not limited to:

- Analyzing the distribution of different cancer types or stages among patients who receive navigation
- Identifying gaps and delays in cancer care to inform quality improvement
- Reporting benchmark data required by Commission on Cancer or other accrediting bodies
- Comparing cancer profiles of patients who receive navigation services with patients who do not (only possible if separate data collection is conducted for non-navigated patients)

## For Keeping Track of Information Important to Day-to-Day Navigation Work

Navigators may need to document and look up clinical information about their patients to keep track of and expedite movement through the cancer process. Case-level data also allows navigators to log and look up contact information about the patient's oncologist and primary care provider. Navigators can use the various case-level notes fields to narratively document and remind themselves of the patient's clinical trajectory.

## Encounter-Level

Encounter-level data are about what happened during each instance that a navigator interacted with (in-person or by phone) or provided services to a patient. Encounter-level data helps track changes in barriers experienced by patients as well as progress related to outcomes.

Most of the data about navigator work will be captured at the encounter level. If navigators meet with or provide services to patients multiple times over the course of navigation, they will have multiple "encounters" to document in PN-BOT™.

## Where to Look in PN-BOT™

For the encounters level, enter data into the **Encounters Data Entry** sheet, see raw data in the **Encounters List** and **Barriers List** sheets, generate automatic reports in the **Encounter Reports** and **Barrier Reports** sheets and create custom reports in the **Encounters Pivot** and **Barriers Pivot** sheets.

## Default Encounter-Level Variables

Default case-level variables include:

- Encounter ID
- Date of Encounter (mandatory)
- Encounter Type
- General Notes
- Barriers
- Navigator Actions
- Outcomes

**Encounter ID** is the number automatically assigned by PN-BOT™ to help it uniquely identify each encounter.

## Optional Encounter-Level Variables

You may choose to opt into 3 optional variables at the encounter level:

- Navigation Staff
- Minutes Spent on Encounter
- Date of Follow Up Needed

## Encounter-Level Reports

There are eight automatic reports about encounters and outcomes and 18 automatic reports about barriers and navigator actions, such as:

- Number of Encounters by Type, by Encounter Month
- Number of Minutes Spent on Encounters per Navigator, by Encounter Month
- Number of New Barriers by Category, by Encounter Month

- Number of New Insurance/Medical Navigator Actions, by Encounter Month

## Use of Encounter-Level Data

### For Seeing Trends in Encounter Volume and Navigator Time Spent

Encounter-level data can help you track how many times navigators interacted with patients and how much time was spent doing so. Such data could be helpful for:

- Managing caseloads for navigation staff
- Counting outputs for program evaluation and external reporting
- Identifying high-intensity patients
- Estimating navigation staff effort for economic evaluations and return on investment calculations
- Justifying need and requests for additional navigation staff or other resources

### For Seeing Trends in Barriers to Care

Patient barriers to care are tracked and reported upon at the encounter level. Data collected about barriers can help navigation programs with:

- Understanding the specific challenges experienced by patients and catering the navigation program to provide innovative solutions for the same
- Justifying the need for resources to address particular barriers to care
- Describing the intensity of navigation services needed to resolve barriers to care (would require external analysis outside of PN-BOT™)

### For Documenting Navigation Services Provided and Outcomes Achieved

Each time navigators document a new encounter, they have the option to specify actions taken to address barriers to care as well as any outcomes achieved since the previous encounter. These actions and outcomes are counted in PN-BOT™'s automatic reports, which can be used to demonstrate outputs and outcomes of the navigation program.

### For Keeping Track of Information Important to Day-to-Day Navigation Work

The **Encounters Data Entry** form is designed to help navigators keep track of what barriers their patients are experiencing, and how the statuses of these barriers change over time. Navigators can log actions taken to address barriers and write narrative notes with additional details. Navigators are reminded of all barriers ever experienced by a patient each time they open a blank form for that patient so that previously identified needs do not fall through the



cracks. If the optional Follow Up Date field is used, navigators can also write themselves notes that can be retrieved later and used as reminders for follow up needed.

## SECTION 2: RESPONSIBLE DATA MANAGEMENT

Before working with PN-BOT™, it is important for users to understand how to responsibly use and manage data files. It is the user's responsibility to avoid loss, corruption and accidental disclosure of patient data.

### Disclaimers, Legal Information and Terms of Use

Please familiarize yourself with the disclaimers, legal information and terms of use located in the **Home** sheet prior to initiating use of PN-BOT™.

### Sensitive Health Information

PN-BOT™ captures sensitive patient health information and should be treated with the appropriate levels of confidentiality and privacy just like any other health or medical record. **All users are responsible for complying with their organization's policies for storing and avoiding disclosure of patient data.**

#### Important:


All users are responsible for complying with their organization's policies for storing and avoiding disclosure of patient data.

Save the PN-BOT™ document in an appropriate location that only appropriate staff can access by entering a password or other credentials. Avoid emailing the document or otherwise transferring it using unsecure channels.

### Avoiding Data Loss

Navigators spend a lot of time and energy entering data and tracking information. Follow two simple steps to make sure this information does not get accidentally lost.

#### 1. Save frequently when entering data

Save (  ) the PN-BOT™ file frequently when entering data. Do not click "x" or otherwise close out of the PN-BOT™ if you entered information that you want to keep. Always save before stepping away from the computer.

2. Always use the provided  buttons in the Data Entry sheets to permanently save information entered in form fields

## Data Entry Sheets vs. List Sheets

PN-BOT™ has **Data Entry** sheets that look like forms to fill out:



PN-BOT™ also has **List** sheets where all information from the **Data Entry** sheet gets stored in database form. They look like traditional spreadsheets/tables:


All **Data Entry** sheets in PN-BOT™ have one or more corresponding **List** sheets that they save into:

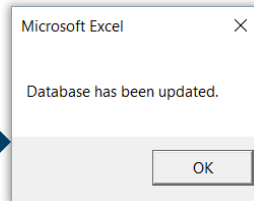
Data Entry Sheet	
Patient Data Entry	Patient List
Case Data Entry	Case List
Encounters Data Entry	Encounters List Barriers List
Testimonials Data Entry	Testimonials List

See Full List of Patients

Back to Patient Data Entry

Buttons like these jump you back and forth between corresponding **Data Entry** and **List** sheets.

The data entered in a **Data Entry** sheet must be moved into the corresponding **List** sheet to get permanently saved. If they are not moved, they will get written over the next time the form is cleared. It is not enough to only save (  ) the PN-BOT™ file. You must click the gray save button in the **Data Entry** sheet to have the information moved into the **List** sheet. Popups will confirm successful saves at each step. Note that using the auto-save feature in Excel is not advised because auto-save only saves the file. It does not save the data transferred from the **Data Entry** sheets into the **List** or **Report** sheets.



## Periodically make backup copies of PN-BOT™

Start an "Archive" folder in your files to save old versions of PN-BOT™ on a regular basis (e.g., weekly or monthly). In case someone accidentally deletes or otherwise corrupts the PN-BOT™ file, you will have this separate backup file saved so that you do not lose all of your patient information. Make sure to clearly date each backup copy of the PN-BOT™ so that you know when you saved it and can avoid confusion as to which version is the most current for data entry.

## Keep redundant secondary forms of data storage until PN-BOT™ compatibility and stability is established

Although PN-BOT™ has undergone extensive development, it has not been tested with all types of computers, operating systems, versions of Excel and organizational network environments. People will use PN-BOT™ in ways and through technological platforms that we have not anticipated nor tested. Therefore, we cannot guarantee that PN-BOT™ will not crash, freeze or otherwise malfunction.

As a precaution, we recommend that you maintain other redundant means of storing patient information alongside PN-BOT™ until you have established the compatibility of PN-BOT™ with your setting. **The GW Cancer Center cannot be held responsible for any loss or diminution of data.**

## Avoiding Data Corruption

### Establish protocols and good communication among all staff regarding PN-BOT™ file versions, variables and data entry

Skip this section if your navigation program only has one navigator or if your program does not need to track/report data consistently across navigators.

If your program has multiple navigators who all need to use the PN-BOT™, establish and make sure everyone is clear on:

- Whether and how files will be shared. Decide whether everyone will enter into a single file or whether each navigator will maintain their own file. If the file will be shared, only one user may enter data or make changes to the file at a time. Otherwise, conflicting copies of PN-BOT™ may inadvertently get created.
- How and where the most current version of the PN-BOT™ will be stored. Take steps to avoid confusion as to which copy is the most current by having clear file names and agreed-upon locations for saving the file.
- Which variables to collect. The **Set Up** sheet of PN-BOT™ allows you to customize PN-BOT™ data collection/entry by selecting your variables of interest from a large list. If your navigation program needs to generate aggregate reports across navigators, it

will be important for all navigators to collect the same set of information used in reports. For example, if your program needs to generate reports on how many surgery patients were served, your data will be incomplete if only two out of three navigators are collecting information about treatment types.

Make sure the same set of variables are checked off and properly set up in each copy of PN-BOT™ being used for data collection. Since anyone using the PN-BOT™ file has access to the **Set Up** sheet, it will be important for all users to know not to make changes on their own without discussing it with everyone else.

### **Be absolutely sure before deleting information**

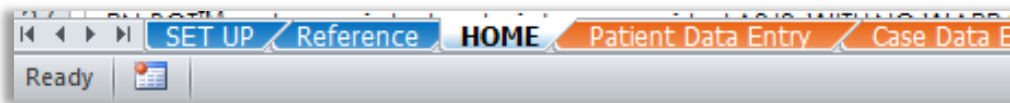
When you delete information, those data are permanently gone and cannot be retrieved (unless it is saved in a backup copy of PN-BOT™). Do not delete anything unless you are completely sure that it should be deleted.

### **Aside from data entry, avoid making changes to PN-BOT™ itself**

Do not rename sheets. Do not rename columns in **List** sheets. Do not delete sheets, buttons, table columns in **List** sheets or rows in data entry sheets. PN-BOT™ may not run properly if such changes are made.

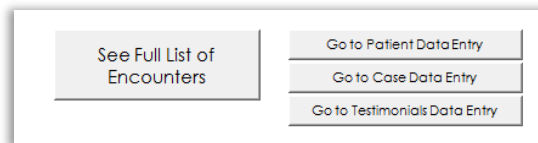
## **SECTION 3: HOW TO USE PN-BOT™ FUNCTIONS**

Sheets in PN-BOT™ are color-coded and can be identified or selected using tabs at the bottom of your screen that look like this:



If you are ever unsure what sheet you are on in PN-BOT™, look at the highlighted/bolded tab at the bottom of your screen. The above example is on the **Home** sheet. You can also scroll up and look for the sheet title.

PN-BOT™ contains many buttons that help you immediately jump to another sheet without having to look through the tab names at the bottom of your screen. For example, each **Data Entry** sheet will contain buttons like these at the top right of the sheet:



If you ever get lost, just click on the PN-BOT™ icon in the top left of the sheet to take you back to the **Home** sheet.

## How to Input Information for Various Data Types

You may enter data into the **Patient Data Entry**, **Case Data Entry**, **Encounters Data Entry** or **Testimonials Data Entry** sheets. The method you use to enter or input information into PN-BOT™ will depend on the variable type.

Do not enter data in the **Patient List**, **Case List**, **Encounters List** or **Testimonials List** sheets. The data you enter into the **Patient Data Entry**, **Case Data Entry**, **Encounters Data Entry** or **Testimonials Data Entry** sheets will automatically appear into its respective **Data List** sheet when you save the **Data Entry** sheet.

**Important:**  
Do not enter data in the **Patient List**, **Case List**, **Encounters List** or **Testimonials List** sheets.

### Entering text type data

Some data entry fields are text type, meaning that you simply type in your response. Depending on the variable, text type answers could range from one word to several sentences long. For example, **Last Name** and **Contact Information Notes** are both text type variables.

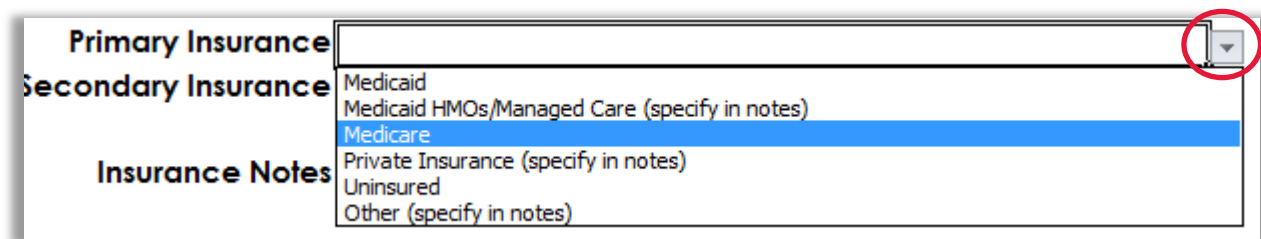
Please note that if your navigation program wishes to generate a report based on a text type variable, consistent spelling and wording will be important. For example, if your program needs to generate a report using the **Navigator Staff Encounters Data Entry** variable, all staff should enter their name the same way every time. If, when entering encounters data, navigator Angela Moss sometimes enters her name as "Angela Moss," "Angie," or "Angela," she would incorrectly be counted as three separate people in report counts.

Encounter	TOTAL	Angie	Angela Moss	Angela	(
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0

To avoid this error, Angela should decide how she wants to spell her name and always consistently type exactly that into the **Navigation Staff** field when entering encounters data.

### Entering list type data

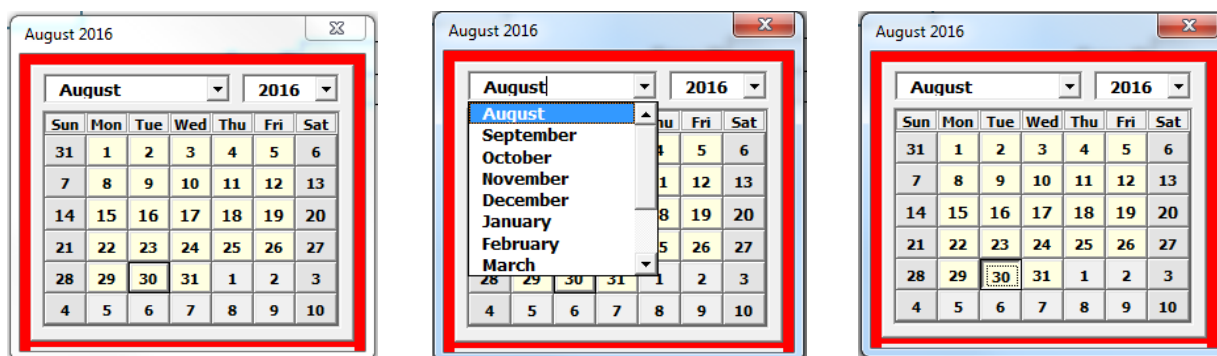
Some data entry fields are list type, meaning that you choose your answer from a dropdown list. When you click in the answer field for a list type variable, you will see a downward pointing triangle. If you click on the triangle, you will see a list of response options to choose from. Click on one of the listed options to select it. For example, **Primary Insurance** is a list type variable:



You may not type responses other than what is included in the dropdown list of response options. For example, if you type “no insurance,” which is not included in the dropdown list, you will see an error message saying “The value you entered is not valid. A use has restricted the values that can be entered into the cell.” To continue you would need to select one of the options from the list instead (e.g., “uninsured”).

### Entering date type data

Some data entry fields are date type, meaning that you must enter a date as your response for that variable. Most data type variables will display the entered date in mm/dd/yyyy format. When you click in a date type data entry field, you will usually see a calendar widget pop up. To select a date using the calendar widget, you may select month and year using dropdown menus and then click on any specific date number to select it. Dates in grey squares, such as weekends, are okay to select.



The data entry field will then populate with the date selected.

Alternatively, if you do not wish to use the calendar widget, you may “x” out of the window and directly type your date instead.

If anything other than a date is entered into a date field, or if a nonsensical date is entered (e.g., 5/4/1780) you will receive an error message prompting a correction.

Note that **Date of Birth** will always need to be typed in and will never prompt the calendar widget input option because the widget’s years for selection do not go back far enough to accommodate most ages.

### Required data entry fields

Some variables are so important that PN-BOT™ will not allow you to save and continue if the data entry field is left blank.

In the **Patient Data Entry** sheet, required fields appear in pink (**Client ID, First Name, Navigation Intake Date**).

In the **Case Data Entry** sheet, required fields appear in green (**Case Start Date**).

In the **Encounters Data Entry** sheet, required fields appear in blue (**Encounter Date**).

If you attempt to save from the **Data Entry** form without entering all required variables, you will be prompted with an error message asking you to enter a value for the missing required variable. For example, in the **Case Data Entry** form, if you forget to enter a **Case Start Date** and click “Save,” you’ll receive an error message that says “Please enter a Case Start date.”

### Auto Populated/Protected data fields

Some fields in **Data Entry** sheets will appear gray, indicating that they are auto populated and/or protected fields. You are not expected to enter data into these fields.

Examples of auto populated and/or protected fields include:

- Identifying information sections of **Case Data Entry** and **Encounters Data Entry** sheets: You do not need to enter this information yourself because it automatically gets pulled from the patient record previously entered into the **Patient Data Entry** sheet. For example:

Identifying Information	
Client ID	2
First Name	Second Example
Last Name	Patient
Date of Birth	5/5/1970
Preferred Name	Mr. Second

- Record History sections of the **Patient Data entry** and **Case Data Entry** sheets: You do not need to enter this information yourself because time and identity stamps get automatically recorded when records are created or updated. For example:

Record History	
Record Creation Timestamp	06/25/2016 02:09 PM
Created By:	Phillips, Serena
Record Update Timestamp	08/30/2016 04:02 PM
Updated By:	Phillips, Serena

- Automatically calculated fields such as **Current Age** in the **Patient Data Entry** sheet.
- Automatically assigned numbers such as **Case Instance** and **Case ID** in the **Case Data Entry** sheet and **Encounter ID** in the **Encounters Data Entry** sheet. For example:

Navigation Information	
Case Instance (i.e. first, second, third etc. case with navigation program)	2
Case ID	3

In most cases, you will not be permitted to make changes to these fields. Attempting to edit these fields will result in a popup message informing you that the cell is protected.

## How to Use the "Select a Patient" Interface

In each of the **Data Entry** sheets, you have the option to "Select a Patient" in order to specify someone for whom a new case, encounter or testimonial is being entered, or to look up an existing record.

The "Select a Patient" interface looks like a yellow box:

Select a Patient:

There are two ways to select a patient:

- Select the patient from a dropdown list
- Search for the patient by **Client ID**, **First Name** or **Last Name**



### Option 1: Select the Patient from a Dropdown List

Step 1: Make sure the “Select a Patient” box is empty. If another patient’s name is in the yellow box, click in the box and press “Delete” or “Backspace” to clear it out and then press the “Tab” key.

Step 2: Click in the yellow box. A small downward pointing triangle will appear to the right.

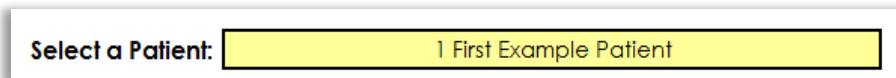
Step 3: Click on the triangle to see a list of patients in PN-BOT™.

Step 4: Select the patient you are looking for from the dropdown list of patients.



The image shows a form field labeled "Select a Patient:" with a yellow background. A dropdown menu is open, displaying two options: "1 First Example Patient" and "2 Second Example Patient". The first option is highlighted in blue.

Once you have clicked on the patient in the dropdown list, that patient’s **Client ID**, **First Name** and **Last Name** will appear in the yellow box, indicating that his or her record has been successfully selected.



The image shows the "Select a Patient:" form field with a yellow background. The text "1 First Example Patient" is now displayed inside the box, indicating that a patient has been selected.

### Option 2: Search for the Patient by Client ID, First Name or Last Name

If there are a large number of patients entered into PN-BOT™, it may be unwieldy to use the dropdown method to find a specific patient. You may also forget a patient’s **Client ID** or may remember only part of his or her name. In these scenarios, searching may be a more convenient option for selecting a patient.

Step 1: Make sure the “Select a Patient” box is empty. If another patient’s name is in the yellow box, click in the box and press “Delete” or “Backspace” to clear it out and then press the “Tab” key.

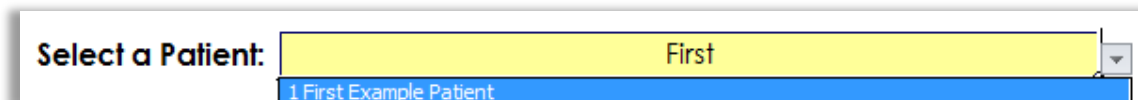
Step 2: Click in the yellow box and start typing as much of the patient’s name or **Client ID** as you can accurately remember. This will narrow your search results. Then, press the “Tab” key.

For example, if you don’t remember “First Example Patient’s” **Client ID** or **Last Name**, you could just type “First” into the box, knowing that there should be records previously entered into PN-BOT™ that match this string of characters.

Step 3: Click in the yellow box to bring up the downward pointing triangle (the rest of the steps are essentially the same as Option 1).

Step 4: Click on the triangle to see the list of all patients in PN-BOT™ who match the string of characters that you typed into the yellow box.

In this example, the only option in the dropdown list is “1 First Example Patient” because no other patient’s name in PN-BOT™ contains “First” in his or her name.



Step 5: Select the patient you are looking for from the dropdown list of patients.

Once you have clicked on the patient in the dropdown list, that patient’s **Client ID**, **First Name** and **Last Name** will appear in the yellow box, indicating that his or her record has been successfully selected.

## How to Use PN-BOT™ to Remember Upcoming Follow-Up or Appointments Scheduled for Specific Dates

You can use PN-BOT™ to remind yourself about follow-up needed on specific dates or upcoming patient appointments.

To use this feature, the **Date of Follow Up Needed** variable must be checked in the **Set Up** sheet (located in row 52). If it is not selected in the **Set Up** sheet, you will have no way to input follow-up dates in the **Encounters Data Entry** sheet or view them in the **Encounters List** sheet.

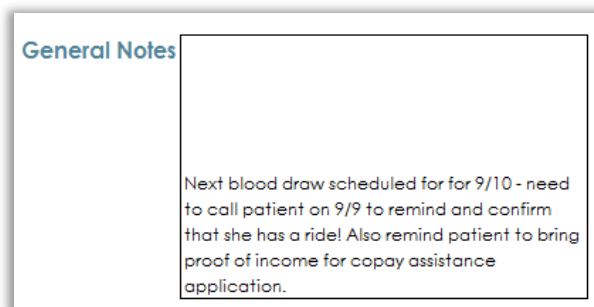
### Set up reminders for upcoming follow-up or appointments

All reminder set-up takes place while entering a new encounter in the **Encounters Data Entry** sheet.

Step 1: Go to the **Encounters Data Entry** sheet, select “Add a New Encounter” and document the encounter for the patient as you normally would.

Step 2: Use the **Date of Follow Up** variable to specify the date that follow-up is due or the upcoming appointment is scheduled to take place.

Step 3: Use the **General Notes** variable to type any reminders or notes to yourself that you want to be able to see closer to the follow-up date. For example:



Step 4: Click the "Save" button to save the encounter record as you normally would.

### Look up reminders for upcoming follow-up or appointments

You will not automatically get a reminder when follow-up is due—you must actively look up follow-up reminders in order to see them. However, you do have the option to see all follow-up due/scheduled for a particular day, as well as the option to see all follow-up due/scheduled for all future dates.

Step 1: From the **Home** screen, click on the "Follow Up Today" or "All Upcoming Follow Up" button, depending on which you would like to see.



Step 2: You will then be directed to the **Encounters List**. Scroll to the right and look at the **Encounter Date of Follow Up** column (column J) and **General Notes** column (column K) to see the list of follow-up due dates and reminders/notes.

If you click on "Follow Up Today," only encounters with **Date of Follow Up** values equal to today's date will be displayed. If no follow-up is scheduled for that date, you won't see any entries in the table.

If you click on "All Upcoming Follow Up," you'll see a list of previously entered encounter records (1 per row) with **Encounter Date of Follow Up** dates set to that date or future dates.

For example, if today is 9/8/2016 and you click “All Upcoming Follow Up,” you will only see encounters in the **Encounters List** table that contain an **Encounter Date of Follow Up** of 9/8/2016 or later. You’ll be able to see the reminder that was set up for 9/9/2016 to contact First Example Patient on 9/9/2016 to remind him or her about their blood draw appointment:

Client ID	First Name	Last Name	Encounter Date of Follow Up	General Notes
1	First Example	Patient	9/9/2016	Next blood draw scheduled for for 9/10 - need to call patient on 9/9 to remind and confirm that she has a ride! Also remind patient to bring proof of income for copay assistance application.

Step 3: When you are done looking at the reminders in the **Encounter List** sheet, use the “Home” or “Back to Encounters Data Entry” buttons to navigate away and unfilter the **Encounters List** sheet. It is important to use the buttons, which clear the filters that were needed to look at specific follow-up date ranges, because you will not be able to see other entries in the **Encounters List** until the filters are cleared.

Note that once the **Encounter Date of Follow Up** date has passed, “overdue” reminders will no longer be displayed when you click on “Follow Up Today” or “All Upcoming Follow Up.”

To see the full list of all follow-up reminders, use the “Sort by Date of Follow Up” button in the **Encounters List** (located at the top of the sheet in column F). Doing so will sort all encounters in chronological order by **Encounter Date of Follow Up**, including all entries whose follow-up dates have already passed.

Encounter Date of Follow Up
7/20/2016
9/9/2016
12/31/2017

## How to Create an Automatic Report Using the Included Report Templates

This section explains how to generate a report included in the “Automatic Reports” list in the **Reports List** sheet. All of these automatic reports have pre-set report templates included in the **Patient, Case, Encounter** and **Barrier Reports** sheets in PN-BOT™. They should require little manual work to generate once the data has been entered.

**Step 1: Make sure you are collecting the data needed to generate the reports that you want**

Consult the Reports List sheet by clicking on the “Reports List” button from the **Home** sheet:

Find your report(s) of interest in the “Automatic Reports” column, and make sure that the “Variables Needed” for the report(s) have been selected in the **Set Up** sheet.

For example, if you want to run the “Number of Clients by Literacy Level, by Intake Month” report, you must make sure that **Literacy Level** is checked off in the SET UP sheet so that navigators can consistently collect data for that variable:

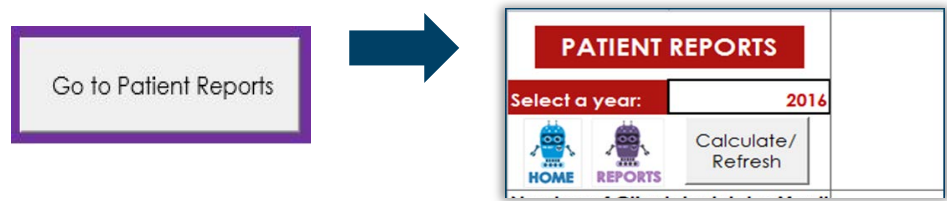
 Literacy Level

AUTOMATIC REPORTS	VARIABLES NEEDED
Number of Clients by Literacy Level, by Intake Month	Patient Info: Literacy Level, Intake Date

**Step 2: Go to the appropriate Reports sheet to see your report of interest**

Reports are grouped into 4 sheets: **Patient Reports, Case Reports, Encounter Reports** and **Barrier Reports**. Consult the **Reports List** sheet to see which group/sheet your report of interest falls under. Click on the provided buttons to jump you to the appropriate report sheet for your report of interest.

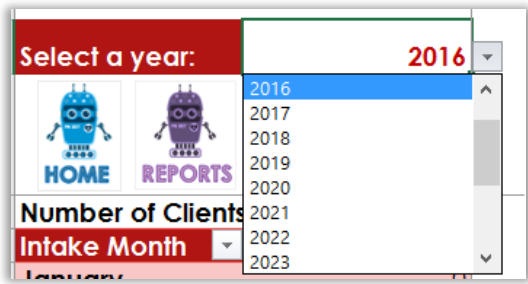
For example, the report “Number of Clients by Literacy Level, by Intake Month” is listed under the “Patient Reports” group. Therefore, you should click the “Go to Patient Reports” button to jump to the **Patient Reports** sheet.



From there, you can scroll down until you see the report that you are looking for.

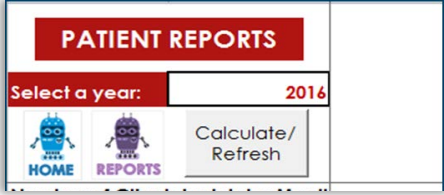
**Step 3: Select a year**

All automatic reports are time-bound by a date, such as **Intake Date, Case Start Date, Encounter Date**, etc. and provide counts or other statistics only for the specified period of time. These report numbers are displayed for one calendar year at a time. Use the “Select a year” dropdown interface provided at the top of each **Reports** sheet to pick the year whose data you would like to see.



**Step 4: Always click the "Calculate/Refresh" button at the top of the Reports sheet before looking at any data**

The numbers in the report tables will not necessarily reflect the most current raw data in the **List** sheets until the "Calculate/ Refresh" button at the top of the sheet is clicked.



Note: It is good practice to consult your raw data (located in the corresponding **List** sheet) to verify that your reports accurately reflect your data, and to investigate any strange or unexpected numbers in your reports.

**Step 5: Some special reports at the bottom of each Reports sheet have their own "Clear Table" and "Calculate/Refresh" buttons**

These reports involve counts of text type variables or variables that have a large number of possible response options (e.g. **Geography of Residence, Cancer Type**). To generate these reports, you must click the "Calculate/ Refresh" button specific to the report in addition to the "Calculate/ Refresh" button at the top of the sheet mentioned in the previous step.

**Geography of Residence**

Clear Table      Calculate/ Refresh

Note: "Geography of Residence" is an open text data entry field. Only refresh this table if y

Intake Month	TOTAL	55555	12345	(not specified)
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	1	0	1	0
July	1	1	0	0
August	1	0	0	1
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Total	3	1	1	1

One column is generated per unique written entry.

## Step 6: Your reports are done; go take a look

After completion of the previous 5 steps, your reports are up-to-date and ready to view. A standard automatic report, such as literacy level, looks like this for your selected 12-month period:

Literacy Level						
Intake Month	TOTAL	Proficient	Intermediate	Basic	Below Basic	(not specified)
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	1	1	0	0	0	0
July	1	0	1	0	0	0
August	1	0	0	0	0	1
September	0	0	0	0	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
<b>Total</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

## Step 7: Export your report if desired

Understand that as more data gets entered into PN-BOT™, the numbers that you see in reports may change. If you want to preserve a report table as is in static form for use in a presentation or other document, simply highlight the table cell range, copy it (Ctrl +C) and paste it somewhere outside of PN-BOT™ (Ctrl+V). For example, this is what the above “Geography of Residence” report table looks like after pasting into Microsoft Word:

The screenshot shows a Microsoft Word document with the report table pasted into it. The table is formatted with a red header row and alternating red and white rows for the data. The text in the table is as follows:

Intake Month	TOTAL	55555	12345	(not specified)	
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	1	0	1	0	0
July	1	1	0	0	0
August	1	0	0	0	1
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
<b>Total</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

## How to Manipulate Data Entered Into PN-BOT™ and Perform Administrative Functions

PN-BOT™'s **Patient, Case, Encounters, Barriers** and **Testimonials List** sheets house all the raw information entered by navigators. It is possible to copy, sort (using the buttons provided) or filter the data safely without unprotecting the sheets.

Please keep all PN-BOT™ sheets protected until and unless you are ready to perform a specific function that requires you to unlock the sheet. Exercise caution when making any sweeping changes to raw data – this is an easy way to corrupt a large amount of data at once. We recommend saving a back-up copy of the PN-BOT™ file (under a different filename) before attempting large-scale manipulation of any data.

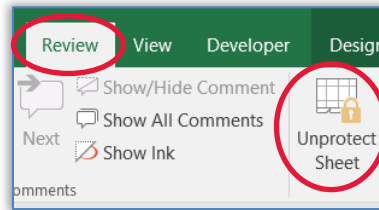
However, sometimes it is necessary to perform functions that require additional degree of control and removing some of the protections put in place to prevent corruption of the PN-BOT™ file. Here are examples of scenarios where you may need to unprotect PN-BOT™ sheets for more advanced functions:

- Fix issues with variable data types. If, for example, your custom text variable column in the **Patient List** is incorrectly displaying text entries in date format, you can unprotect the **Patient List** in order to correct the column's variable type from date to text.
- Merge data files. If you are combining data across copies of PN-BOT™ you will need to paste a large number of rows from one PN-BOT™ file's raw data into another. Pasting data requires unprotecting the **List** sheet.
- Transition versions of PN-BOT™. If you are trying to switch from PN-BOT™ version 1.0 to version 1.1 without re-entering all your data, you will need to copy your raw data from the old version of PN-BOT™ into your new version. This would require unprotecting the **List** sheets for the PN-BOT™ version 1.1.
- Start **Client** or **Case ID** numbering from a number other than the default. This would be critical for navigation programs that plan to merge data across PN-BOT™ files, to avoid duplicate ID numbers across data.
- Correct a large amount of data at once. If a navigation program exclusively provides "phone call" encounter types, but a navigator has been accidentally selecting "in-person" for all her encounters, the person managing PN-BOT™ data may choose to fix the issue by quickly replacing all entries of "in-person" with "phone call" directly in the appropriate **List** sheets. This is a somewhat risky move, and also requires unprotecting the **List** sheets.
- Customize pivot tables. Some functions, such as manual grouping of variable response options, require unprotecting the **Pivot** sheet.

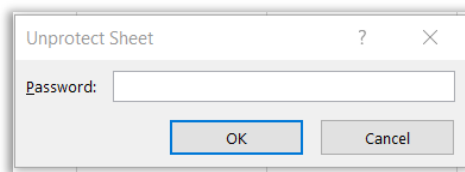


To unprotect a sheet:

Step 1: Click on the "Review" menu and click on "Unprotect Sheet."



Step 2: You will be prompted for a password. Enter **gwcancer** into the dialogue box.



Note: This password will only unlock the following sheets in PN-BOT™:

- Set Up
- Patient list
- Case List
- Encounters List
- Barriers List
- Testimonials List
- Patient Pivot
- Case Pivot
- Encounters Pivot
- Barriers Pivot

We hope you find PN-BOT™ to be a helpful and useful tool for your navigation program.

