

# *Bp Premier* SUMMIT 2025

Please take a seat,  
your session starts soon.

## Acknowledgement of Country

Best Practice Software acknowledges the Traditional Custodians of Country throughout Australia and recognise their unique cultural and spiritual relationships to the land, waters, and seas and their rich contribution to society. We pay our respects to ancestors and Elders, past, present, and emerging.

Best Practice Software respects Māori as the tangata whenua and Treaty of Waitangi partners in Aotearoa New Zealand.

Right: Ginmine design from corner, radiating outwards.  
Designed for the Bp Bundaberg Operations Hub Mural Project, 2021

Artist: Nicole Wone

Addresses themes of: Evolution – Adaptation of Universe and traditional Indigenous beliefs across the globe.

Beginning of time, darkness. Movement in the cosmos. Rainbow Serpent – Creation being. Ancestral lineage without our DNA





*BpPremier*  
**SUMMIT 2025**

**Complex SQL Queries and Reports**

Scott Everist

# Complex SQL Queries and Reports

## Scott Everist

Scott Everist is a seasoned professional with over 13 years of experience at Best Practice. In recent years, Scott has transitioned into a management role in Service Quality. Here, he focuses on data analysis, quality assurance, and ensuring the best outcomes possible for the Customer Support Group.

His analytical skills and attention to detail have been instrumental in driving improvements and maintaining high standards.

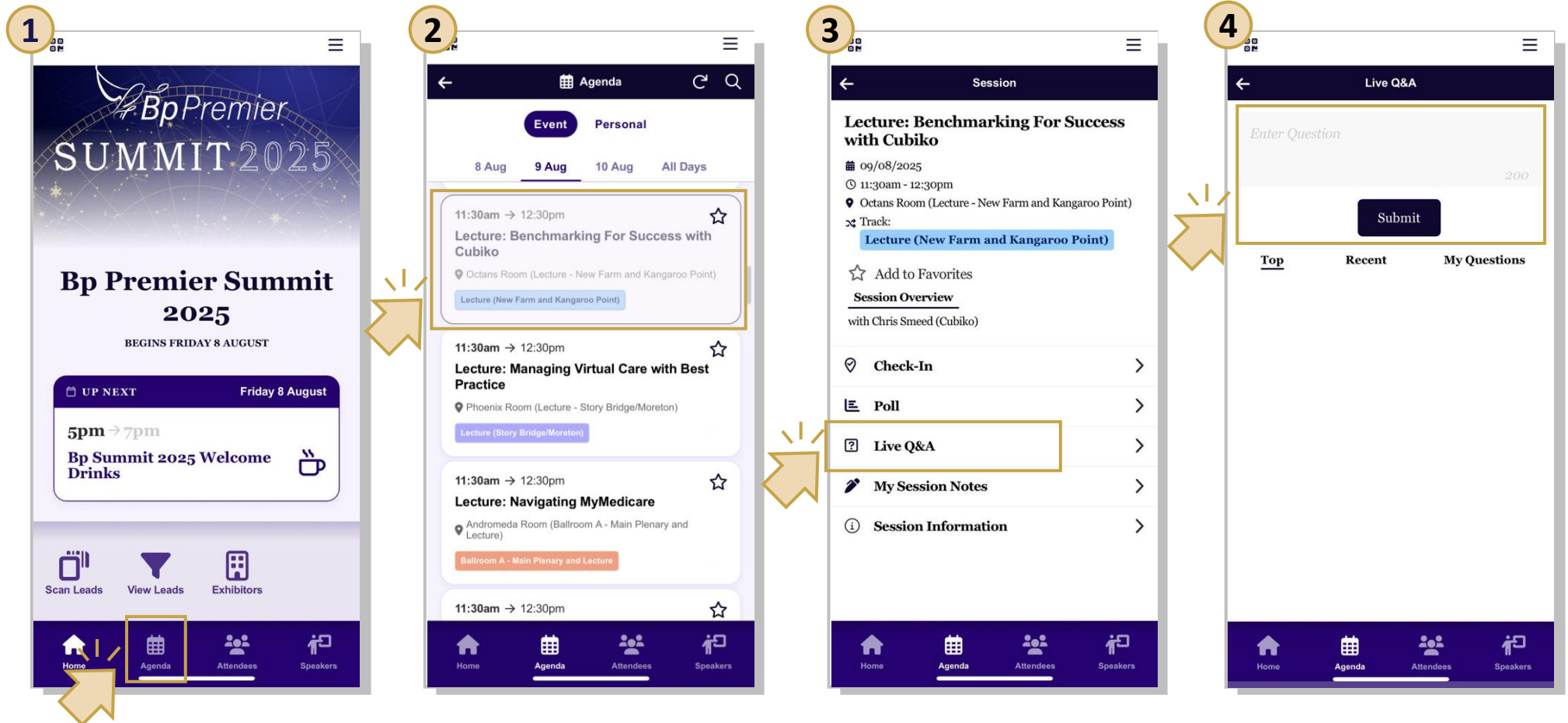


# BpPremier SUMMIT 2025

Ask any questions  
using The Event App



Download the app  
By scanning the QR code



# Login to Bp Premier

1




Best Practice



2

Login



Product: Bp Premier

Version: Spectra SP1 Revision  
Edition  
Build No: 1.13.1.1078

Site ID: 99989

Drug database: July 2025

User: Dr Frederick Findacure

Password:

Location: Bundaberg Clinic

Start in: Main screen

**3** Presenter to select relevant user and location

**4** Login

Cancel

Password : samples

5

Bp Premier

File Clinical Management Utilities View Setup Help

Currently logged in: Dr Frederick Findacure



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**SUMMIT 2025**

**Complex SQL Queries and Reports**

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# Agenda

- Database overview
- SQL basics
- Overview of the utilities available to query the database
  - Bp Browser
  - Database Search
  - Bp Reporting Tool
- Example queries and exercises
- Q&A

# Database Overview



# Table Structure

InternalID	RecordStatus	FirstName	Surname	Created	CreatedBy	Updated	UpdatedBy
1	1	Kathleen	Aalbrecht	2012-01-30	11	2025-07-19	1
2	1	Alan	Abbott	2012-01-30	5	NULL	NULL
3	0	Maree	Ackerman	2012-02-01	4	2025-02-10	5
4	1	Felix	Adams	2012-02-01	7	2025-08-05	6

- First column is the primary key which is a unique identifier for that record
- Most tables will have the following columns:
  - RecordStatus – Indicates the status of the record. Generally 1 is active and 0 is deleted
  - Created – The date and time the record was created
  - CreatedBy - The UserID of the user that created that record
  - Updated – The date and time the record was last updated
  - UpdatedBy – The UserID of the user that last updated the record

# Table Relationships

InternalID	FirstName	Surname	CreatedBy
1	Kathleen	Aalbrecht	11
2	Alan	Abbott	6

Patients

RecordID	InternalID	UserID	Appointment Date
1	2	5	2025-01-01
2	5	5	2025-01-02

Appointments

UserID	FirstName	Surname
5	Frederick	Findacure
6	Ivor	Cure

Users

- Foreign keys are used to link tables by referencing the primary key of the related table.
- This helps reduce duplicate data.

Alan Abbott's patient record was created by Ivor Cure and he has an appointment on 1<sup>st</sup> January with Dr Findacure

# Bp Browser

The Bp Browser provides a basic read-only view of the data contained in your database.

## Useful for:

- Viewing, filtering and sorting data
- Exporting bulk data to text or XML formats
- Viewing the tables and columns that make up the Bp Database which can be useful when building custom queries.

Requires 'Allow Access' to the 'Bp Browser Access' permission.

The screenshot displays the Bp Browser application interface. On the left, a 'Select table' dialog box is open, showing a list of tables under the 'BPSPATIENTS' database. The tables listed are: PATIENTLOGIN, PATIENTNCSRNOTIFICATIONS, PATIENTNCSRSTATUS, PATIENTPHOTO, PATIENTPRESENCE, PATIENTS, PATIENTSTATUS, and PATIENTWHITECOAT. The 'PATIENTS' table is selected. On the right, the 'PATIENTS' table is displayed in a grid view. The table has columns: Internalid, Recordstatus, Externalid, Origin, Patientstatus, Dateofdeath, Titlecode, and Firstname. The data is sorted by Internalid, showing 32 records. The first few rows are:

Internalid	Recordstatus	Externalid	Origin	Patientstatus	Dateofdeath	Titlecode	Firstname
0	0		0	0	///	0	
1		1 ABBOANAS	1	1	///	4	Anastasia
2		1 ABBOANTH	1	1	///	1	Alan
3		1 ABBOBENJ	1	1	///	5	Benjamin
4		1 ABBOMADE	1	1	///	2	Madeline
5		1 ADAMFELIA	1	1	///	1	Felix
6		1 ALDRALFR	1	1	///	1	Alfred Charles
7		1 ALLEDAVIA	1	1	///	1	David
8		1 ALLEFAY A	1	1	///	2	Fay
9		1 ALLEJANEA	1	1	///	2	Janelle
10		1 ALLEJESSA	1	1	///	4	Jessica
11		1 ALLEKENNA	1	1	///	1	Kenneth
12		1 ALLEMITCA	1	1	///	1	Mitchell
13		1 AMOSTEGA	1	1	///	4	Tegan
14		0 ARHTODD	1	1	///	1	Todd
15		1 BARTRAYM	1	1	///	0	Raymond
16		1 COSTKATH	1	1	///	2	Kathleen
17		1 COSTTERR	1	1	///	1	Terrance
18		1 JONEWALT	1	1	///	1	Walter
19		1 MARSELIZA	1	1	///	2	Elizabeth Jean
20		1 ALBEANTH	1	2	///	0	Leon
21		1 ALBEBRITA	1	2	///	4	Brittany
22		1 ALBEJACKA	1	2	///	0	Jackson
23		1 ALBEJOANA	1	2	///	2	Joanna
24		1 ALBEJOHNA	1	2	///	1	John
25		1 ALBEMICHA	1	2	///	4	Michaela
26		1 ALBEROCH	1	2	///	4	Rochelle
27		1 ALBETAMA	1	2	///	4	Tamara
28		1 HOBBHARC	1	3	29/03/2004	0	Harold
29		1 JONEANNIA	1	1	///	0	Annie
30		1 JONEGRAC	1	3	28/03/2004	0	Gracie
31		1 MOORMAN	1	1	///	3	Mandy
32		1 ALFRGWEN	1	1	///	2	Gwenda

Demo

# SQL Queries

- SQL is a language designed for accessing and manipulating databases.
- A SELECT statement is used to retrieve data from the database.
- Each statement, is made up of several clauses that help filter, sort and aggregate the data being retrieved.

SQL clause	What it does	Required
SELECT	Lists the columns that will be retrieved * selects all columns.	Yes
FROM	Lists the tables that contain the columns listed in the SELECT clause. This can be more than one.	Yes
WHERE	Specifies criteria that must be met by each record to be included in the results.	No
ORDER BY	Specifies how to sort the results.	No
GROUP BY	In a SQL statement that contains aggregate functions, lists columns that are not summarised in the SELECT clause.	Only if there are such fields
HAVING	In a SQL statement that contains aggregate functions, specifies conditions that apply to columns that are summarised in the SELECT statement.	No

```
SELECT *  
FROM BPS_Patients  
WHERE StatusText = 'Active'  
ORDER BY Surname, Firstname
```

	InternalID	ExternalID	StatusText	Title	Firstname	Middlename
1	24634		Active	Mrs	Kathleen	
2	24643		Active	Mrs	Kathleen	
3	24652	NULL	Active		Wargle	
4	24641		Active	Dr	Simon	
5	24637		Active	Mr	Reuben	T
6	24636	NULL	Active		Ichiban	
7	24638		Active	Mr	Sam	A

# Joining tables

InternalID	FirstName	Surname	CreatedBy
1	Kathleen	Aalbrecht	11
2	Alan	Abbott	6

Patients

RecordID	InternalID	UserID	Appointment Date
1	2	5	2025-01-01
2	5	5	2025-01-02

Appointments

UserID	FirstName	Surname
5	Frederick	Findacure
6	Ivor	Cure

Users

RecordID	FirstName	Surname	Appointment Date	Doctor
1	Alan	Abbot	2025-01-01	Findacure

```
SELECT RecordID,  
       p.FirstName,  
       p.Surname,  
       AppointmentDate,  
       u.Surname AS Doctor  
FROM   Patients p  
       INNER JOIN Appointments a ON p.InternalID = a.InternalID  
       INNER JOIN Users u ON a.UserID = u.UserID  
WHERE  RecordID = 1
```

# Database Search

The Database Search feature allows the retrieval of a list of patients through either a user-friendly query builder or custom SQL query.

## Useful for:

- Sending SMS or BHA messages
- Generating letters
- Adding clinical reminders
- Inactivating patients
- As a filter for exporting patient clinical records
- Printing or exporting patient demographics for external use.
- Printing labels

Requires 'Allow Access' to the 'Search clinical data' permission.

The screenshot shows the 'Database search' window with the 'Demographics' tab selected. The SQL Query field contains the following query:

```
SELECT *  
FROM BPS_Patients  
WHERE Status Text = 'Active'  
ORDER BY surname, firstname
```

Below the query field, there are checkboxes for 'Include inactive patients' and 'Include deceased patients', both of which are unchecked. A status bar indicates '94 matching records'.

Name	Address	D.O.B.	Age	Medicare No.	Medicare expiry	File No.	Home phone
Aalbrecht, Kathleen	707 Menner Cl, Darwin. 0800	07/07/1965	60 yrs	4134899932 - 1	31/12/2027		
Abbott, Alan	12 John St, Woodlane. 4035	30/06/1945	80 yrs	4133180467 - 1	31/12/2027	101	07 50505050
Ackeman, Ashley Francis	71 Billabonger Road, Willawong. 4110	10/07/1980	45 yrs	4133178947 - 1	31/12/2027	7893	07 78945787
Ackemann, Maree Aleisha	71 Billabonger Road, Willawong. 4110	06/08/1981	43 yrs	4133178947 - 2	31/12/2027	7894	07 78945787
Adams, Felix Alexander	35 Yarrabine Road, Landsborough. 4550	30/12/1928	96 yrs	4133180466 - 1	31/12/2027	245	07 23456987
Adkins, Merlin D	653 Igor Drive, Hamilton. 3300	26/06/1995	30 yrs	3950156581 - 1	31/12/2027		
Ahem, Jason Patrick	17 Seymore Ave, Bentleigh. 3204	31/05/1977	48 yrs	3500158284 - 3	31/12/2027	987	03 49788795
Ahem, Rhonda Joan	17 Seymour Ave, Bentleigh. 3204	06/06/1938	87 yrs	3500158284 - 2	31/12/2027	986	03 49788795
Alberts, Brittany	10 Williams Road, Darwin. 801	/ /	/	6500110501 - 7	31/12/2027		08 23658491
Aldridge, Alfred Charles	Lazy Lakes Nursing Home, 4 King St, Launceston. 7	24/01/1908	117 yrs	5500064971 - 1	31/12/2027	781	03 96781510
Alfreds, David Charles	481 Spence St, Oxley. 4075	19/03/1930	95 yrs	4133180466 - 1	31/12/2027	9781	07 48759654
Alfreds, Gwenda Elizabeth	481 Spence St, Oxley. 4075	16/02/1933	92 yrs	4133180466 - 2	31/12/2027	9782	07 48759654
Allen, David Charles	22 Star Street, Fremantle. 6160	06/10/1960	64 yrs	2234567891 - 1	31/12/2027	6749	08 99905050
Allen, Fay Ellen	8 Grey St, Fremantle. 6160	12/07/1940	85 yrs	2234567891 - 1	31/12/2027	3346	08 99905050
Allen, Janelle	22 Star Street, Fremantle. 6160	24/01/1965	60 yrs	2234567891 - 1	31/12/2027	6750	08 99905050
Allen, Jessica Cate	22 Star Street, Fremantle. 6160	08/01/1992	33 yrs	2234567891 - 4	31/12/2027	6751	08 99905050
Allen, Kenneth	8 Grey St, Fremantle. 6160	10/06/1928	97 yrs	2234567891 - 1	31/12/2027	3345	08 99905050
Allen, Mitchell Owen	22 Star Street, Fremantle. 6160	15/03/1988	37 yrs	2234567891 - 3	31/12/2027	6752	08 99905050
Amos, Tegan	1/235 Rode Road, Chemside. 4032	11/04/1984	41 yrs	3500166361 - 1	31/12/2027	154	07 58759456
Ashley, Christopher R	491 Dalys Gr, Mermaid Waters. 4218	07/10/1954	70 yrs	4950159962 - 1	31/12/2027		
Atkins, Lou N	268 Desiree Cr, Hamilton. 3300	23/12/1996	28 yrs	3950156941 - 2	31/12/2027		
Barefoot, Jennie	5 Kendall Gr, Bridgenorth. 7277	24/04/1997	28 yrs	6950446421 - 1	31/12/2027		
Barnett, Becky	6 Jeffrey Cr, Dennington. 3280	27/02/1997	28 yrs	3950326151 - 1	31/12/2027		
Barrett, Frances Ann	23 Gregory Street, Wynnum. 4178	16/09/1972	52 yrs	2294247001 - 1	31/12/2027	978461	4567 8966
Bartholomew, Raymond	354 Main Road, Bridgeman Downs. 4035	27/11/1928	96 yrs	4133180466 - 1	31/12/2027	789461	07 62576666
Bishop, Gomer O	150 Lennard Pl, Paradise Point. 4216	03/07/1954	71 yrs	4950159872 - 1	31/12/2027		5165841361
Bishop, Rose	89 Gavin Street, Rutherford. 2320	24/01/1926	99 yrs	2294247003 - 1	31/12/2027	789464	02 42658795
Blackwell, David	2 Gra" Heme Cr, Brukunga. 5252	17/09/1998	26 yrs	5950250951 - 1	31/12/2027		

Currently logged in: Dr Frederick Findacure (Bundaberg Clinic) Thursday 17/07/2025 08:19:12 PM

# Demo

# Database Search - Exercise 1

Using the database search report builder, create a query that finds patients that matches the below criteria:

- Active patients
- Currently a smoker
- Do **not** have a Past History of COPD recorded

## Expected Results

3 matching records						
Name	Address	D.O.B.	Age	Medicare No.	Medicare expiry	File No.
Ackeman, Ashley Francis	71 Billabonger Road, Willawong. 4110	10/07/1980	45 yrs	4133178947 - 1	31/12/2027	7893
Amos, Tegan	1/235 Rode Road, Chermside. 4032	11/04/1984	41 yrs	3500166361 - 1	31/12/2027	154
Bryant, Leonard	32 Lonely Lane, Bankstown. 2200	06/06/1956	69 yrs	2294260071 - 1	31/12/2027	66604

# Database Search - Exercise 2

**Supplied query:** Patients with a GPMP/TCA plan eligible for a GPCCM plan

Update to include the following criteria:

- Patient is not registered for MyMedicare

**Hint:** The column is in the Patients table. Use Bp Browser to verify the column name and value to filter for.

## Expected Results

						1 matching record
Name	Address	D.O.B.	Age	Medicare No.	Medicare expiry	File No.
Barrett, Frances Ann	23 Gregory Street, Wynnum. 4178	16/09/1972	52 yrs	2294247001 - 1	31/12/2027	978461

# Database Search - Exercise 3

**Supplied query:** Patients that are registered for MyMedicare

Update to include the following criteria:

- Does **not** have a MyMedicare location set, or
- Does **not** have a MyMedicare registration date set

## Expected Results

18 matching records						
Name	Address	D.O.B.	Age	Medicare No.	Medicare expiry	File No.
Ahem, Rhonda Joan	17 Seymour Ave, Bentleigh. 3204	06/06/1938	87 yrs	3500158284 - 2	31/12/2027	986
Alfreds, David Charles	481 Spence St, Oxley. 4075	19/03/1930	95 yrs	4133180466 - 1	31/12/2027	9781
Alfreds, Gwenda Elizabeth	481 Spence St, Oxley. 4075	16/02/1933	92 yrs	4133180466 - 2	31/12/2027	9782
Allen, Kenneth	8 Grey St, Fremantle. 6160	10/06/1928	97 yrs	2234567891 - 1	31/12/2027	3345
Allen, Mitchell Owen	22 Star Street, Fremantle. 6160	15/03/1988	37 yrs	2234567891 - 3	31/12/2027	6752
Amos, Tegan	1/235 Rode Road, Chemsides. 4032	11/04/1984	41 yrs	3500166361 - 1	31/12/2027	154
Bartholomew, Raymond	354 Main Road, Bridgeman Downs. 4035	27/11/1928	96 yrs	4133180466 - 1	31/12/2027	789461
Bishop, Rose	89 Gavin Street, Rutherford. 2320	24/01/1926	99 yrs	2294247003 - 1	31/12/2027	789464
Carlton, Noah	219 Geoffrey Cr, Tennant Creek. 0862	27/09/1980	44 yrs	4950290231	31/12/2027	
Costello, Kathleen	36 Reed Street, Bendigo. 3552	03/11/1962	62 yrs	3500158281 - 2	31/12/2027	789462
Costello, Terance	36 Reed Street, Bendigo. 3552	28/10/1958	66 yrs	3500158281 - 1	31/12/2027	
Dean, Reuben T	76 Frederick St, Woodlane. 5238	14/12/1945	79 yrs	5950067771 - 1	31/12/2027	
Fields, Steven	11 Hiram Gr, Ainslie. 2602	23/09/1997	27 yrs	2950889271 - 1	31/12/2027	
Jones, Walter	2 Oldham Road, Kenmore. 4069	02/02/1936	89 yrs	3500158282 - 1	31/12/2027	
Limbrick, Sandeshni	63 Holles Terrace, Buxton. 4660	10/04/1984	41 yrs	4950324121 - 1	31/12/2027	
Marshal, Elizabeth Jean	15 Albert St, St Peters. 5069	02/11/1948	76 yrs	6500110502 - 2	31/12/2027	
Moore, Mandy	68 Bridge Road, Noosaville. 4566	11/04/1966	59 yrs	4122401287 - 1	31/12/2027	
Nicole, Patsy	32 Geoff Ave, Dickson. 2602	05/04/1923	102 yrs	2950159672 - 4	31/12/2027	

# Bp Reporting Tool – Custom SQL Query

The Custom SQL Query feature within the Bp Reporting Tool allows read-only sql queries to be executed against the database.

## Useful for:

- When more than just a list of patients is required. Allows complete flexibility with what is retrieved from the database.
- Exporting data to CSV.

Requires 'Allow Access' to the 'Reports' permission.

Custom SQL Report Wizard - 2 of 2

1 Login 2 Custom Report

### Custom Report

Enter your SQL SELECT statement to return data rows from you BP Premier database

[Open Sql...](#) [Save Sql...](#)

```
SELECT p.InternalID, Surname, FirstName, COUNT(RecordID) AS AppointmentCount
FROM Patients p INNER JOIN Appointments a ON p.InternalID = a.InternalID
WHERE p.RecordStatus = 1
AND a.RecordStatus = 1
GROUP BY p.InternalID, Surname, FirstName
```

[Show SQL Results](#) [Save SQL Results](#) 63 rows

InternalID	Surname	FirstName	AppointmentCount
1	Abbott	Anastasia	2
2	Abbott	Alan	66
3	Abbott	Benjamin	59
4	Abbott	Madeline	6
5	Adams	Felix	31
6	Aldridge	Alfred Charles	1
7	Allen	David	7
8	Allen	Fay	4

< Back Finish Cancel

# Demo

# Custom SQL Query – Exercise 4

Supplied query: Patients with 5 or more Current Rx records

Update the columns being displayed to show the drug name as per the example below.

## Expected Results

Show SQL Results

Save SQL Results

16 rows

InternalID	FirstName	Surname	Drugname	
6	Alfred Charles	Aldridge	Accupril 10mg Tablet	
6	Alfred Charles	Aldridge	Dilatrend 3.125mg Tablet	
6	Alfred Charles	Aldridge	Lasix M 20mg Tablet	
6	Alfred Charles	Aldridge	Normison 10mg Tablet	
6	Alfred Charles	Aldridge	Agarol Emulsion	
6	Alfred Charles	Aldridge	Ebixa 10mg/g Solution	
32	Gwenda	Alfreds	Cipramil 20mg Tablet	
32	Gwenda	Alfreds	Daonil 5mg Tablet	

# Questions & Answers



Thank you for joining us!



**Our Bp Summit  
Presentations  
and Resources are available  
via our Knowledge Base**

Complex SQL Queries  
and Reports

Joel Mortensen