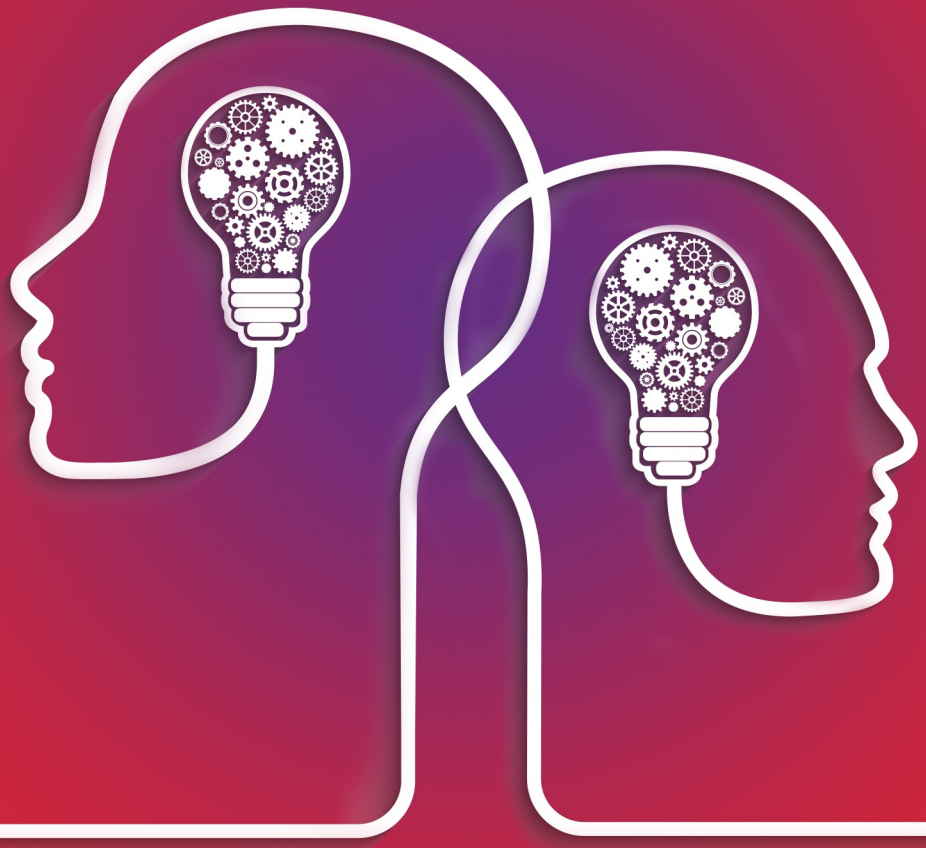
Best Practice
An evolution in medical software

Bp VIP.net

User-defined Forms Guide



VIP.net knowledge base

Legal notices

Copyright © 2019 Best Practice Software. All rights reserved.

Best Practice Software believe the information in this User Manual is accurate as of its publication date. The information is subject to change without notice.

You may only copy, change, or use the User Manual as required for your own use as permitted under the End User Licence Agreement or the Order Form. User Manuals are intended for reference only and do not preclude the need for training.

Best Practice Software Pty Ltd
PO Box 1911
Bundaberg Queensland Australia 4670

Best Practice Software New Zealand Ltd
PO Box 1459
Hamilton New Zealand 3240

www.bpsoftware.net

The information contained in the User Manual is intended to be a guide only. Best Practice Software does not provide any warranty in relation to its currency, accuracy, or completeness and, unless otherwise required by law, will not accept any liability in relation to any loss or damage suffered by you or any third party in reliance on the information contained in the User Manual.

Last updated: August 2018

This User Manual is sourced from the Best Practice Software Bp VIP.net Ruby **Knowledge Base**.

Understanding user-defined forms

User-defined forms (UDFs) are a way for Bp VIP.net users to customise parts of the user interface to suit the requirements of their practice.

Specialists must record an enormous variety of data relevant to their specialty. Bp VIP.net's Medical Desktop cannot capture all of this data with a set of standard screens in the user interface. Instead, UDFs allow a specialist to create a screen with fields that record unique patient information.

For example, an ophthalmologist could create a Medical Desktop screen that records visual acuity and macular degeneration information from the front page, and sub-pages might include fields for recording pre- and post-surgery information for cataract surgeries.

An endocrinologist could create a Medical Desktop with diabetes-related fields as part of the front page, with sub-pages for cardiovascular risk assessment. A cardiologist will have their own data capturing requirements for patient information.

As well as the Medical Desktop, you can also extend the following screens:

- Patient Details
- Organisation Details
- Provider Details

You can also create a **Kiosk**, which is a UDF designed to capture the kind of information required when a patient first enrols at your organisation. See **Setting up and using Kiosk on page 29** for more information.

UDF Types

When you create a new UDF, you select a **Type** from the **Properties** screen. The type determines whether the UDF is a completely new screen, or a component of an existing screen.

The following UDF types are installed with Bp VIP.net and cannot be modified or added to.

UDF Type	Description
Medical Desktop	Standalone Medical Desktop screen.
Medical Desktop Page	Sub-screen opened from a Medical Desktop.
Patient Details	Group of fields that comprise a panel on the **Patient Details** screen.
Patient Details Page	Sub-screen opened from the **Patient Details** screen.
Patient Details More	A tab of fields on the **Patient Details** screen.
Organisation Details	Group of fields that comprise a panel on the **Organisation Details** screen.
Practice Details	Group of fields that comprise a panel on the **Practice Details** screen.

UDF Type	Description
Practice Details Page	Sub-screen opened from the **Practice Details** screen.
Provider Details	Group of fields that comprise a panel on the **Patient Details** screen.
Kiosk Main	Main screen for recording patient enrolment details through Kiosk.
Kiosk Page	Sub-screen opened from Main Kiosk.

Create a UDF

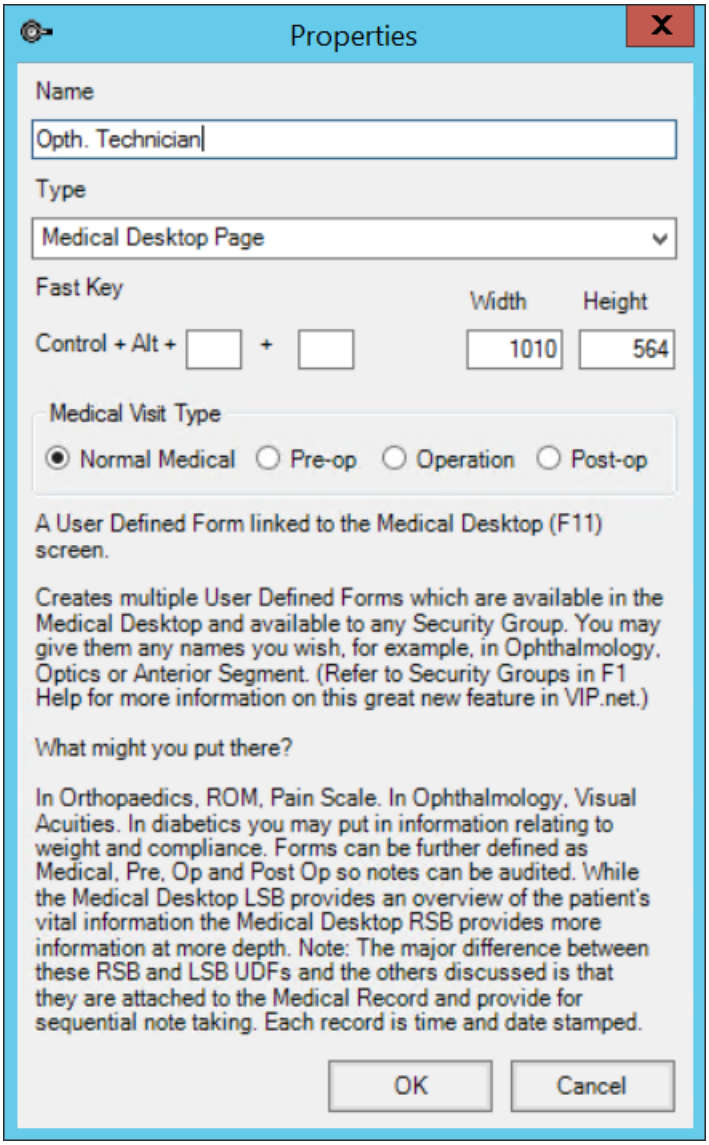
UDFs are created in the Bp VIP.net **Form Designer** screen. Bp VIP.net is installed with several system UDFs that are used in the Medical Desktop, Personal, and Provider Details screens. You can create new UDFs from a blank canvas, or modify an existing UDF and save the form under a different name.

Creating a UDF normally involves:

1. Insert fields and field labels onto a blank canvas.
2. Assign fields and labels into groups.
3. Apply rules and shapes to visually section a UDF into functional areas or workflows.
4. Create rules and calculations to allow the UDF to intelligently respond to user input.
5. Set the tab order so that a user can tab through the form in a natural order.
6. Determine under which circumstances and providers the UDF is visible.

Create a UDF

1. Select **Setup** > **User-Defined Forms**. The **User-Defined Forms** list screen will appear.
2. Click **New** to open the **Form Designer**, which is a blank canvas with a toolbar along the top.
3. Click the  icon to open the **Properties** screen.



4. Enter a **Name** for the UDF. Each UDF must have a unique name.
5. Select the UDF **Type**. See **UDF Types on page 3** for more information on the types of UDF available.
6. Assign a **Fast Key** to the UDF if you want operators to be able to quickly access the screen from anywhere in Bp VIP.net.
7. Set the starting **Width** and **Height** for the UDF.

   Best Practice Software recommend starting with a large canvas, such as 1000 x 800, so you have plenty of space to arrange fields for the initial construction. After you have finished adding and formatting fields, you can shrink the canvas to just the size required. If you expand the canvas because you run out of space, you may have to realign many of your fields.

8. Use the first half of the toolbar to insert the required fields, such as pick lists, free text boxes, and labels. See **Form Designer Toolbar on page 8** for more information on the fields you can insert.
9. Click and drag to select multiple fields, and use the **Alignment** icons on the toolbar to align fields to the left, right, top, or bottom. Ctrl+A will also snap the selected fields to grid.

10. You can also select a field and use the arrow keys to finely adjust the position of a field.

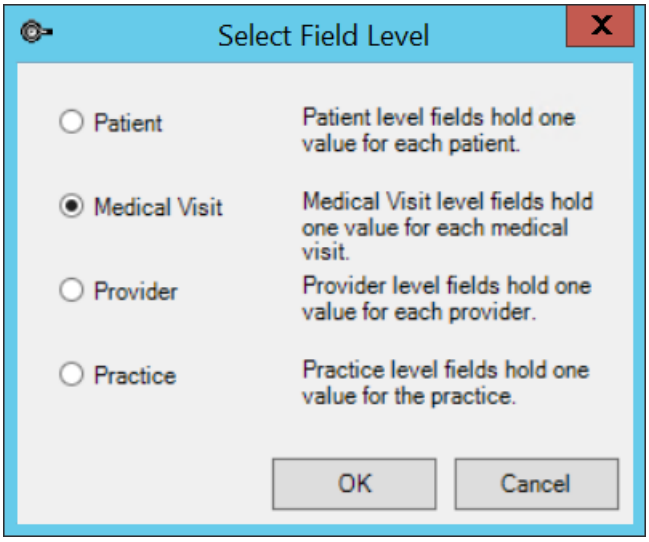
> ***Tip:*** *If a field is pushed off-canvas, use click and drag to select the object and use the arrow keys to move the field back on to the canvas.*

11. Right-click a field and select **Send to Back** or **Bring to Front**, or press Shift+Tab or Tab to move fields into the foreground or background. This option is useful when you insert Shapes to section a UDF into related groups of fields.
12. Hover the mouse over the right or bottom border of a field and drag to adjust the length or height. You can also use Shift+arrow key.
13. Click to save and close the Form Designer when you are ready to test the UDF.

To test a UDF, insert a link to the UDF from an existing UDF of type 'Medical Desktop' or 'Details'. Click the link to open your UDF and test the layout, data entry, and rules.

What is a field level?

Except for preset fields, when you insert a new field into a UDF, Bp VIP.net prompts for the **Field Level** of the new field:



The field level indicates the context, or how the data should be stored and updated in the database. If a field is set to the **Practice** level, the entered value will be stored once for the whole practice. If the field is updated, the value for the whole practice changes, regardless of which operator is logged in. You would set a field to level 'Practice', for example, if the field was in a UDF of type 'Practice Details', used to record practice demographic details.

If a field is set to level **Medical visit**, a value is stored for each visit by a patient. Each time a patient visits for a consultation, a new value can be recorded. This level is used for fields that appear in Medical Desktop UDFs, for example, which capture patient information from visit to visit. Because fields of this type change value over time, you could create a graph from fields of level 'Medical Visit'.

Fields of level **Patient** and **Provider** are used to store information about a patient or provider that changes little over time. For example, fields to record DOB or Blood Type would be of level 'Patient', because this kind of information is recorded once over a patient's lifetime and will not change. Similarly, a field to record a provider's vehicle registration number would be set to level 'Provider', because this information would not change very often.

Form Designer Toolbar

The toolbar along the top of the **Form Designer** allows you to insert fields of different types and align the components of a UDF.

Note: *Every field in a UDF must have a unique name.*

Most fields have a **Copy Forward** option in the settings. This option auto-populates the field from past data entry:

- **None** — Do not auto-populate.
- **Previous Visit** — Use the value from the most recent visit, even if that visit is the default value and was not changed by an operator.
- **Previous Entry** — Use the value from the most recent change of data. Ignore any previous visits in which the data was not changed.

Icon	Action
	Inserts a preset or 'lookup' field into the UDF to record data. See **Using the preset fields on page 11** for more information.
	Inserts a pick list of custom options to select from. You can supply over-ride values depending on the provider logged in. ***Tip:*** *Always start the list of pick list items with a comma, so that the first entry is blank.*
	Inserts a set of related radio buttons. A user can only select one button. Align the buttons horizontally or vertically (default).

Icon	Action
	Inserts a single-line text box to record free text. You can set the type of data expected by the text box (numbers only, or currency, or date and time, for example). The following options apply to text boxes: ■ **Length / Decimals** — Number of decimal places to record. The field Length can never be less than (Decimals+2). ■ **Show + sign** — Allow and show positive and negative values. ■ **Current Date/Time** — Insert the current date and time into fields of **Type** Date and Time by default. ■ **Show Expired** — Show expired Date and Time fields in red.
	Inserts a single checkbox. The **Text when...** fields indicate the text to pass on to autotexts, templates, and UDF rules if the checkbox is checked or unchecked.
	Inserts a multi-line free text box.
	Inserts a user-defined dropdown list that selects from an existing UDF pick list. You can specify a pick list that has been defined for any UDF, not just the current UDF. Users can also use the list as a 'maintain list'. That is, the user can right-click in a blank entry and add additional options to choose from.
	Inserts a text label used to label fields and sections of a UDF canvas.
	Inserts a rectangle to highlight or divide a UDF canvas into sections. You can use the grouping feature and shapes to highlight a desired workflow through a form, for example, or hide or dim a UDF section until relevant.
	Inserts a slider object into the UDF. A slider is a line with end points and defined intervals, for example, from 1 to 10 in intervals of 1.0. You can pair a slider with a read-only text box calculated from the slider value to create an adjustable 'dial' on a UDF.
	Inserts a horizontal or vertical rule.
	Inserts a graph. See **Create a graph from visit data on page 22** for more information.
	Inserts a Visual Acuity field specific for eye specialists. VA fields are automatically colour-coded red and green and paired to reflect left and right eye measurements. See **Record visual acuity on page 27** for more information. The preset field **Ophthalmology** > **VA Format** can be inserted to determine the default units used for all VA fields on a UDF. See **Using the preset fields on page 11** for more information.

Icon	Action
	Inserts a template image designed to be used as a sketchpad. For example, a graphic of the front and back of the human body might be used to mark the location of an injury, or a graphic of an eye to indicate a condition. Bp VIP.net operator Windows accounts must have Windows permissions to access the template image file and the containing folder to be able to use the image on a UDF.
	Inserts a hyperlink to a URL, email address, or file on the network. URLs and email addresses will open in your default browser or email client. You can also link to an autotext or report builder report that generates one of the above.
	Opens another UDF or Bp VIP.net screen. For example, you could open the **Immunisations** screen from Medical Desktop. See **Add an Immunisation link to a user-defined form (UDF)** for more information.
	Inserts an option to print the UDF to a template or report. The fields from the UDF will populate the report or template fields. For example, you could print to a medical certificate template. The following options apply to UDF printing: ■ **Preview** — Always show a print preview before printing. ■ **XML** — Export all or a subset of the UDF fields to an XML file. You will be prompted for a file-name and location to save to.
	Align the selected fields to the left.
	Align the selected fields to the right.
	Align the selected fields to the top.
	Align the selected fields to bottom.
	Sets the tab order for the UDF. See **Set the tab order on page 17** for more information.
	Inserts a rule into the UDF. See **Apply a rule on page 15** for more information.

Icon	Action

	Inserts a **Notes Summary** button into the UDF that prints a summary of selected fields automatically to patient notes in Medical Desktop with a timestamp.
	
	Summary notes are represented by a series of bracketed values:
	
	`{Blood Pressure: [BPSys] / [BPDias]}`
	
	`{Resting Heart Rate: [RHR]}`
	
	`...`
	
	The text between the curly brackets is printed to notes. The UDF field between the square brackets is substituted with its recorded value. For example, the above summary notes might be printed as:
	
	`Blood Pressure: 120 / 80`
	
	`Resting Heart Rate: 72`
	
	When recording information in a live UDF, a field with red text indicates that the field has been recorded into patient notes.

	Opens the **UDF Properties** screen. This screen sets the UDF type, fast access key combination, and size.
	Saves and closes the current UDF.
	Closes the current UDF without saving. Bp VIP.net will confirm the close if there are unsaved changes.

Using the preset fields

Preset fields encourage you to use Bp VIP.net's existing field types for data that a specialist will commonly record, instead of creating new fields unnecessarily. It is good practice to scan the preset fields before you create a new UDF field, to check if what you want to record already exists.

For example, the preset fields under **Glasses**, **Ophthalmology**, and **Ophthalmology Motility** offer a large range of data that ophthalmologists might record in patient details. Endocrinologists can find relevant fields under **Diabetes**, and **Cardiologists** might use the Echo Cardiac Report fields.

The preset field **Medical** > **Visit History List** provides a selectable list of a patient's visit history. This is a very useful preset field to use in Medical Desktop UDFs.

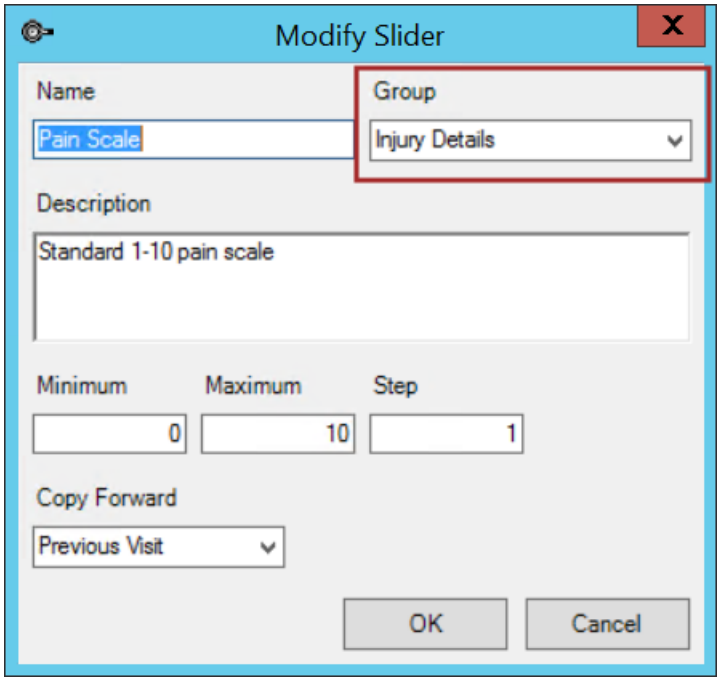
When you insert a preset field, you must select the type:

- **Medical** — field data is stored per patient visit and associated with a visit record, for use in Medical Desktop UDFs. If a new visit occurs, all values are set to '0' until data is entered, if the field is not set to copy forward.
- **Patient/Org** — data for patient and organisation details. Used for demographic data, Patient/Org fields are static over time unless a new value is recorded.
- **UDFs** — references a field from another UDF. If a field already exists in another UDF, use this option to avoid data being defined twice in the Bp VIP.net database.

Grouping fields on a UDF

Fields on a UDF can be grouped, so that actions can be performed on multiple fields and labels at once. Groups can be combined with rules to perform actions on sections of the UDF based on entered data. For example, you could hide or dim fields to collect gynaecological data if the patient ticks an 'M' demographic checkbox. See **Apply a rule on page 15** for more information.

When you insert a field, you can select or enter a **Group** option.



Select a group to assign the field to that group. To create a new group, type the new group name into the **Group** field and click **OK** when you have completed the rest of the fields.

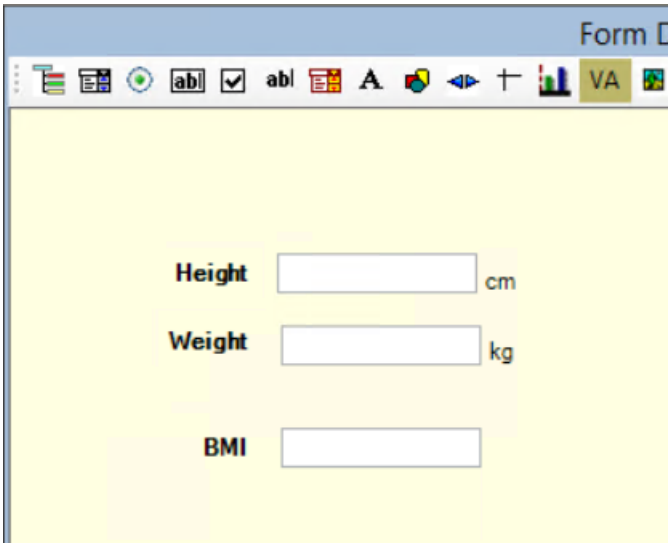
Apply a Calculation

A calculation is a value calculated from other field values in a UDF. A UDF field that has a calculation will be read-only. Only text boxes, edit boxes, and VA fields can be calculations.

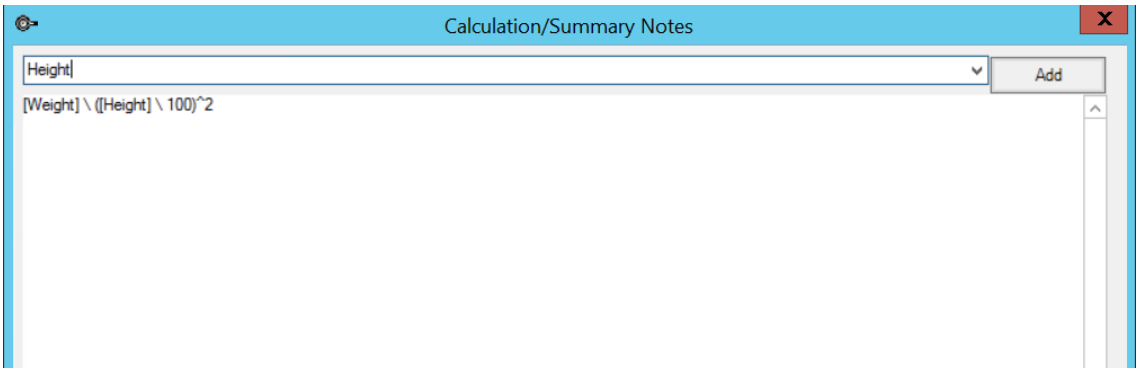
Calculation example

For example, you could have fields for **Height** and **Weight** and use those values to calculate and display the patient's **Body Mass Index**.

1. Insert numeric text box fields for **Height** and **Weight** into the UDF. Supply labels showing units of measurement.



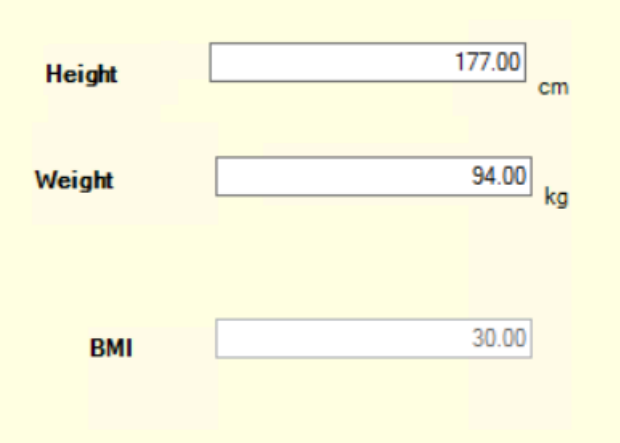
2. Click the abl icon to open the **Modify Text Box** screen. Call the text box 'BMI' and click **Calculations**. The **Calculations/Summary Notes** screen will appear.
3. Select the **Weight** UDF field you created in step 1 from the drop-down menu at the top. Click **Add** to insert the field into the workspace.
4. Insert the **Height** UDF field from step 1 into the workspace.
5. Construct the formula for BMI in the workspace:



Tip: *If you know the field name, you can type it directly in square brackets in the workspace.*

6. Click **OK** to return to the **Modify Text Box** screen. The **Calculations** button has turned red to indicate that a calculation exists. This field is now read-only.
7. Add two decimal places to the field and click **OK**.

8. Add a label 'BMI' to the UDF.
9. Save and close the UDF, and link the new UDF from an existing medical desktop to test.
10. When you enter values in the **Height** and **Weight** fields, the **BMI** field will display the calculated value.



The following operators can be used in calculations:

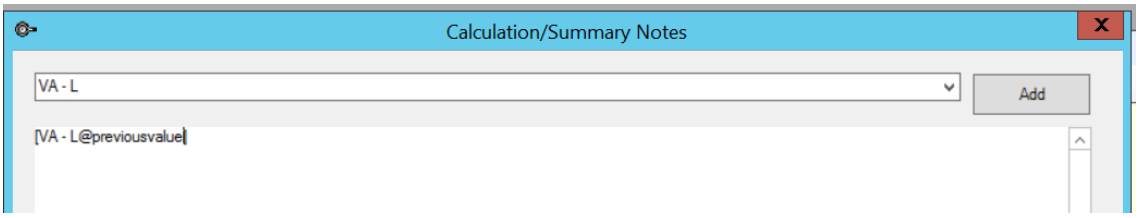
Character	Operation
+	Addition
-	Subtraction
*	Multiplication
\ or /	Division
^	Exponent
[^]	Use after a field name in square brackets, such as [Height^]. The caret ^ returns the previous value held for this field, for example, the patient's weight recorded from the previous visit. You can use the caret operator to keep a running total of values.
[$]	Use after a checkbox field name in square brackets, such as [DrugTaken$]). The $ operator returns the **Description** field from the checkbox field properties.
[!]	Use after a VA field name in square brackets, such as [VAUnaidedRight!]. The ! operator converts any VA field value to Snelln 6m and returns the converted value.
( )	Normal arithmetic brackets
@	Copy forward a previous value entered or recorded. See **Using the @ operator below** for more information.

Using the @ operator

Some preset fields do not allow copy forward, which forces users to enter values or leave a blank every new record. You can use the @ operator when calculating values to replicate copy forward behaviour:

- @previous — Use the last value recorded for this field, even if the value was NULL (nothing was recorded).
- @previousvalue — Use the last value entered by a user for this field, ignoring subsequent NULL entries.

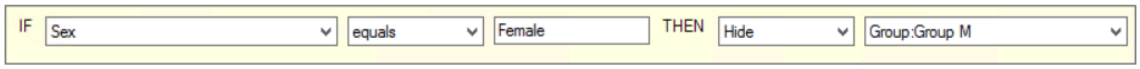
The following example shows the @previousvalue modifier applied to a UDF field 'VA - L'. When a new record is created, the VA - L field will show the last entered value for the field.



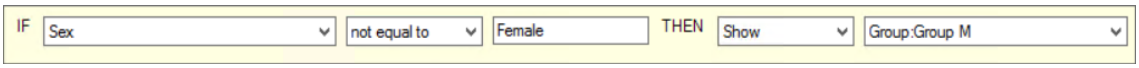
Apply a rule

When you define a rule, a field value is compared to a set value using comparison operators such as 'equals', 'less than', or 'contains'. If the result of the comparison is true, an action is performed on a field or group.

You do not need to define the complement to a rule. For example, if you have a rule defined as:



you do not need to create a second rule:



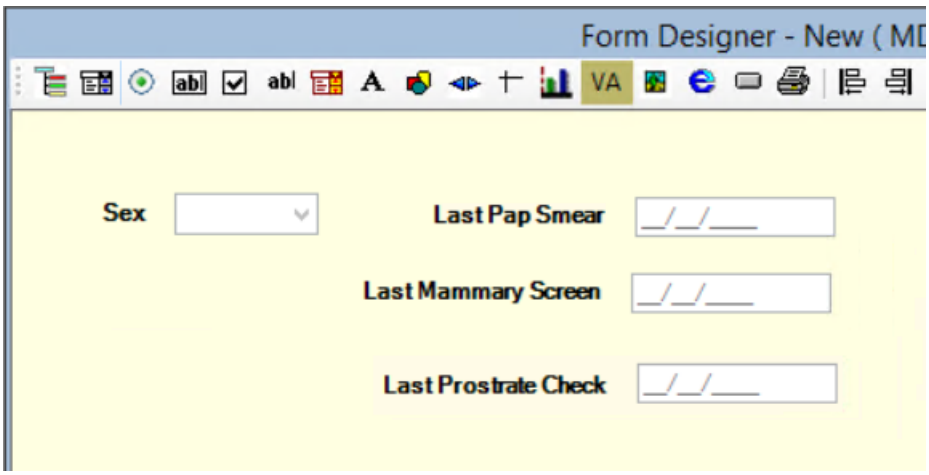
The opposite behaviour of an existing rule is assumed.

If a field has a default value, the default value is processed in any rules when the screen is loaded. Rules are executed in the order they appear in the list.

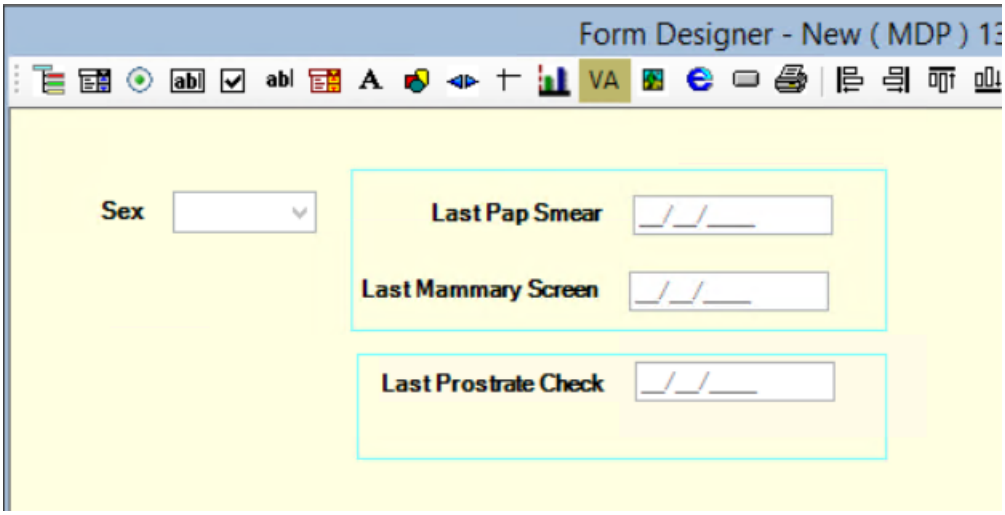
Rule example

The following example hides one group of fields and shows another based on the user's selection in a **Sex** field.

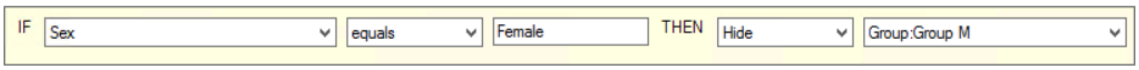
1. Insert a pick list called 'Sex' into a UDF with ',Male,Female,Unspecified' in the **List of Possible Values**. Supply a label for the pick list.
2. Insert the following text box fields of type 'Date' into the UDF:
   - Last Pap Smear
   - Last Mammary Screen
   - Last Prostrate Check.
3. Supply labels for the new date fields.



4. Insert a shape with a width of '1' into the UDF that covers the pap smear and mammary screen fields. Assign the shape, the labels, and the two fields a **Group** called 'Group F'. Right-click on the inserted rectangle and select Send to Back or press Shift+Tab to place the rectangle in the back-ground.
5. Insert a shape with a width of '1' that covers the prostrate check field and label. Assign the shape, the label, and the field a **Group** called 'Group M'. Send the rectangle to the background.

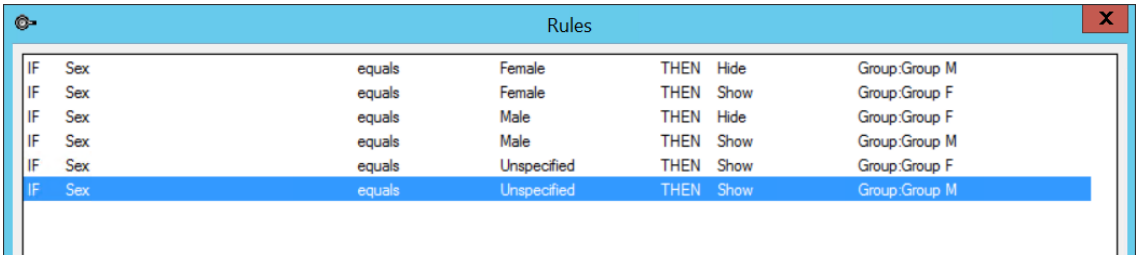


6. Click the  icon to open the **Rules** screen. Click **Add** to add an empty row to the workspace.
7. Complete the fields along the bottom as shown:



Tip: *You may need to save, close, and reopen the UDF to see your groups appear in the last field.*

8. Click **Add** and add the following rules to the workspace:



9. Click **OK** to close the **Rules** screen. Save and close the Form Designer.
10. Link the new UDF from an existing medical desktop to test. The selection made from the **Sex** drop-down will toggle the visibility of the field groups.

The comparison operators are straightforward: equals/not equal to, greater than/less than, begins with/ends with, and contains/in. The 'contains' operator returns true if the compare value is a character subset of the field value. For example, 'cde' is contained in 'abcdef'.

The following actions can be used in rules:

Action	Description
Hide	Hides the group or field from display.
Show	Shows the group or field.
Enable	Renders the group or field able to receive input.
Disable	Keeps the field or group visible, but greys out and renders the field or group unable to receive input. Labels are not greyed out.
Compel	Forces the focus back to a field or group so that the user cannot exit the screen until the field or group has a value.
Uncompel	Removes a compel from a field or group.
Warn	Displays a warning popup to the user, but allows the user to continue or exit the screen. The text for the warning popup is the **Description** from the rule field's properties.
Disallow	Displays a warning popup that the value entered is invalid.

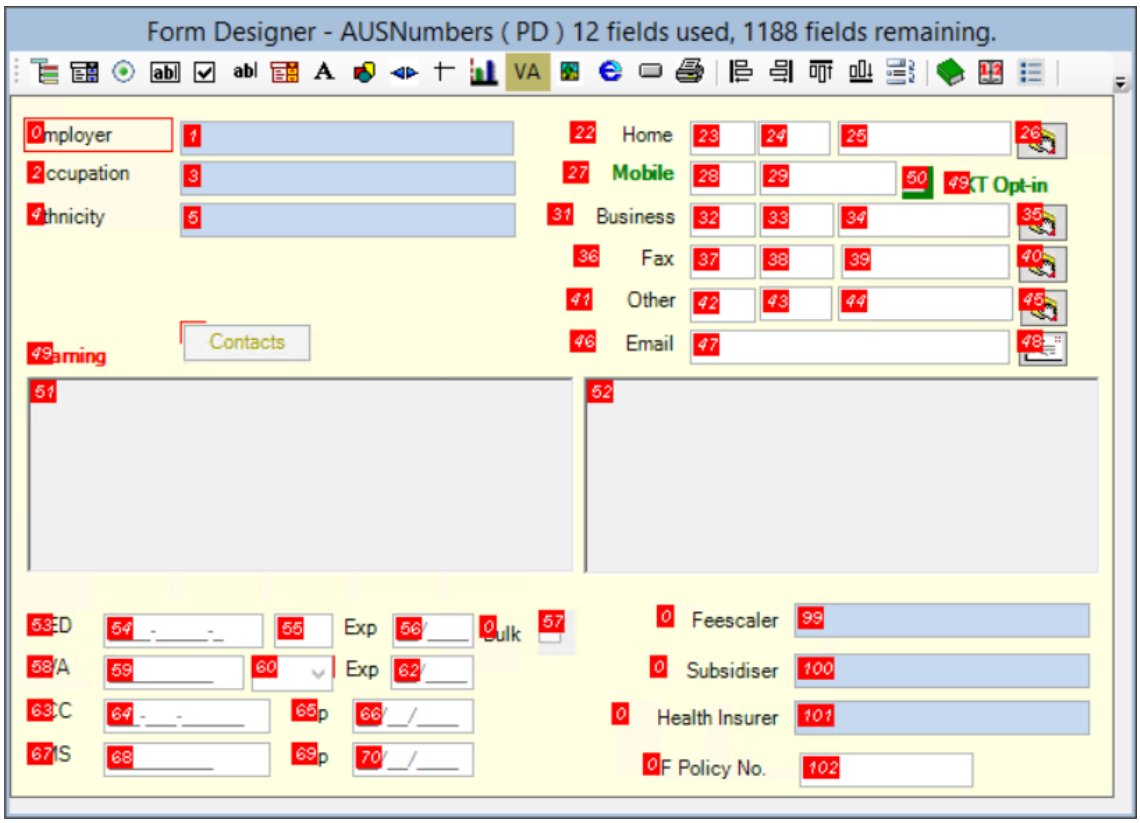
Set the tab order

The tab order on a user-defined form defines the sequence in which users can use the Tab key to move through the fields in a form. Experienced data entry operators often use the Tab key to quickly process a form without using the mouse to move the cursor.

The tab order also matches up labels with the correct field. If you use the **Summary** feature of UDFs, all labels associated with a field must appear directly before the corresponding field in the tab order.

How tab ordering works

The screen capture below shows an example of a UDF with tab order visibility switched on.

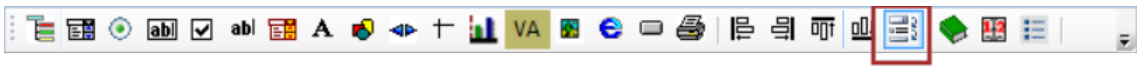


The example represents a possible form for capturing patient details from the **Patient Demographics** screen. The **Employer** field in the top left has two numbers appearing adjacent: the '0' is the tab number for the label 'Employer', and '1' is the tab number for the field in which the user types a value.

The Tab key will only move the focus from field to field, not from field to label. In the example, if the cursor were focused on the **Employer** field, pressing Tab would shift the focus to the **Occupation** field (the next highest field in the tab order at 3). If Tab were pressed again, focus would shift to the **Ethnicity** field (5), and then the first **Home** number field (23), the second **Home** number field (24), and so on.

Set the tab order

1. Select **Setup** > **User-Defined Forms** from the menu. Select or create the UDF you want to adjust the tab order for.
2. Click the **Set Tab Order** icon from the Form Designer toolbar. Tab order will be made visible on the UDF.



3. Select a UDF component. The item will be highlighted with a red border.
4. Use one of the following key combinations to change the tab order number:

Key Combination	Action
Ctrl+Pg Up	Increases number by 10.
Ctrl+Pg Dn	Decreases number by 10.
Ctrl+Up arrow	Increases number by 1.
Ctrl+Down arrow	Decreases number by 1.
Ctrl+Home	Sets the number to the last tab order stored in memory.
Ctrl+End	Sets the number to one greater than the last tab order stored in memory.
Ctrl+3 (**not** keypad 3)	Opens the **Tab Index** popup to enter a specific number.

It is good practice to leave gaps of at least five between field tab order values. This allows you to insert fields in the tab order if you need to update the UDF later without needing to renumber the entire UDF.

Important: *Field labels must always have tab order value one less than the associated field.*

5. Save the UDF.

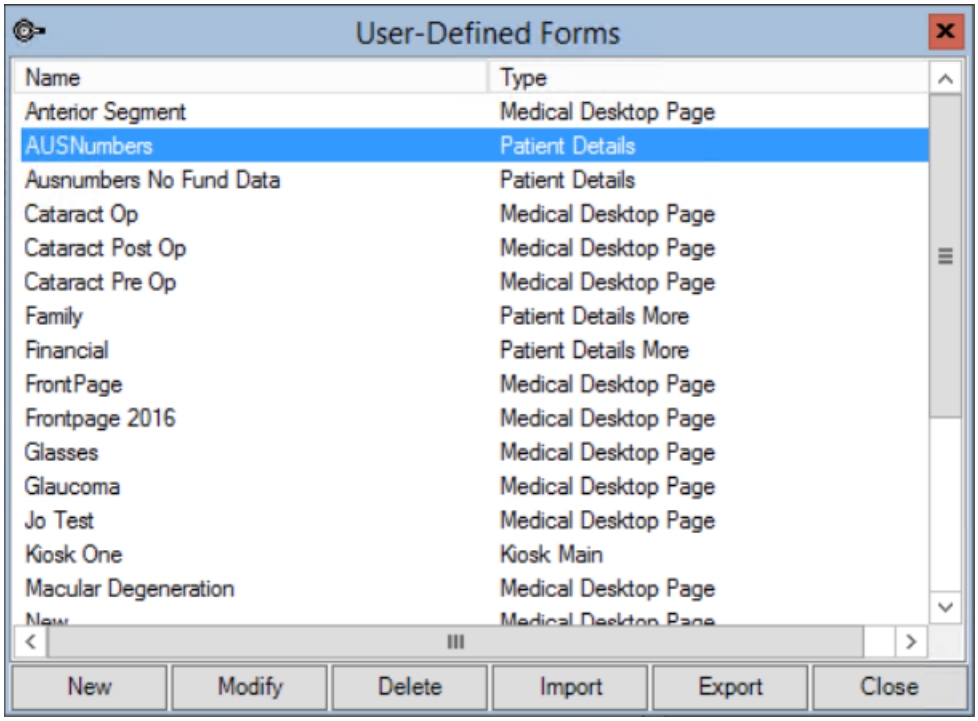
Activate a UDF

UDFs of the following type are automatically enabled and added to the standard Bp VIP.net screens:

- Medical Desktop — See **Set a UDF as a provider's Medical Desktop on the next page** for more information.
- Patient Details — appears as a panel in the **Patient Details** screen
- Patient Details More — each 'More' UDF appears as a tab on the **Patient Details** screen
- Practice Details — comprises the entire **Practice Info** screen
- Provider Details — appears as a **More** tab on the **Provider Details** screen.

The first UDF to appear alphabetically in the **Setup** > **User-Defined Forms** list is used in the standard screen. Rename existing screens to start with something like 'ZZ_' to push UDFs you do not want to the bottom of the list.

In the example below, the first 'Patient Details' UDF in the list (AUSNumbers) will be used in the **Patient Details** screen. If this UDF were renamed 'ZZ_AUSNumbers', the next 'Patient Details' UDF in the list (Ausnumber No Fund Data) will appear in the **Patient Details** screen.



To enable a UDF of type 'Medical Desktop Page', you need to link the UDF to an existing Medical Desktop or Medical Desktop Page. When the link button is clicked, your UDF will open. See the icon in **Form Designer Toolbar on page 8**.

Set a UDF as a provider's Medical Desktop

The default Medical Desktop used for the practice is the first UDF of type 'Medical Desktop' that appears in the **Setup** > **User-Defined Forms** list, which lists UDFs alphabetically.

To change the default Medical Desktop, rename unwanted Medical Desktop UDFs to start with something like 'ZZ_' to push them to the bottom of the list.

You can also nominate a UDF to open on top of the default Medical Desktop when F11 is pressed.

To set an opening UDF for the practice, select **Setup** > **Facility Preferences** > **General Preferences** > **Medical Desktop** tab and select a UDF from the drop-down **Select UDF to open over Medical Desktop when F11 is pressed**.

To set an opening UDF for an operator, log in as that operator and select **Setup** > **Facility Preferences** > **General Preferences** > **Medical Desktop** tab. Untick **Use Facility Preferences** and select a UDF from the drop-down **Select UDF to open over Medical Desktop when F11 is pressed**.

Set workstation UDF Preferences

Two workstation preferences set the default size for UDF labels and Medical Desktop.

1. Select **Setup** > **Workstation Preferences**. The **Workstation Preferences** screen will be displayed.
2. Adjust the following settings:
    - **UDF Label Scale** — Default zoom size of UDF labels
    - **Medical Desktop UDF Zoom Mode** — Default zoom size of Medical Desktop UDFs.

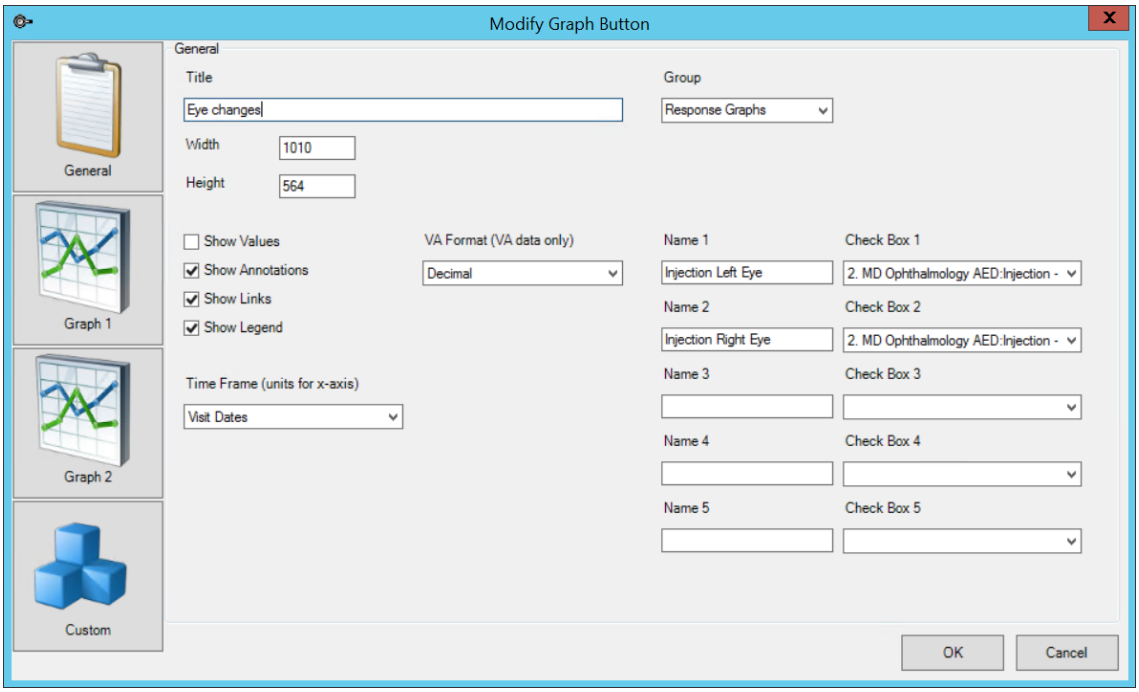
Create a graph from visit data

Bp VIP.net includes a graphing tool for creating line graphs that show changes in patient history data over time. Up to four different series can be plotted on one graph, and you can display two graphs in the same view. Graphing functionality includes:

- Checkbox and pick list values can be plotted over time alongside data points (for example, to indicate change before and after intervention).
- Links to relevant patient history items are included at data points (for example, an Rx was written, or an operation performed).
- High and low ranges for a series can be included in a graph, for a visual indication of a series' path in an acceptable range.

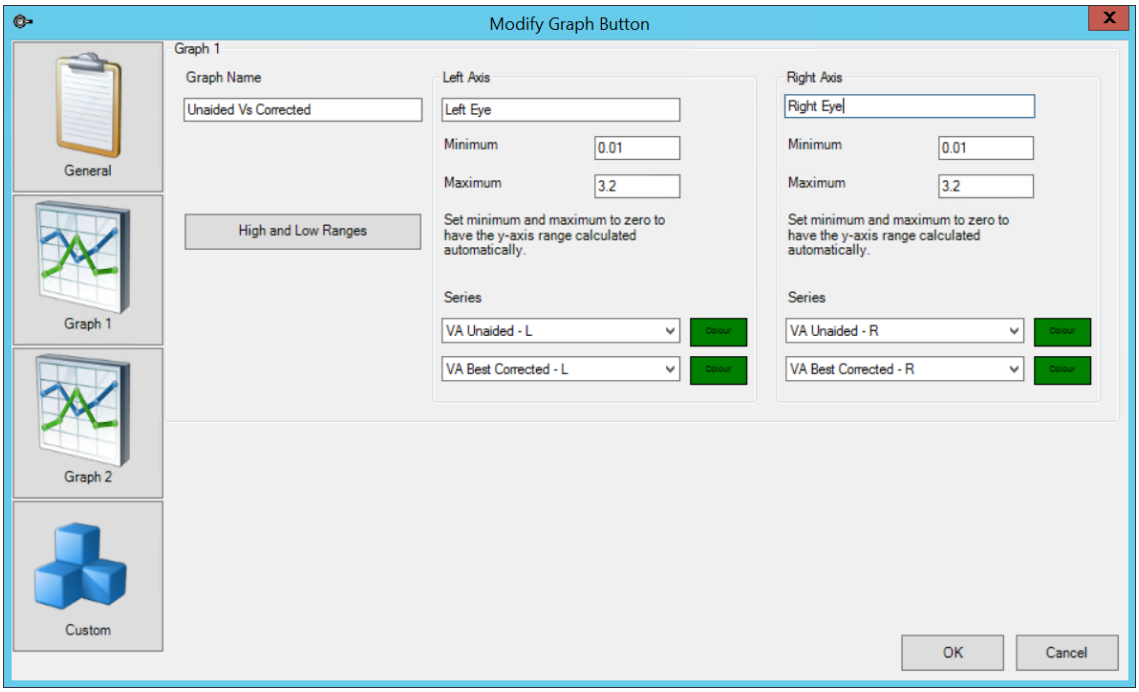
To insert a graph:

1. Click  on the Form Designer toolbar. The **Modify Graph Button** screen will appear.



2. Enter a **Title** for the graph. The title will be displayed at the top of the graph.
3. Enter a **Width** and **Height** for the graph size.
4. Select the **Group** to assign the graph to, if any. See **Grouping fields on a UDF on page 12** for more information.

5. Select the items to display on the graph by default:
   - **Values** — Show the numeric values of data points.
   - **Annotations** — Show any notes made on the graph. To enter a note, left-click on a data point.
   - **Links** — Show links to related items from patient history, if any, that coincide with data points. Links will be inserted along the top of the graph.
   - **Legend** — Show the graph legend.
6. If you are graphing Visual Acuity fields, select a **VA format** to use for all VA data. Bp VIP.net will convert any data recorded in other formats.
7. Select the **Time Frame** over which to show data. The default, 'Visit Dates,' is the most common time frame. If you select Days, Weeks, or Months, select a date value to **Start From** and the **Start on** and **Number of** fields.
8. Select the **Graph 1** tab.



9. The **Graph Name** will indicate which line corresponds to Graph 1.
10. By default, the y-axis for graphs is scaled automatically based on the highest and lowest values for the series from patient data. Enter **Minimum** and **Maximum** values to scale the left or right axes to user-defined values.
11. Select up to two fields to populate the graph **Series** for the left and right axes. Select a **Colour** for the series line.
12. If you want to plot data for additional Series, select the **Graph 2** tab and complete the fields.
13. Click **OK** to save the graph and insert the graph button into the UDF. When the user clicks the graph button, the graph will be displayed in a viewer.

Graphing interventions

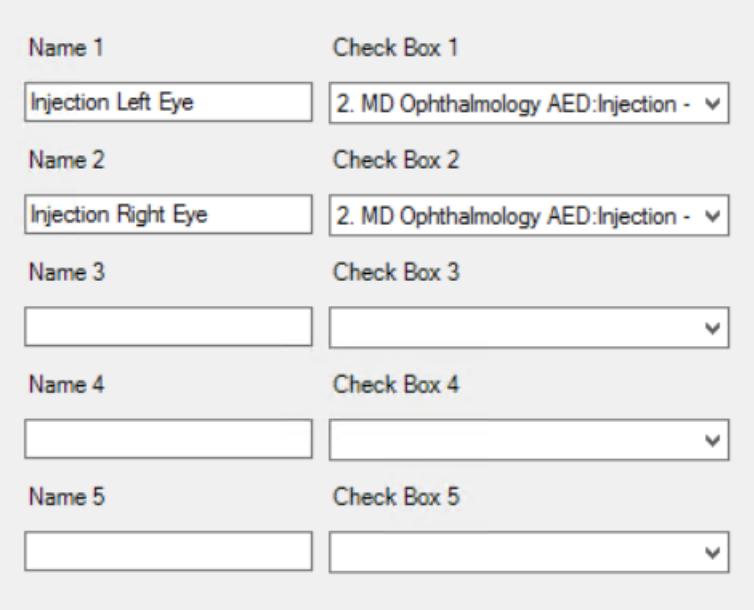
You can indicate the value of checkboxes and pick lists at data points. For example, you could

indicate whether an injection was administered throughout a series, when a patient quit smoking, or how intraocular pressure was measured.

The checkbox or pick list value is indicated along the top of the graph at each data point.

To graph checkbox values:

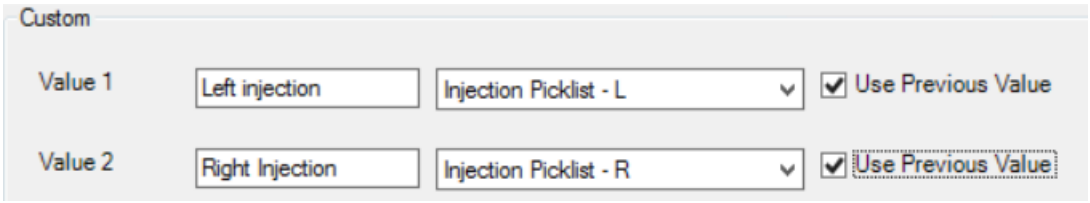
1. Open the **Modify Graph Button** screen for the graph.
2. The five **Name** and **Check Box** fields on the right hand side indicate the checkbox values to include on the graph.



3. In the example, two checkbox fields have been added: 'Injection - Right' and 'Injection - Left'. When the graph is displayed to the user, a row along the top of the graph will indicate whether these checkboxes were ticked or unticked at each data point.
4. Click **OK** to save the graph.

To graph pick list values:

1. Open the **Modify Graph Button** screen for the graph. Select the **Custom** tab.
2. The ten **Value** rows indicate the UDF pick list fields to include on the graph.



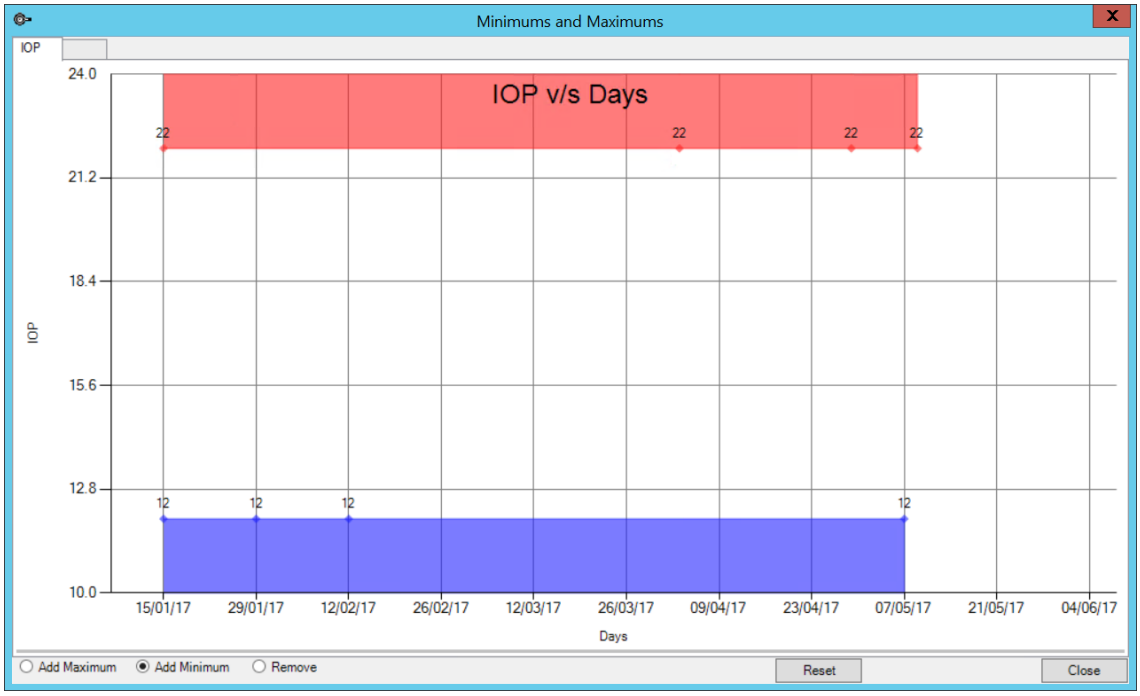
3. In the example, two pick list fields have been added: 'Injection Picklist - L' and 'Injection Pick-list - R', represented by the labels 'Left injection' and 'Right injection' on the graph.

4. **Use Previous Value** indicates to display the pick list value from the previous data point, rather than the current data point. This option increases the readability of some graph types by visually corresponding a previous intervention and the resulting data.
5. Click **OK** to save the graph.

Graphing acceptable range boundaries

You can visually add upper and lower acceptable range boundaries to a graph. For example, if you are graphing intraocular pressure, you may consider any measurement below 12 and above 22 mm Hg to be outside the normal limits and requiring investigation. When the graph is displayed, you can instantly see whether a patient's IOP has crossed an upper or lower boundary.

1. Open the **Modify Graph Button** screen for the graph.
2. In the **General** tab, select 'Days', 'Weeks', or 'Months' from the **Time Frame**. You cannot use 'Visit Dates' as the default x-axis period if you want to apply a range boundary.
3. Enter **Start on** and **Number of** values to define the starting time and intervals.
4. Select **Graph 1** or **Graph 2** tab, whichever graph you are applying a range boundary to. Click **High and Low Ranges**. The **Minimums and Maximums** screen will appear blank. The example below shows a completed boundary range for IOP over Days.



5. Select **Add Maximum** or **Add Minimum** in the lower left to add maximum or minimum range points. Left-click in the graph to insert a range point. A shaded area will be created between existing points and the new range point.
6. Add range points incrementally to create a shaded area that represents the upper and lower acceptable ranges for the data series. Select **Remove** and left-click a range point diamond to remove the point from the graph.

Click **Reset** to clear all points and start again.

7. If you are satisfied with the range boundaries, click **Close** to save.

Testing a graph

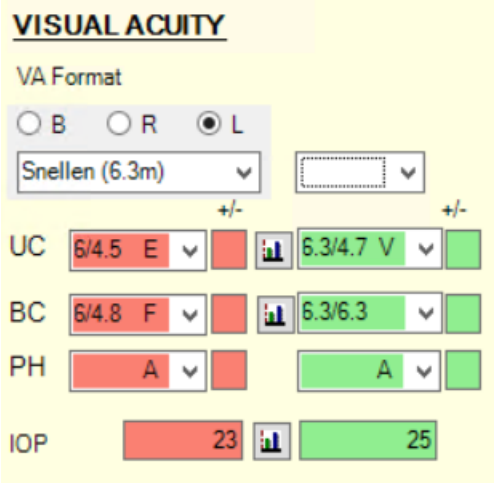
To test how a graph looks, you must:

1. Create and save the graph on a UDF. The graph will be inserted as a button. Close the Form Designer.
2. Open the containing UDF, depending on the type. For example, if the UDF is a **Medical Desktop** or subpage, press F11.
3. Record some meaningful data in the graphed fields over two or more patient visits and save the record. It is good practice to use a 'dummy' patient record for testing purposes.
4. Click the graph button to view the graph.

Record visual acuity

UDF designers can assign a Visual Acuity Format to each eye independently, or lock both eyes to the same format. For example, you could record different Snellen formats for the left and right eyes of a patient.

The example below shows the preset field **Opthalmology** / **VA Format** in a UDF, with Snellen (6.3m) selected for the left eye (L). Below the VA format field are fields for recording uncorrected, best corrected, and pinhole values. The UC, BC, and PH fields show Snellen (6m) used for the right eye, and Snellen (6.3m) used for the left eye.



The VA Format control will remember the last selection made in a record and apply as the default for the next new record.

Important: *If you view historical eye examination records, changing the VA format for an old record will convert existing measurements to the new format and update the historical record.*

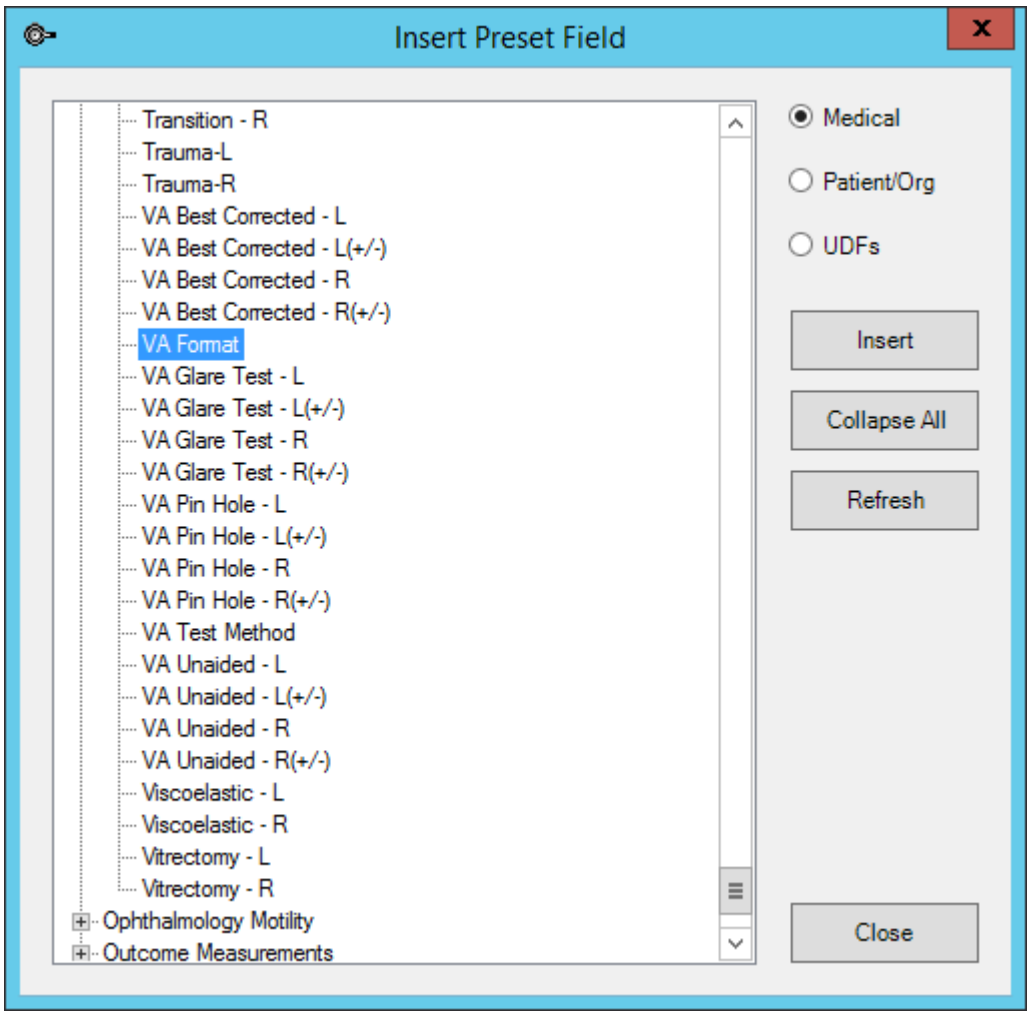
Upgrading from an earlier version of Bp VIP.net

When you upgrade to Ruby from a previous version, the last recorded VA format used is used as the default for both eyes if a new record is created. If no historical record exists, the default set in **Facility Preferences** > **Medical Desktop** > **Default VA Format** is used.

The updated VA format field is significantly larger than the same field in version 514. Your practice's UDF designer should inspect any UDF at your practice that contains this field to check if the VA format needs to be refitted to accommodate the larger field size.

Insert a VA Format field

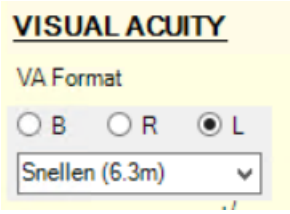
1. Select **Setup** > **User-Defined Forms** from the menu and open the UDF in which you want to insert a VA format field.
2. Click the Preset field icon at the left of the **Form Designer** toolbar.
3. Open the **Ophthalmology** folder and scroll down to VA format.



4. Double-click **VA format** to insert the preset field.

Set a VA format

1. From a Medical Desktop UDF, select one of the radio buttons:
   - B — Set default VA format to be used for both eyes.
   - R — Set default VA format to be used for the right eye.
   - L — Set default VA format to be used for the left eye.
2. Select the format to use from the drop-down below the radio buttons.



3. Any VA measurements taken will now default to the selected format for each eye.

Setting up and using Kiosk

Bp VIP.net Kiosk saves your practice time by enabling patients to complete your registration process on a tablet or mobile device in the waiting room, freeing up reception staff.

Patients are directed through a set of user-defined forms (UDFs) unique to your practice. Questions can be enabled and disabled depending on the type of patient and consultation; for example, different questions for male and female patients, or a section might require completion for a WorkCover consultation.

To set up Kiosk, you need to:

1. Create the user-defined forms of type 'Kiosk Main' and 'Kiosk Page' to capture the information you need from patients.
2. Insert the Kiosk Launcher onto an existing UDF, usually from **Patient Details** (F3).
3. Set a Bp VIP.net workstation (often a tablet or laptop) to act as a dedicated kiosk.

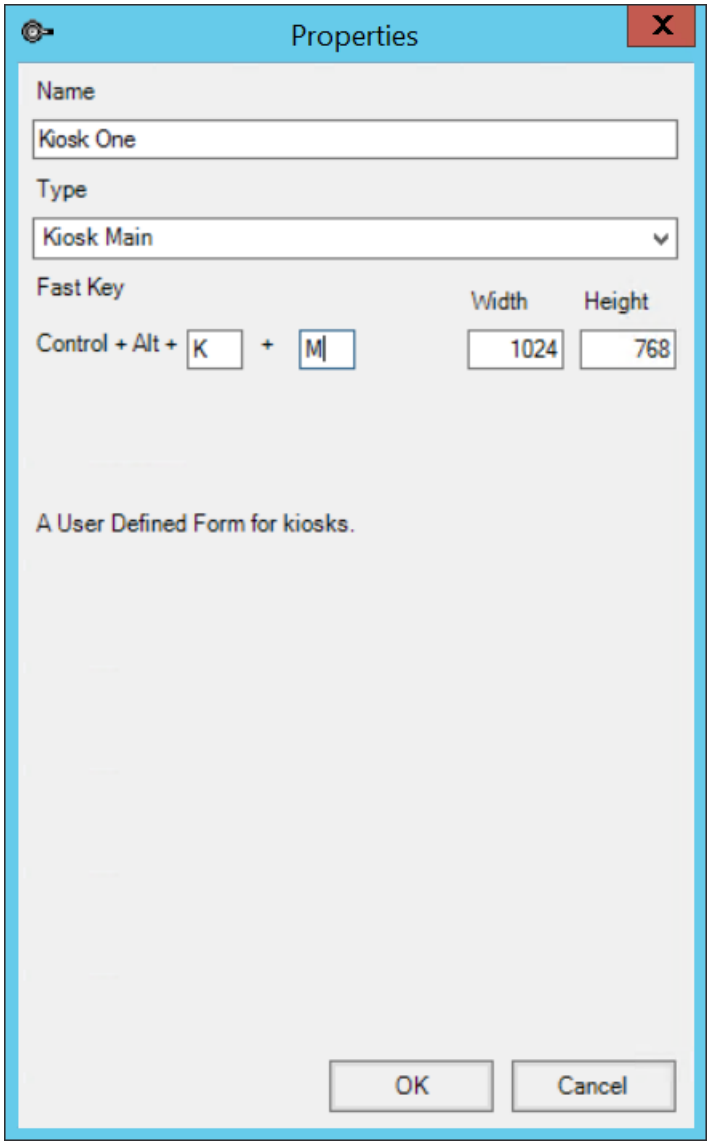
After you have set up Kiosk, a staff member can create the new patient with a minimum of details, and hand the tablet to the patient to complete the UDF forms.

Create Kiosk UDF

The main Kiosk UDF will be of type 'Kiosk Main'. Any flow-on pages opened up from the main Kiosk page will be of type 'Kiosk Page'.

1. Select **Setup** > **User-Defined Forms**. The **User-Defined Forms** screen will appear.
2. Click **New**. The **Form Designer** will appear.
3. Click the **Properties** icon toward the end of the Form Designer toolbar.

The **Properties** screen will appear.



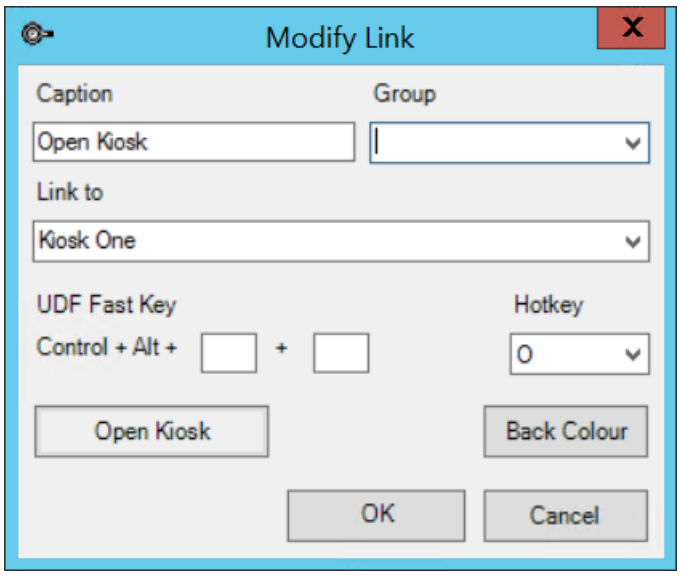
4. Enter a meaningful **Name** for your Kiosk form and select 'Kiosk Main' from the **Type** drop-down.
5. Enter a shortcut key if you wish and a default opening size for the Kiosk form. Make sure the form size is appropriate for the viewport size of the tablet or laptop.
6. Click **Ok** to create the form. The Form Designer will show a blank UDF.
7. Insert UDF components to capture the information your practice requires from patients. See **Create a UDF on page 5** for more information.
8. If you create subpages for your Kiosk that are linked from the main page, the linked pages must be of type 'Kiosk Page'.

Insert the Kiosk Launcher

After you have created your Kiosk pages, you must insert a link so that the Kiosk form can be

opened. For example, insert a link to Kiosk from the 'AUSNumbers' UDF section of the **Patient Details** screen, because you need this screen open to record patient details.

1. Select **Setup** > **User-Defined Forms**. The **User-Defined Forms** screen will appear.
2. Select the UDF you want to insert a Kiosk link into and click **Modify**. The **Form Designer** will appear.
3. Click the **Link** icon on the Form Designer toolbar. The **Modify Link** screen will appear.
4. Enter a **Caption** for the link button and **Link to** the Kiosk you created in **Create Kiosk UDF on page 29**.



5. Click **OK** to insert the Kiosk link. Click **Close** to close the **Patient Details** UDF.

Set a workstation to Kiosk mode

1. Log in to the workstation that will be used as a Kiosk.
2. Select **Setup** > **Workstation Preferences**.
3. Tick the **Kiosk** checkbox. If this option does not appear, your practice has not obtained a Kiosk licence for your Bp VIP.net installation.
4. Click **Ok**.
5. Select **Help** > **Kiosk Mode** from the menu.

Any user logged in to this workstation will not be able to search for another patient to load in to the Information Bar, and will have access only to the Kiosk UDF forms.

Start a Kiosk session

1. Log in to the Bp VIP.net workstation on which you inserted the Kiosk launcher into the Patient Details UDF in **Insert the Kiosk Launcher on the previous page**.

2. Search for or create the patient who will fill out the Kiosk. Press F3 to open the **Patient Details** screen.
3. Select the Kiosk workstation from the **Kiosk** dropdown and click **Start**. The **Patient Details** screen will close.
4. Give the Kiosk workstation to the patient to complete the Kiosk UDFs and return to reception.