

WEEK 9 – CREATING REPORTS IN SMARTCARE PART 1

INTENDED AUDIENCE

- This presentation is aimed toward county technical staff who will be responsible for creating ad hoc and custom reports within the SmartCare EHR
- The software needed will NOT be needed for all county users who will be accessing SmartCare but a smaller subset

REPORTING OPTIONS

- **SmartCare Reports**
 - Completely customizable by county IT users
 - Real time updates
 - CDAG must be enforced by report creator
- **List Pages**
 - Prebuilt reports already in SmartCare
 - Offers some layout flexibility
- **Ad-hoc Reporting**
 - Built in query builder for selected tables within SmartCare
 - Will be CDAG compliant after March service pack is loaded into county TRAIN databases
- **Datawarehouse**
 - Good for non-time critical data reporting

- Prerequisites
 - Software needed
 - SQL Credentials from Streamline
- Database Connection Options
- Available Documentation
- Databases and Use Cases
- Frequently Used Tables

AGENDA

- Create New Report
 - Format Dates
 - Create Groups
 - Add Parameters
 - Create Summaries and subtotals
 - **Enforce CDAG!!!!**
- Uploading Reports to Report Server
 - Report Server URL
- Creating a New Report within SmartCare
- Adding report to Role Definition
- Future Steps

Microsoft SQL Server Management Services (SSMS)

- Pros
 - Good SQL query building user interface and error checking
 - Recommended by Streamline to build queries and datasets for reporting writing tools
- Cons
 - Does NOT create .RDL file needed for publishing reports in SmartCare
 - Limited visual capabilities

Microsoft Visual Studio

- Pros
 - Enterprise level tool that is good for sharing resources with multiple report writers
 - Creates RDL files needed for report publishing in SmartCare
- Cons
 - More steps to set up an initial connection to the SmartCare database
 - Might have a cost or purchase element before using

Microsoft Report Builder

- Pros
 - Free download from Microsoft website
 - <https://www.microsoft.com/en-us/download/details.aspx?id=53613>
 - Creates RDL files needed for Smartcare report publishing
 - Simpler steps to set up initial connection
 - Capable of dynamically linking to shape files (county or zip code maps for example)
- Cons
 - Must switch data source prior to uploading into SmartCare

SQL CREDENTIALS FROM STREAMLINE

- Each user that will write reports will need a separate user account from Streamline
- Request accounts from Senior Implementation Coordinators
- Accounts will have READ ONLY access to the county SQL servers
- The SQL Credentials are **NOT** the same as a SmartCare EHR account
- User does NOT have to be logged into SmartCare to see/view SQL server data or write reports
- Only 1 SQL account will be needed per user for all databases

Database Connection Options

- Open VPNGUI
 - Free download from Streamline SFTP Site
 - Must connect prior to report building
 - Connection usually stays connected for extended durations
 - May not be compliant with county IT policies
- IPSEC Point to Point
 - Always connected
 - Your county IT staff must work with Streamline to exchange IP, network information and test

Available Documentation

- Available on CalMHSA Member Portal within Documents section
 - SmartCare Core Data Dictionary 6.0
 - ER Diagram CalMHSA Core
 - Data Warehouse Data Dictionary (discussed during Part 2, May 16, 2023)

SMARTCARE CORE DATA DICTIONARY

Available Documentation

- Choose Phase 1 for Phase filter
- Reverse Sort on Date Uploaded and look for 2023-02-03

Documents

[Add Document](#)

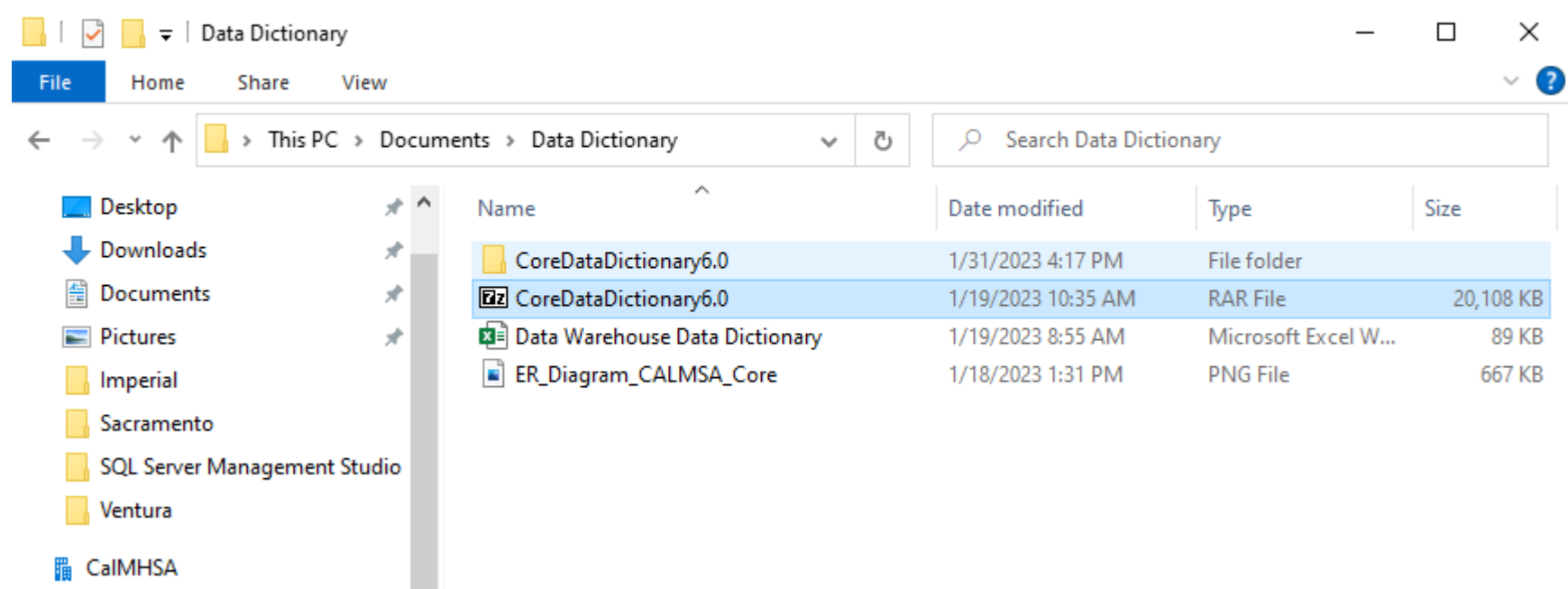
Earliest Date: Latest Date: Phase: Category:

Show entries Search:

| ID | Display Name | Categories | Phase | County Uploaded | Date Uploaded | Actions |
|------|------------------------------------|------------|----------------|-----------------|---------------------|---|
| 7140 | SmartCare Core Data Dictionary 6.0 | ehr, other | Pilot, Phase 1 | CalMHSA | 2023-02-23 22:52:58 | Download View Edit Deactivate |
| 7135 | Data Warehouse Data Dictionary | ehr, other | Pilot, Phase 1 | CalMHSA | 2023-02-23 18:06:54 | Download View Edit Deactivate |
| 7133 | ER Diagram CalMHSA Core | ehr, other | Phase 1 | CalMHSA | 2023-02-23 18:05:11 | Download View Edit Deactivate |

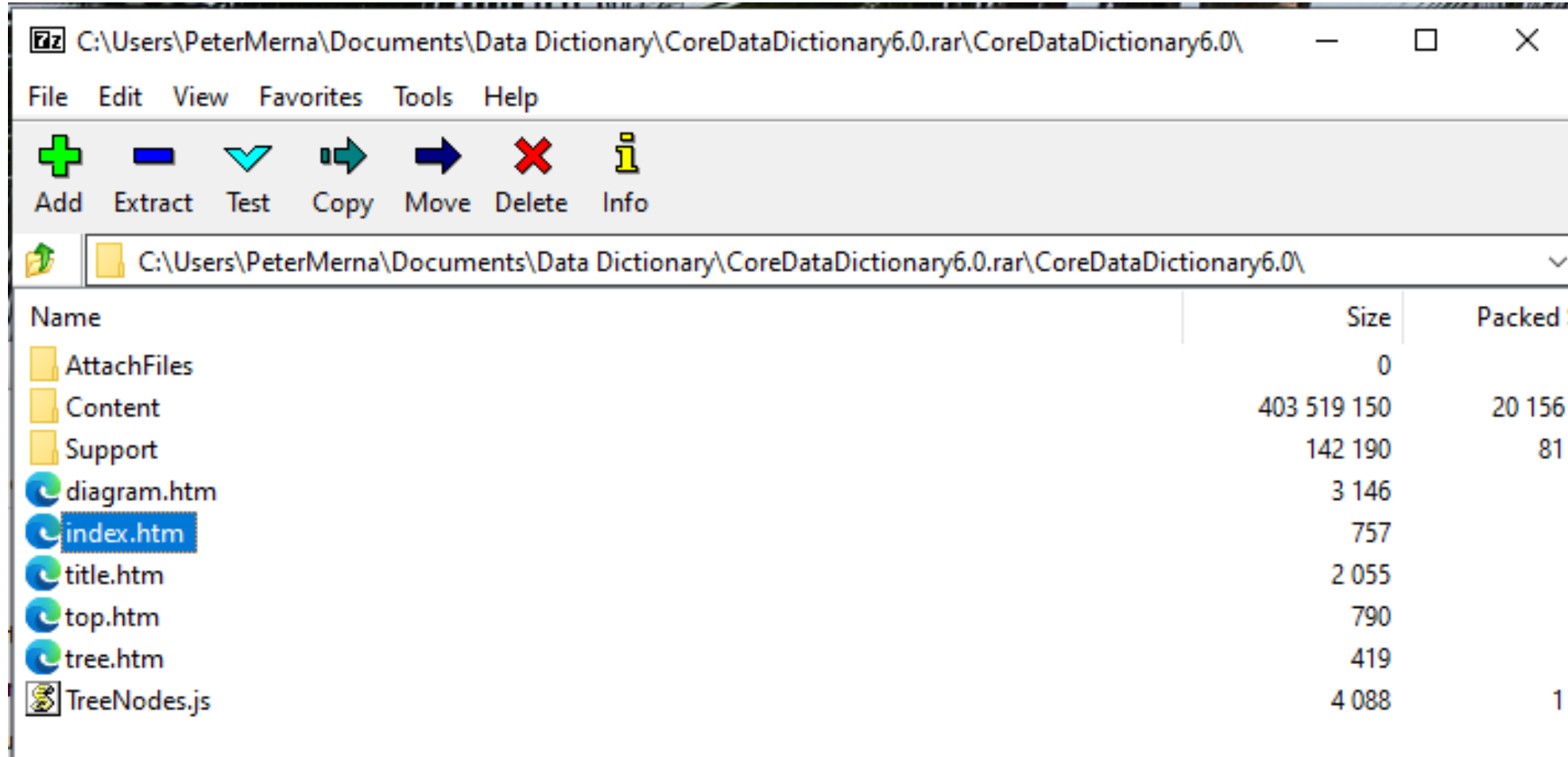
SMARTCARE CORE DATA DICTIONARY 6.0

- Use 7 Zip or similar to open RAR file
- Does not have CalMHSA custom development tables so far



SMARTCARE CORE DATA DICTIONARY 6.0

- Click on index.htm file



SMARTCARE CORE DATA DICTIONARY 6.0

- Expand Streamline, expand Main Model, click on Tables and click on any table within listing

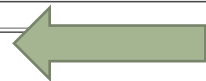
The screenshot displays the Streamline Core Data Dictionary 6.0 interface. On the left, a tree view shows the navigation structure: Framework.DM1 > Streamline > Main Model > Tables. The 'Clients' table is selected. The main area shows the table's metadata and DDL code.

| Clients | |
|---------------------|--|
| Logical Entity Name | Clients |
| Default Table Name | Clients |
| Physical Only | NO |
| Do Not Generate | False |
| Owner | |
| Definition | |
| Note | |
| Pre SQL | |
| DDL Code | <pre>CREATE TABLE Clients(ClientId int IDENTITY(1,1), CreatedBy type_CurrentUser DEFAULT SYSTEM_USER NOT NULL, CreatedDate type_CurrentDatetime DEFAULT CURRENT_TIMESTAMP NOT NULL, ModifiedBy type_CurrentUser DEFAULT SYSTEM_USER NOT NULL, ModifiedDate type_CurrentDatetime DEFAULT CURRENT_TIMESTAMP NOT NULL, RecordDeleted type_YOrN NOT NULL, DeletedDate datetime NOT NULL, DeletedBy type_UserId NOT NULL, ExternalClientId varchar(15) NULL, Active type_Active DEFAULT 'Y' NOT NULL, MRN varchar(15) NULL, LastName varchar(50) NULL, FirstName varchar(30) NULL, MiddleName varchar(30) NULL, Prefix varchar(10) NULL, Suffix varchar(10) NULL, SSN type_SSN_Encrypted NULL, Sex type_Sex NULL, DOB datetime NULL, PrimaryClinicianId int NULL, CountyOfResidence type_County NULL, CountyOfTreatment type_County NULL, CorrectionStatus type_GlobalCode NULL, Email type_Email NULL, Comment type_Comment NULL, LivingArrangement type_GlobalCode NULL, NumberOfBeds type_GlobalCode NULL, MinimumWage char(3) NULL, FinanciallyResponsible type_YOrN DEFAULT 'Y' NOT NULL, AnnualHouseholdIncome money NULL, NumberOfDependents int NULL</pre> |

SMARTCARE CORE DATA DICTIONARY 6.0

- Lots of helpful information such as datatype, allows NULL value, GlobalCodeCategory, etc.

| Clients Columns | | | | |
|------------------------------------|-------------------------------|----------------------|------|---|
| ColumnName | Domain | Datatype | NULL | Definition |
| ClientId | | int | NO | |
| CreatedBy | | type_CurrentUser | NO | |
| CreatedDate | | type_CurrentDatetime | NO | |
| ModifiedBy | | type_CurrentUser | NO | |
| ModifiedDate | | type_CurrentDatetime | NO | |
| RecordDeleted | RecordDeleted | type_YOrN | NO | |
| DeletedDate | DeletedDate | datetime | NO | |
| DeletedBy | DeletedBy | type_UserId | NO | |
| ExternalClientId | | varchar(15) | YES | |
| Active | | type_Active | NO | |
| MRN | | varchar(15) | YES | |
| LastName | | varchar(50) | YES | |
| FirstName | | varchar(30) | YES | |
| MiddleName | | varchar(30) | YES | |
| Prefix | | varchar(10) | YES | |
| Suffix | | varchar(10) | YES | |
| SSN | | type_SSN_Encrypted | YES | |
| Sex | | type_Sex | YES | |
| DOB | | datetime | YES | |
| PrimaryClinicianId | | int | YES | |
| CountyOfResidence | | type_County | YES | |
| CountyOfTreatment | | type_County | YES | |
| CorrectionStatus | | type_GlobalCode | YES | GlobalCodes Category = CORRECTIONSTATUS |
| Email | | type_Email | YES | |
| Comment | | type_Comment | YES | |
| LivingArrangement | | type_GlobalCode | YES | GlobalCode Category = LIVINGARRANGEMENT |



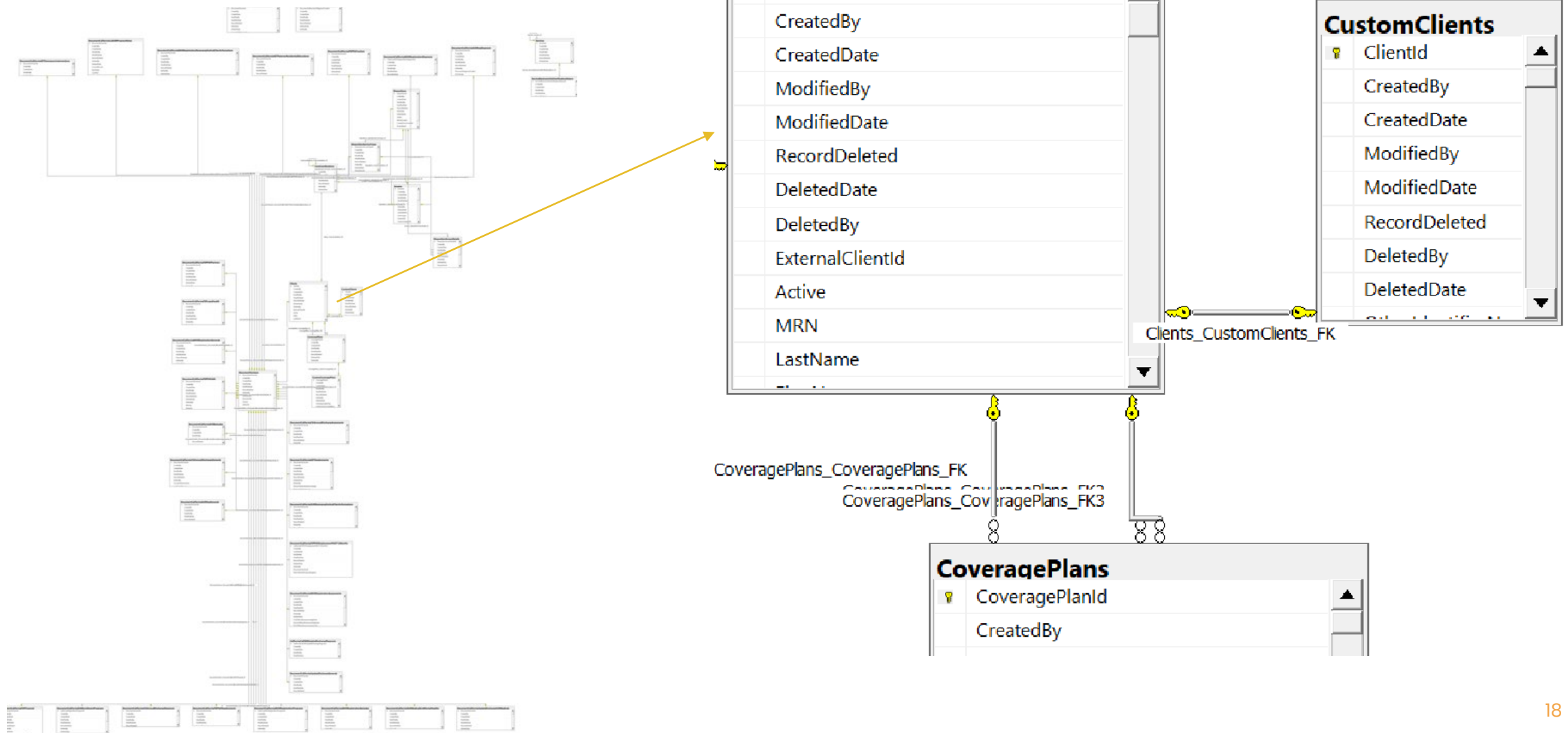
SMARTCARE CORE DATA DICTIONARY 6.0

- Parent/Child Relationships, Foreign Keys, and Cardinality, oh my!

| Parent Relationships: | | | | | | |
|---|-----------------|-----------------------------|--|------------|---------------|----------------------------|
| Table Name | Type | Cardinality | Constraint Name | VerbPhrase | InversePhrase | Foreign Keys |
| ClientPrograms | Non-Identifying | Zero or One to Zero or More | ClientPrograms_Clients_FK | | | PrimaryProgramId |
| ClientStatements | Non-Identifying | Zero or One to Zero or More | ClientStatements_Clients_FK | | | LastClientStatementId |
| ExternalReferralProviders | Non-Identifying | Zero or One to Zero or More | ExternalReferralProviders_Clients_FK | | | ExternalReferralProviderId |
| Payments | Non-Identifying | Zero or One to Zero or More | Payments_Clients_FK | | | LastPaymentId |
| Staff | Non-Identifying | Zero or One to Zero or More | Staff_Clients_FK | | | PrimaryClinicianId |
| Staff | Non-Identifying | Zero or One to Zero or More | Staff_Clients_FK2 | | | AssignedAdminStaffId |
| Staff | Non-Identifying | Zero or One to Zero or More | Staff_Clients_FK3 | | | PrimaryPhysicianId |
| Staff | Non-Identifying | Zero or One to Zero or More | Staff_Clients_FK4 | | | UserStaffId |
| Staff | Non-Identifying | Zero or One to Zero or More | Staff_Clients_FK5 | | | ProviderPrimaryClinicianId |
| Staff | Non-Identifying | Zero or One to Zero or More | Staff_Clients_FK6 | | | StaffId |
| Child Relationships: | | | | | | |

ER DIAGRAM CALMHTSA CORE

- ER Diagram examples



DOCUMENT CODE DETAIL

- Go to Document Management and choose Document from List Page

Document Management (210)

Document Type Service Note Document Name Status [Apply Filter](#)

| Document Name | Document Description | Document Type | Service Note | Requires Signature |
|---|----------------------------|------------------|--------------|--------------------|
| Transfer Document | Transfer Document | Native | N | Y |
| Transition Of Care | Transition Of Care | Native | N | Y |
| Transition of Care (CalMHSA) | | Native | N | Y |
| UMDAP Financial Assessment | UMDAP Financial Assessment | Native | N | Y |
| UNCOPE(C) | UNCOPE(C) | Native | N | Y |
| USCDI Summary of Care | USCDI Summary of Care | Native | N | Y |
| Vital Signs | Vital Signs | Scanned Document | N | N |
| Weekly Note | Weekly Note | Native | N | Y |
| Youth Medi-Cal Mental Health Screening Tool | | Native | N | Y |
| Youth Medi-Cal Screening Tool | | Native | N | Y |

DOCUMENT CODE DETAIL

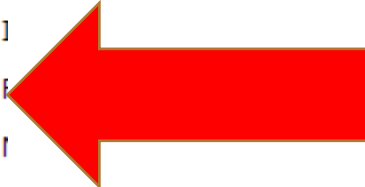
- Look for Table List field
- If multiple tables are filed from document, tables will be comma delimited

Document Codes Detail

General

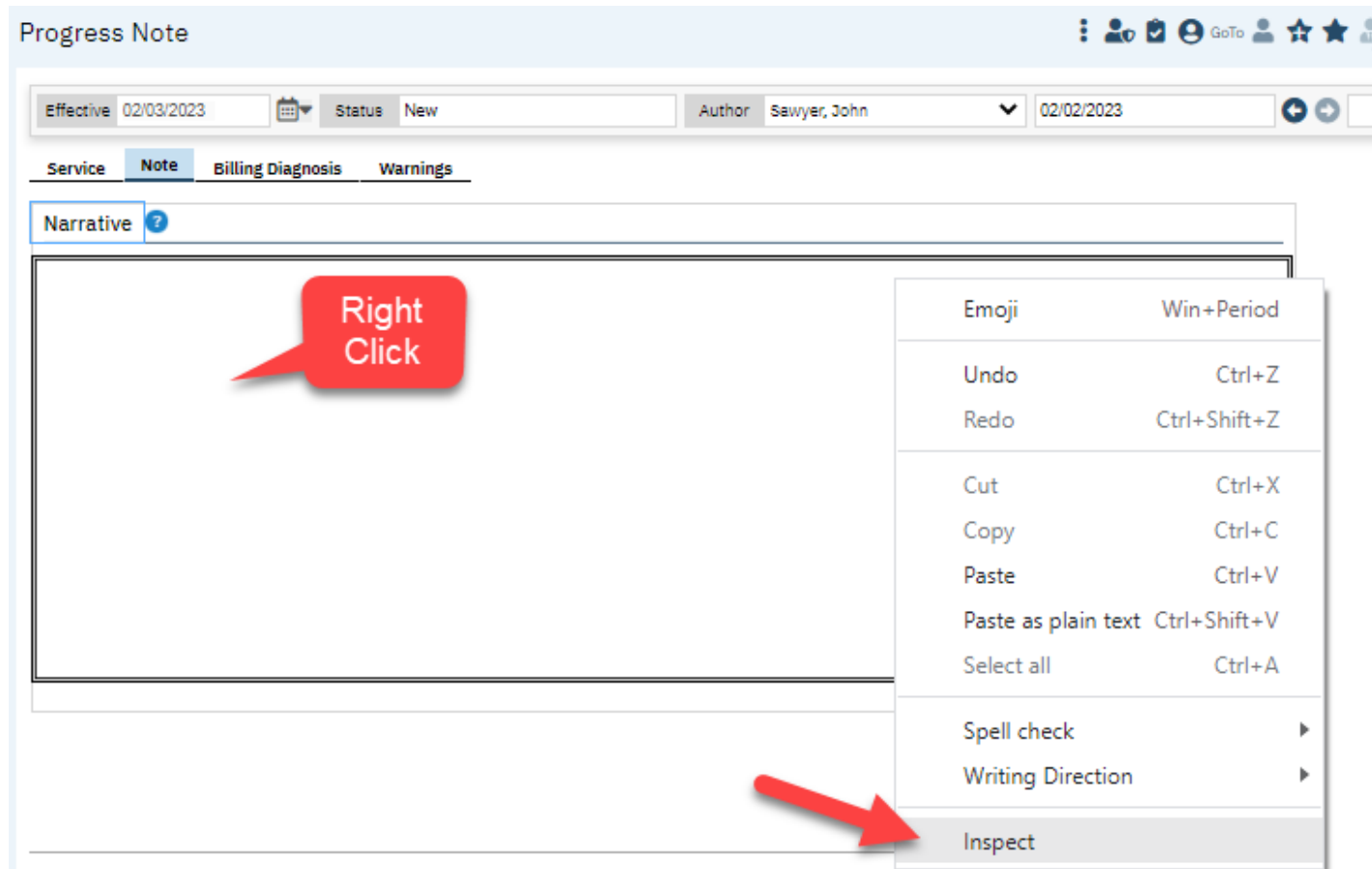
Details

| | | |
|-------------------|---|--|
| Document Name | UMDAP Financial Assessment | |
| View Document URL | RDLCaliforniaUMDAPFinancialAssessment | |
| View Document RDL | RDLCaliforniaUMDAPFinancialAssessment | |
| Table List | DocumentCaliforniaUMDAPResponsibleParties, Dc | |
| Document URL | | |
| Image Folder | | |



HTML INSPECT

- Log into SmartCare and open form
- Right click on entry box and select “Inspect”



- Side panel will highlight the section of the HTML for the field selected



```
<table cellpadding="0" cellspacing="0" border="0" width="100%">
  <tbody>
    <tr>
      <td align="left" colspan="8">
        <textarea name="ctl100$ContentPlaceholderPageContents$ctl100$TextArea_CustomMiscellaneousNotes_Narration" id="ctl100_ContentPlaceholderPageContents_ctl100_TextArea_CustomMiscellaneousNotes_Narration" spellcheck="True" cols="60" rows="20" data-preventexpand="1" class="form_textarea" style="resize: none;"></textarea> == $0
      </td>
    </tr>
  </tbody>
</table>
```

... textarea#ctl100_ContentPlaceholderPageContents_ctl100_TextArea_CustomMiscellaneousNote: ...

HTML INSPECT EXAMPLE

- Side panel will highlight the section of the HTML for the field selected

In that section it will have the

Type of box

Table for the element

Field name for the element

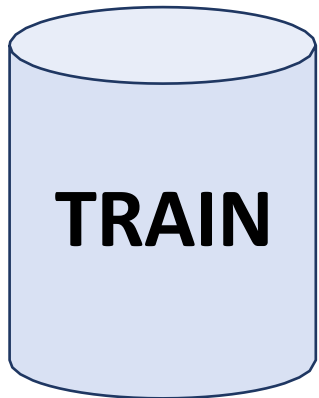
```
<textarea  
name="ctl00$ContentPlaceHolderPageContents$ctl00$TextArea_CustomMiscellaneousNotes_Narration"  
id="ctl00_ContentPlaceHolderPageContents_ctl00_TextArea_CustomMiscellaneousNotes_Narration"  
spellcheck="True" cols="60" rows="20" data-preventexpand="1" class="form_textarea" style="resize:  
none;"></textarea>
```

So in this example, the “Narrative” text box for a Progress Note is stored in

dbo.CustomMiscellaneousNotes.Narration

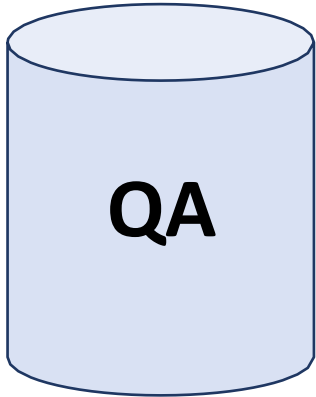
DATABASES AND USE CASES

- For reporting, databases that will be most utilized will be QA, TRAIN, and PROD

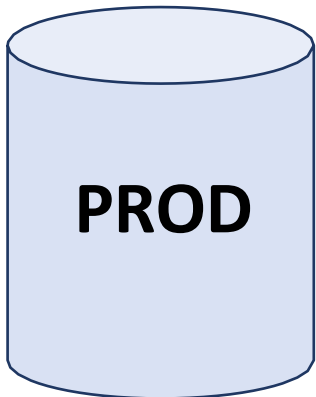


- During Implementation, this is the primary SandBox to be used by the Counties to learn the system
- Pre-Populated with sample data by CalMHSA
- During conversion testing, can be refreshed with migrated data
- Can be periodically refreshed with county PROD data (Scramble)
- After Go-Live used for end user training and practice
- Test reports can be loaded for training and practice

DATABASES AND USE CASES



- During Implementation, used for data migration validation
- Will be overwritten with new data with each migration testing iteration
- Must be the same update level as CalMHSA
- Will be primary environment for county testing after conversion
- Will be used after conversion for county to test SmartCare product updates



- PROD – Was SETUP but eventually becomes county PROD database
- Final data migration will need to be done prior to go live
- Final destination for production reports

FREQUENTLY USED TABLES – CLIENT DEMOGRAPHICS

- Clients
 - Contains one record for each unique ClientId in SmartCare
 - Does NOT contain, race, ethnicity, phone number, aliases
 - Does contain First Name, Last Name, DOB, Sex, and SSN
- Other Client demographic related tables
 - ClientPhones
 - ClientRaces
 - ClientEthnicities
 - ClientAddresses
 - ClientAliases

FREQUENTLY USED TABLES – CLIENT PROGRAMS, ETC.

- ClientPrograms
 - Contains a record for every program request/enrollment
 - Program ID, Enrollment Date, Discharge Date, Status
- Client Plans
 - Contains client coverage plan information
 - ClientId, EffectiveFrom, EffectiveTo, ClientPlanId
- Services
 - Contains a record for every service in SmartCare
 - ClientId, DateOfService, ProgramId, ClinicianId, FacetoFacetime
- Appointments
 - StaffId, ClientId, ServiceId, Status, ProgramId

FREQUENTLY USED TABLES – BILLING AND CLAIMS

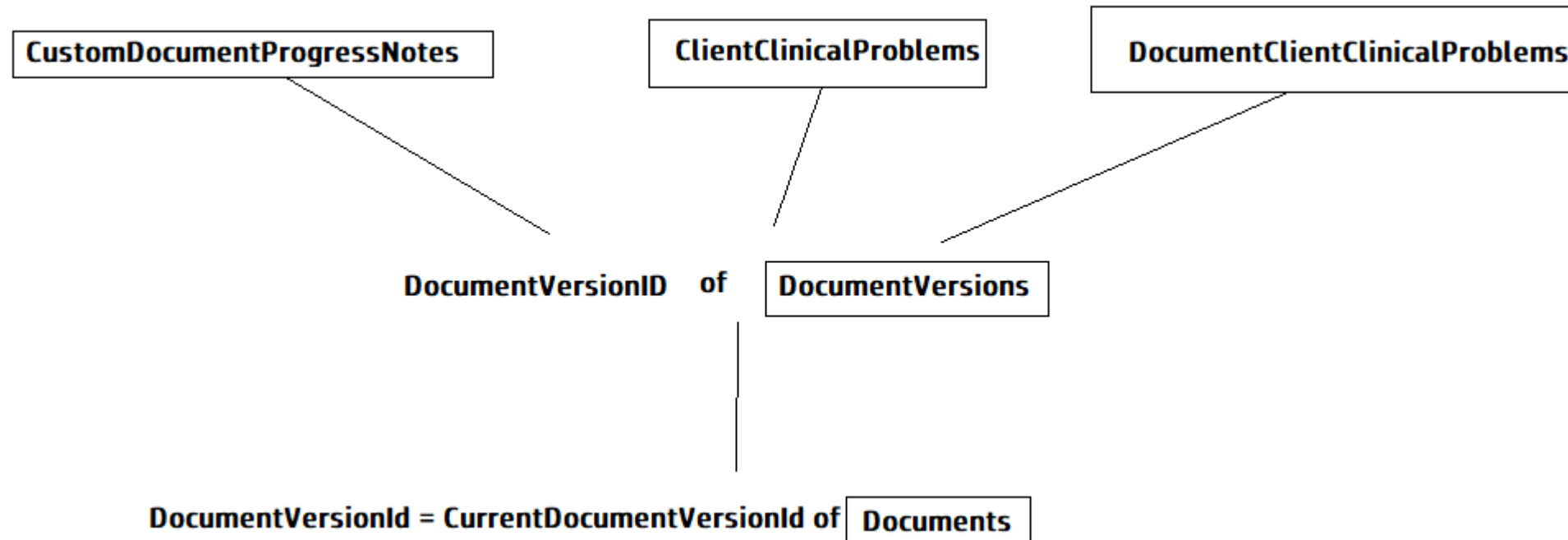
- Charges
 - Contains services entered in SmartCare and status of billing
 - ServiceId, ReadyToBill, Flagged, FirstBillDate, ExpectedPayment
- ServiceCompletionBatches
 - RunDate, TotalCharges, NumberofServices
- ServiceErrors
 - ErrorType, ErrorMessage, ServiceId, CoveragePlanId
- ServiceClaimErrors
 - Contains claims that have errored during claiming process
 - ClaimLineId, ServiceCreationError, CreatedDate, CreatedBy

FREQUENTLY USED TABLES – CLIENT CLINICAL

- Documents
 - Contains ClientId, DocumentCodeId, Status
 - Is the main table for any and all documents (forms that have Sign functionality in SmartCare)
- DocumentVersions
 - Contains DocumentVersionId, DocumentId, Effective Date
 - Is the history table of any document with one or more versions
- CustomProgressNotesPrograms
 - Contains Program ID, Enrollment Date, Discharge Date, Requested Date, Status, Information (note field)
- ClientClinicalProblems
 - Contains Program ID, Client Id, ICD10 Code, SNOMED Code, Staff ID, Start Date, End Date

FREQUENTLY USED TABLES – CLIENT CLINICAL

- Example Client Clinical tables relationship



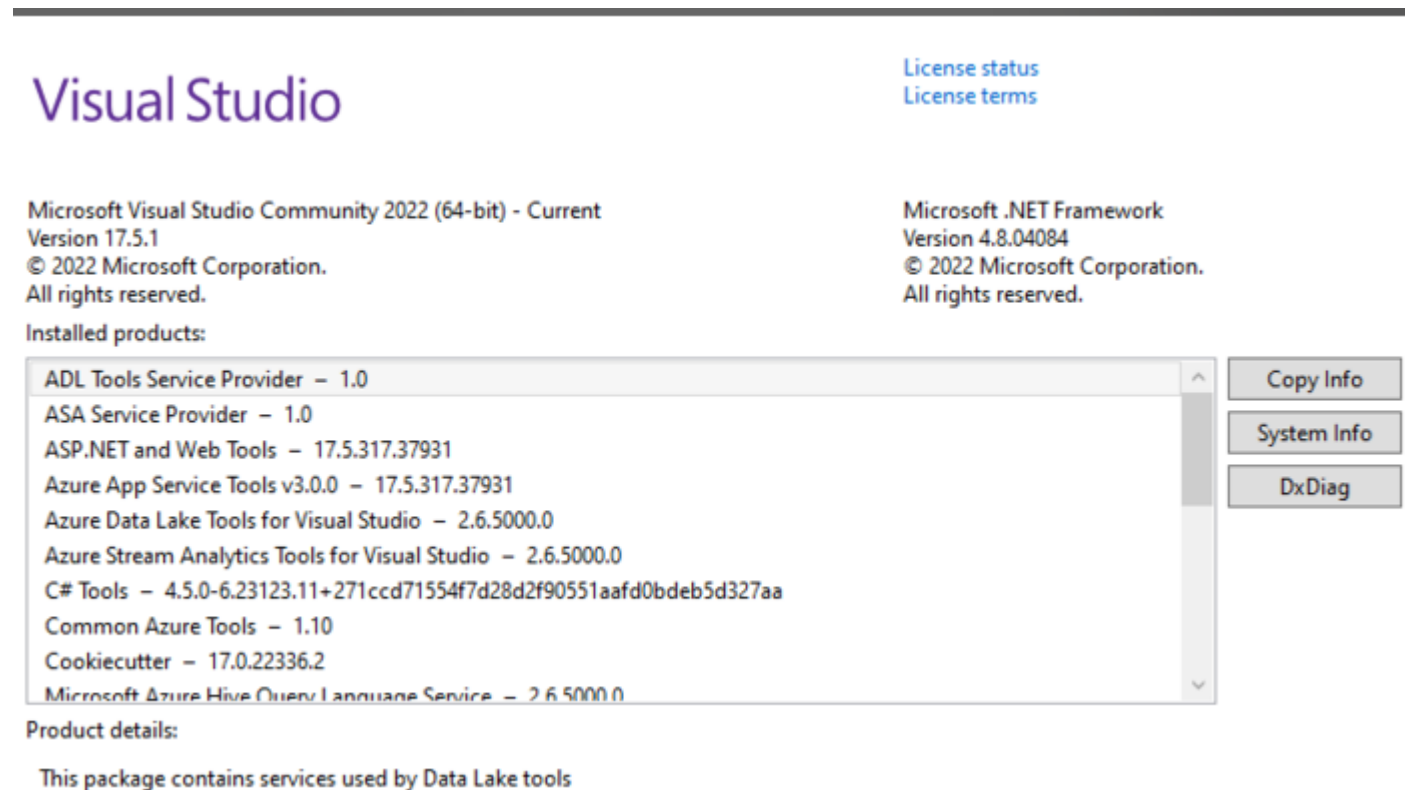


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CREATING REPORTS

SETUP STEPS IN MS VISUAL STUDIO

- Install MS Visual Studio
 - SSRS extension plugin must also be installed
 - <https://marketplace.visualstudio.com/items?itemName=ProBITools.MicrosoftReportProjectsforVisualStudio2022>
- Example version



The screenshot shows the Visual Studio installation details page. At the top, the title "Visual Studio" is displayed in purple. To the right, there are links for "License status" and "License terms". Below the title, the main product information is listed: "Microsoft Visual Studio Community 2022 (64-bit) - Current Version 17.5.1 © 2022 Microsoft Corporation. All rights reserved." To the right of this, the ".NET Framework" information is shown: "Microsoft .NET Framework Version 4.8.04084 © 2022 Microsoft Corporation. All rights reserved." Below the main product information, there is a section titled "Installed products:" which contains a scrollable list of installed extensions and tools. The list includes: ADL Tools Service Provider - 1.0, ASA Service Provider - 1.0, ASP.NET and Web Tools - 17.5.317.37931, Azure App Service Tools v3.0.0 - 17.5.317.37931, Azure Data Lake Tools for Visual Studio - 2.6.5000.0, Azure Stream Analytics Tools for Visual Studio - 2.6.5000.0, C# Tools - 4.5.0-6.23123.11+271ccd71554f7d28d2f90551aafd0bdeb5d327aa, Common Azure Tools - 1.10, Cookiecutter - 17.0.22336.2, and Microsoft Azure Hive Query Language Service - 2.6.5000.0. To the right of the list are three buttons: "Copy Info", "System Info", and "DxDiag". Below the list, there is a section titled "Product details:" which contains the text: "This package contains services used by Data Lake tools".

Visual Studio

License status
License terms

Microsoft Visual Studio Community 2022 (64-bit) - Current
Version 17.5.1
© 2022 Microsoft Corporation.
All rights reserved.

Microsoft .NET Framework
Version 4.8.04084
© 2022 Microsoft Corporation.
All rights reserved.

Installed products:

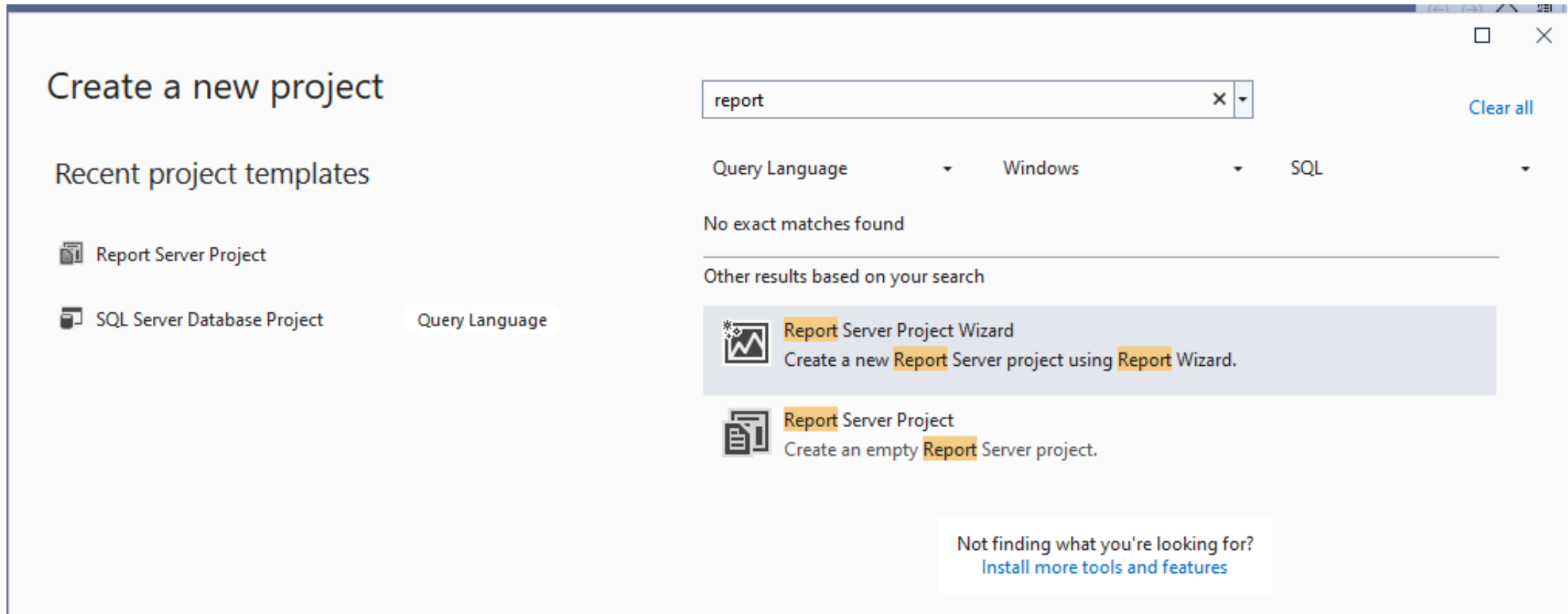
- ADL Tools Service Provider - 1.0
- ASA Service Provider - 1.0
- ASP.NET and Web Tools - 17.5.317.37931
- Azure App Service Tools v3.0.0 - 17.5.317.37931
- Azure Data Lake Tools for Visual Studio - 2.6.5000.0
- Azure Stream Analytics Tools for Visual Studio - 2.6.5000.0
- C# Tools - 4.5.0-6.23123.11+271ccd71554f7d28d2f90551aafd0bdeb5d327aa
- Common Azure Tools - 1.10
- Cookiecutter - 17.0.22336.2
- Microsoft Azure Hive Query Language Service - 2.6.5000.0

Copy Info
System Info
DxDiag

Product details:
This package contains services used by Data Lake tools

CREATE NEW PROJECT IN VISUAL STUDIO

- Choose Report Server Project



ONE TIME MODIFICATION OF PROPERTIES

- Choose Project from top level menu and choose **Properties**
- Choose TargetServerVersion

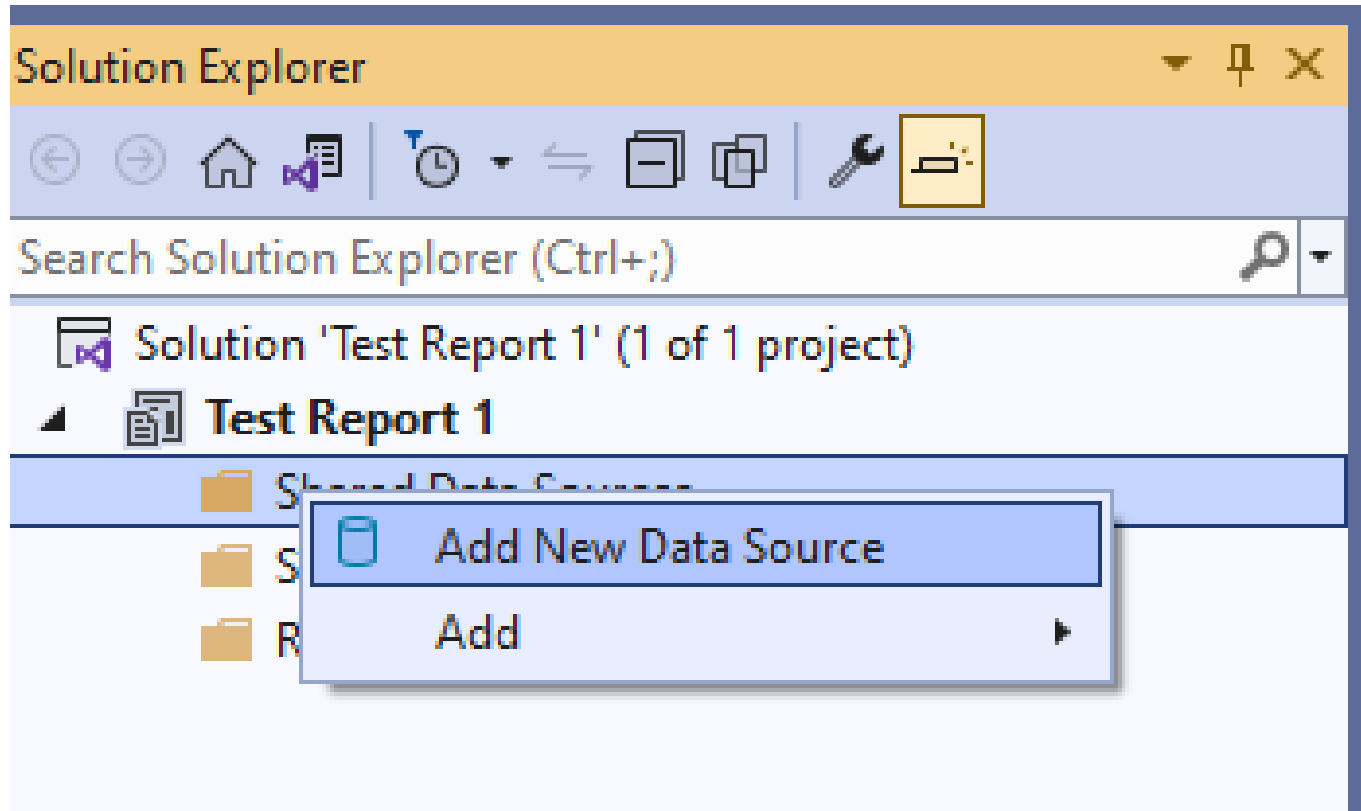
The image shows a screenshot of Visual Studio with the 'Project' menu open. The 'Properties' option is highlighted at the bottom of the menu. In the background, the 'Test Report 1 Property Pages' dialog is open, showing the 'Deployment' section. The 'TargetServerVersion' property is selected and set to 'SQL Server 2008 R2, 2012 or 2014'.

| Property | Value |
|------------------------|----------------------------------|
| Build | |
| ErrorLevel | 2 |
| OutputPath | bin\Debug |
| Debug | |
| StartItem | |
| Deployment | |
| OverwriteDatasets | False |
| OverwriteDataSources | False |
| TargetDatasetFolder | Datasets |
| TargetDataSourceFolder | Data Sources |
| TargetReportFolder | Test Report 1 |
| TargetReportPartFolder | Report Parts |
| TargetServerURL | http://localhost/reportserver |
| TargetServerVersion | SQL Server 2008 R2, 2012 or 2014 |

TargetServerVersion
Identifies the version of SQL Server Reporting Services that is specified in the T...

SET UP A SHARED DATASOURCE

- Select Shared Data Sources, right click and choose **Add New Data Source**



SET UP A SHARED DATASOURCE

- Enter **Streamline** as Name
- Enter **Microsoft SQL Server** for Type

Shared Data Source Properties

General

Credentials

Change name, type, and connection options.

Name:
Streamline

Type:
Microsoft SQL Server

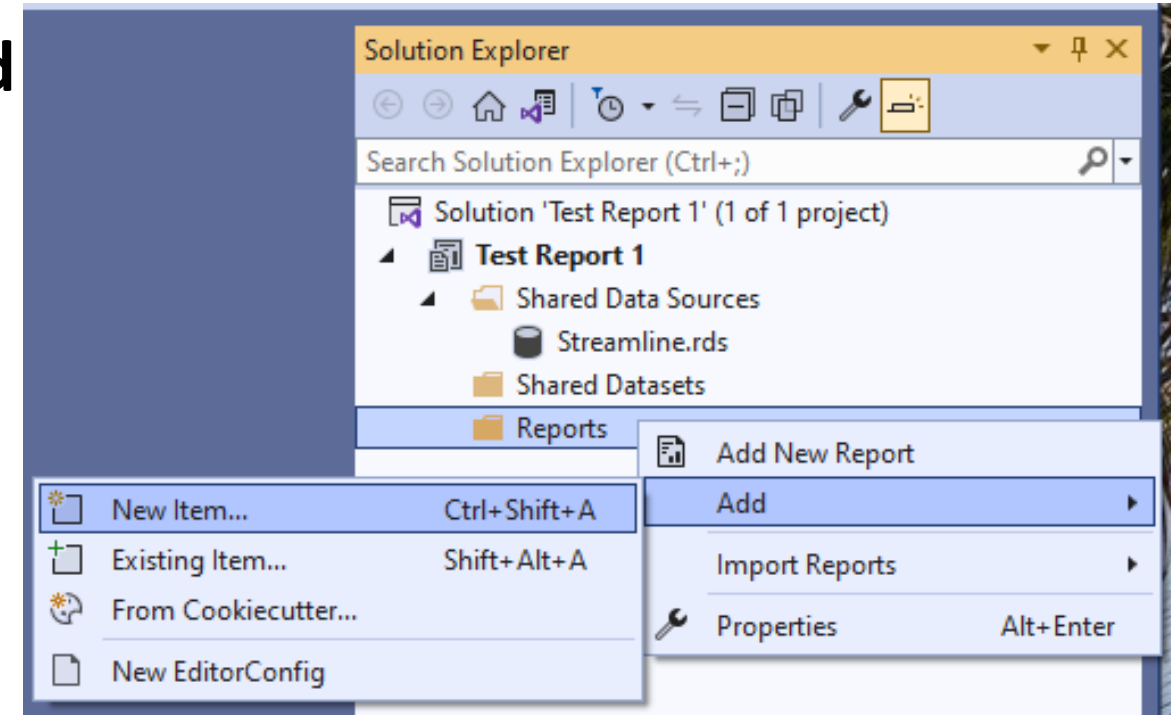
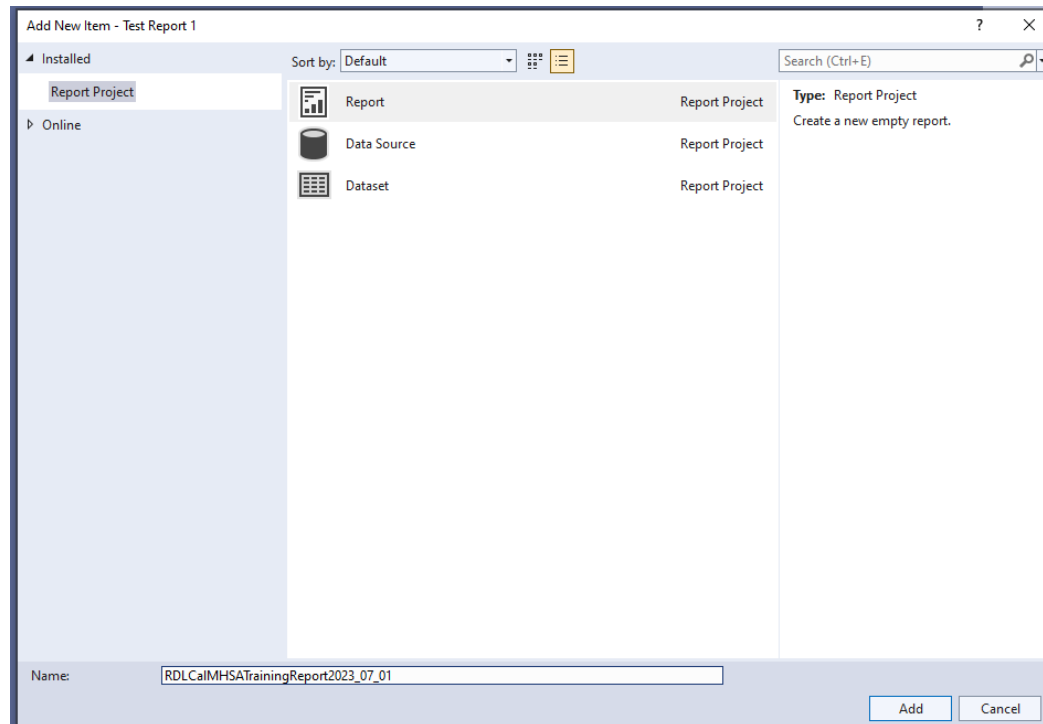
Connection string:
Click here to type or paste a connection string

Build...

Help OK Cancel

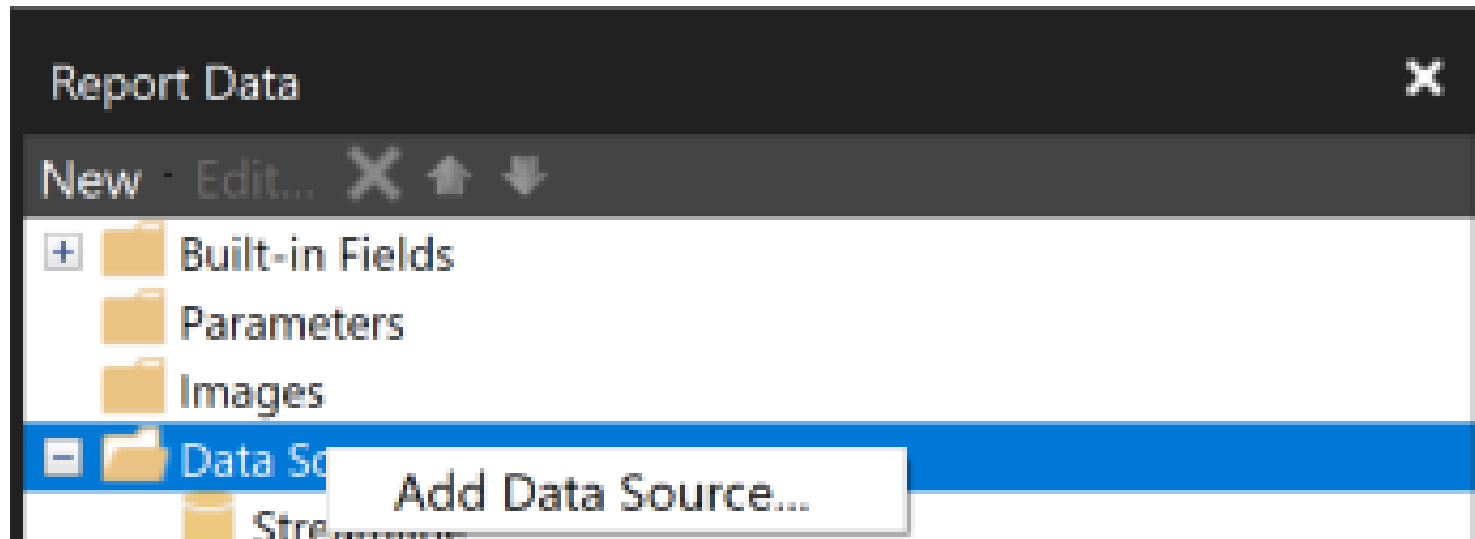
CREATE NEW REPORT

- Right click on **Reports** and choose **Add**
- Choose **New Item**
- Choose **Report**



SETUP STEPS IN MS REPORT BUILDER

- Install MS Report Builder
 - <https://www.microsoft.com/en-us/download/details.aspx?id=53613>
- Open MS Report Builder and in the report RDL file, go to **Data Sources** and Add data source
- *NOTE - To EDIT locally, you need to have an embedded data source and DISCONNECTED to the Report Server*



CREATE NEW DATA SOURCE

- Enter data source name
- Choose **Microsoft SQL Server** in the Select Connection Type field
- Click **Build**

General

Credentials

Change name, type, and connection options.


Name:
Streamline

Use a shared connection or report model
 Use a connection embedded in my report

Select connection type:
Microsoft SQL Server

Connection string:
Data Source=10.70.16.8\\CalMHSA;Initial Catalog=CalMHASmartcareTrain

Build...



Test Connection

Use single transaction when processing the queries

ENTER CREDENTIALS

- Enter IP Address for **Server Name**
 - CalMHSA will provide to counties
- Choose **SQL Server Authentication** for Authentication
- Enter **User Name** and **Password**
 - Obtained from Streamline for users that will be report writers
- Choose database from drop down and click **Test Connection**

Connection Properties

Data source: Microsoft SQL Server (SqlClient) Change...

Server name: 10.70.16.8\CalMHSA Refresh

Log on to the server

Use Windows Authentication

Use SQL Server Authentication

User name: pmerna

Password: ●●●●●●

Save my password

Connect to a database

Select or enter a database name: CalMHASmartcareTrain

Attach a database file: Browse...

Logical name:

Advanced...

Test Connection OK Cancel

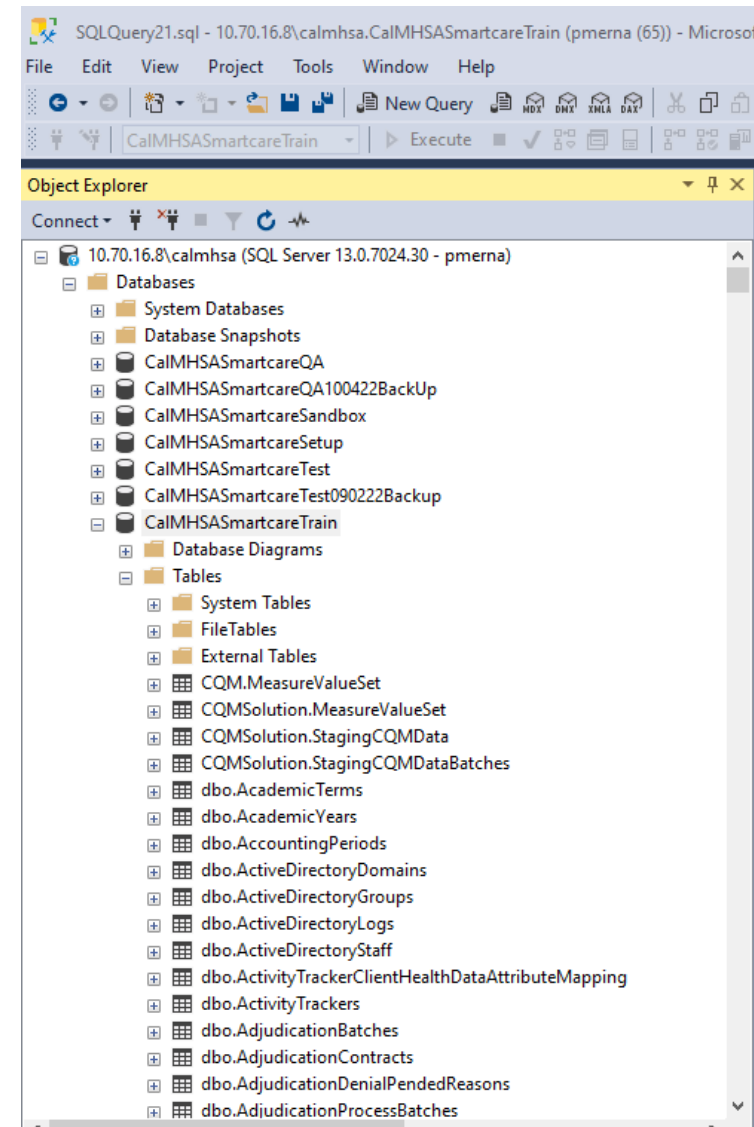
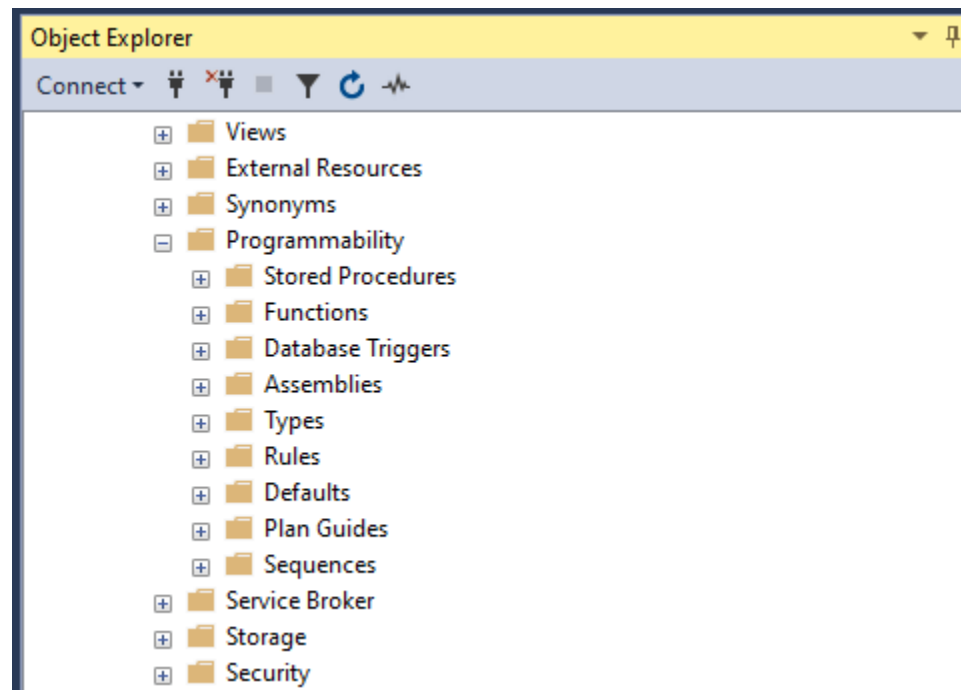


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CREATE QUERY IN SSMS

USE SSMS OR ANOTHER SQL REPORTING SOFTWARE

- Create New Query and choose database
- Expand **Tables** to view available tables
- Expand **Programmability** to view Stored Procedures, Functions, etc.



SMARTCARE IS A NORMALIZED DATABASE

- Normalized database thus only the code (Global Code) Id will file within a column in a table that contains a dictionary type field
- There is a global code table that will list each entry for a give global code category
- You do NOT have to join the GlobalCodes table to all your queries because there is a stored procedure that will display the value rather than the code

The screenshot displays the schema for the `dbo.GlobalCodes` table. The columns are listed as follows:

| Column Name | Data Type | Constraints |
|---------------------------------------|---------------------------|--------------|
| <code>GlobalCodeId</code> | <code>int</code> | PK, not null |
| <code>CreatedBy</code> | <code>varchar(30)</code> | not null |
| <code>CreatedDate</code> | <code>datetime</code> | not null |
| <code>ModifiedBy</code> | <code>varchar(30)</code> | not null |
| <code>ModifiedDate</code> | <code>datetime</code> | not null |
| <code>RecordDeleted</code> | <code>char(1)</code> | not null |
| <code>DeletedBy</code> | <code>varchar(30)</code> | not null |
| <code>DeletedDate</code> | <code>datetime</code> | not null |
| <code>Category</code> | <code>char(20)</code> | FK, not null |
| <code>CodeName</code> | <code>varchar(250)</code> | not null |
| <code>Code</code> | <code>varchar(100)</code> | not null |
| <code>Description</code> | <code>text</code> | not null |
| <code>Active</code> | <code>char(1)</code> | not null |
| <code>CannotModifyNameOrDelete</code> | <code>char(1)</code> | not null |
| <code>SortOrder</code> | <code>int</code> | not null |
| <code>ExternalCode1</code> | <code>varchar(25)</code> | not null |
| <code>ExternalSource1</code> | <code>int</code> | not null |
| <code>ExternalCode2</code> | <code>varchar(25)</code> | not null |
| <code>ExternalSource2</code> | <code>int</code> | not null |
| <code>Bitmap</code> | <code>varchar(200)</code> | not null |
| <code>BitmapImage</code> | <code>image</code> | not null |
| <code>Color</code> | <code>varchar(10)</code> | not null |

WRITE QUERY

- Write query
- Note – Almost all tables in SmartCare have a RecordDeleted field so make sure to deselect within the WHERE clause

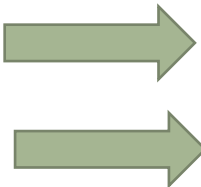
```
use CalMHASmartcareTrain
SELECT
c.ClientId as 'Client ID'
,c.FirstName as 'First Name'
,c.LastName as 'Last Name'
,dbo.GetClientAgeByDOB(c.DOB,c.ClientId) as 'Age'
,dbo.ssf_GetGlobalCodeNamebyId(c.GenderIdentity) as 'Gender Identity'
,p.ProgramName as 'Program'
,dbo.ssf_GetGlobalCodeNamebyId(cp.Status) as 'Status'
,cp.EnrolledDate as 'Enrolled Date'
,cp.DischargedDate as 'Discharge Date'
FROM Clients c
JOIN ClientPrograms cp on cp.ClientId=c.ClientId
JOIN Programs p on p.ProgramId=cp.ProgramId
WHERE ISNULL(c.RecordDeleted, 'N')='N'
--AND cp.EnrolledDate between @FROMDATE AND @THRUDATE
```



GLOBAL CODE TRANSLATION

- Global codes can be translated by using stored procedure –
dbo.GetGlobalCodeNameById(table.field)

```
use CalMHASmartcareTrain
SELECT
  c.ClientId as 'Client ID'
  ,c.FirstName as 'First Name'
  ,c.LastName as 'Last Name'
  ,dbo.GetClientAgeByDOB(c.DOB,c.ClientId) as 'Age'
  ,dbo.ssf_GetGlobalCodeNameById(c.GenderIdentity) as 'Gender Identity'
  ,p.ProgramName as 'Program'
  ,dbo.ssf_GetGlobalCodeNameById(cp.Status) as 'Status'
  ,cp.EnrolledDate as 'Enrolled Date'
  ,cp.DischargedDate as 'Discharge Date'
FROM Clients c
JOIN ClientPrograms cp on cp.ClientId=c.ClientId
JOIN Programs p on p.ProgramId=cp.ProgramId
WHERE ISNULL(c.RecordDeleted, 'N')='N'
--AND cp.EnrolledDate between @FROMDATE AND @THRUDATE
```



GLOBAL CODE TRANSLATION

- The dbo.ssf_GetGlobalCodeNamebyId stored procedure may result in an error in SSMS but will work when the report is launched in SmartCare
- Another option to display global codes in SSMS is to use the following select statement:

(SELECT CodeName FROM GlobalCodes WHERE GlobalCodeId = <INSERTCOLUMNHERE>)

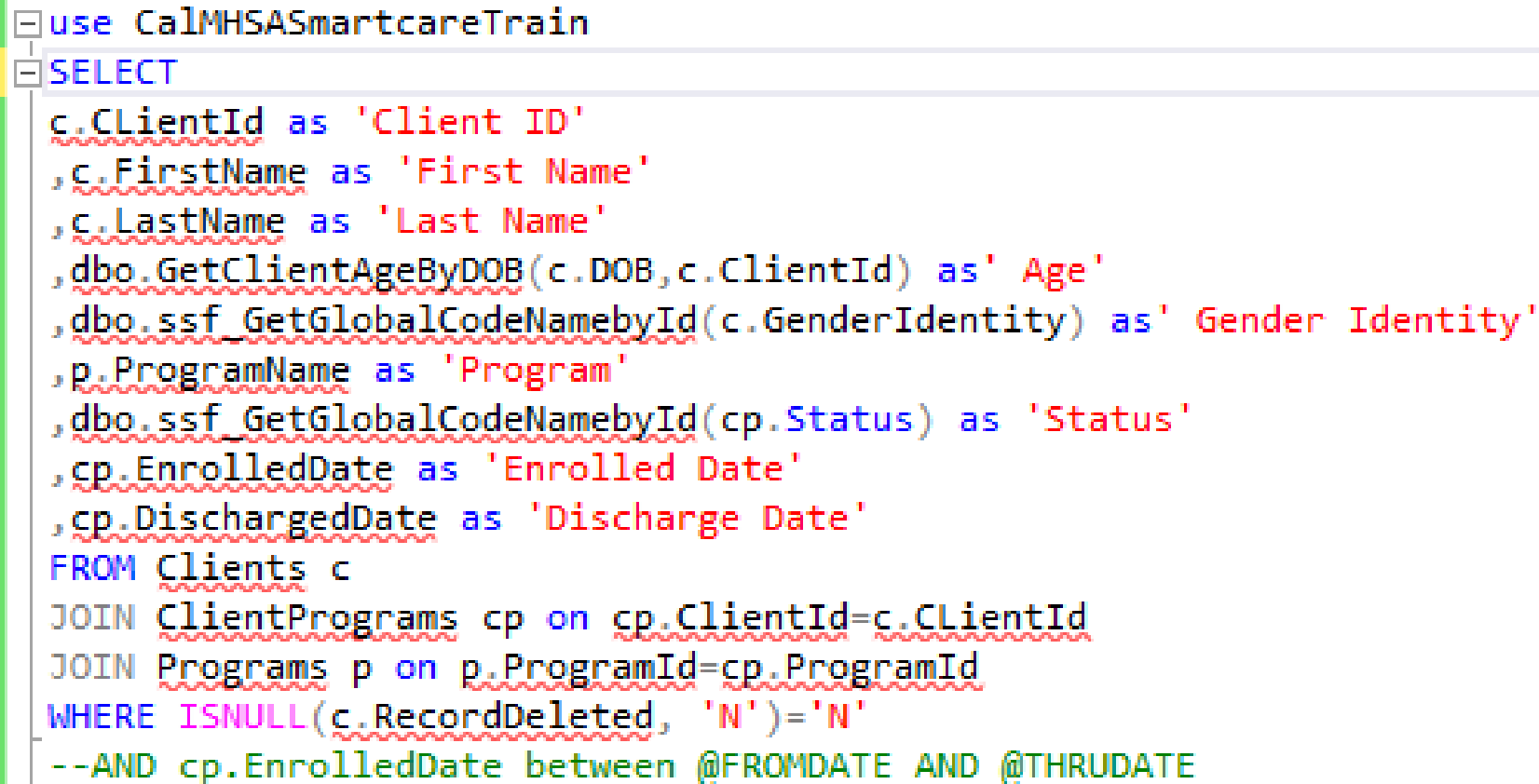
- Example – maritalstatus field from Clients table

```
select ClientId as 'Client ID',  
(SELECT CodeName FROM GlobalCodes WHERE GlobalCodeId = maritalstatus) as 'Marital Status'  
from clients
```

| | Results | Messages |
|---|-----------|----------------|
| | Client ID | Marital Status |
| 1 | 1 | Never Married |
| 2 | 1007 | Unknown |

GLOBAL CODE TRANSLATION

- There are also functions such as **dbo.GetClientAgeByDOB** to display age in years



```
use CalMHASmartcareTrain
SELECT
c.ClientId as 'Client ID'
,c.FirstName as 'First Name'
,c.LastName as 'Last Name'
,dbo.GetClientAgeByDOB(c.DOB,c.ClientId) as 'Age'
,dbo.ssf_GetGlobalCodeNamebyId(c.GenderIdentity) as 'Gender Identity'
,p.ProgramName as 'Program'
,dbo.ssf_GetGlobalCodeNamebyId(cp.Status) as 'Status'
,cp.EnrolledDate as 'Enrolled Date'
,cp.DischargedDate as 'Discharge Date'
FROM Clients c
JOIN ClientPrograms cp on cp.ClientId=c.ClientId
JOIN Programs p on p.ProgramId=cp.ProgramId
WHERE ISNULL(c.RecordDeleted, 'N')='N'
--AND cp.EnrolledDate between @FROMDATE AND @THRUDATE
```

AGE FUNCTION DISPLAYED

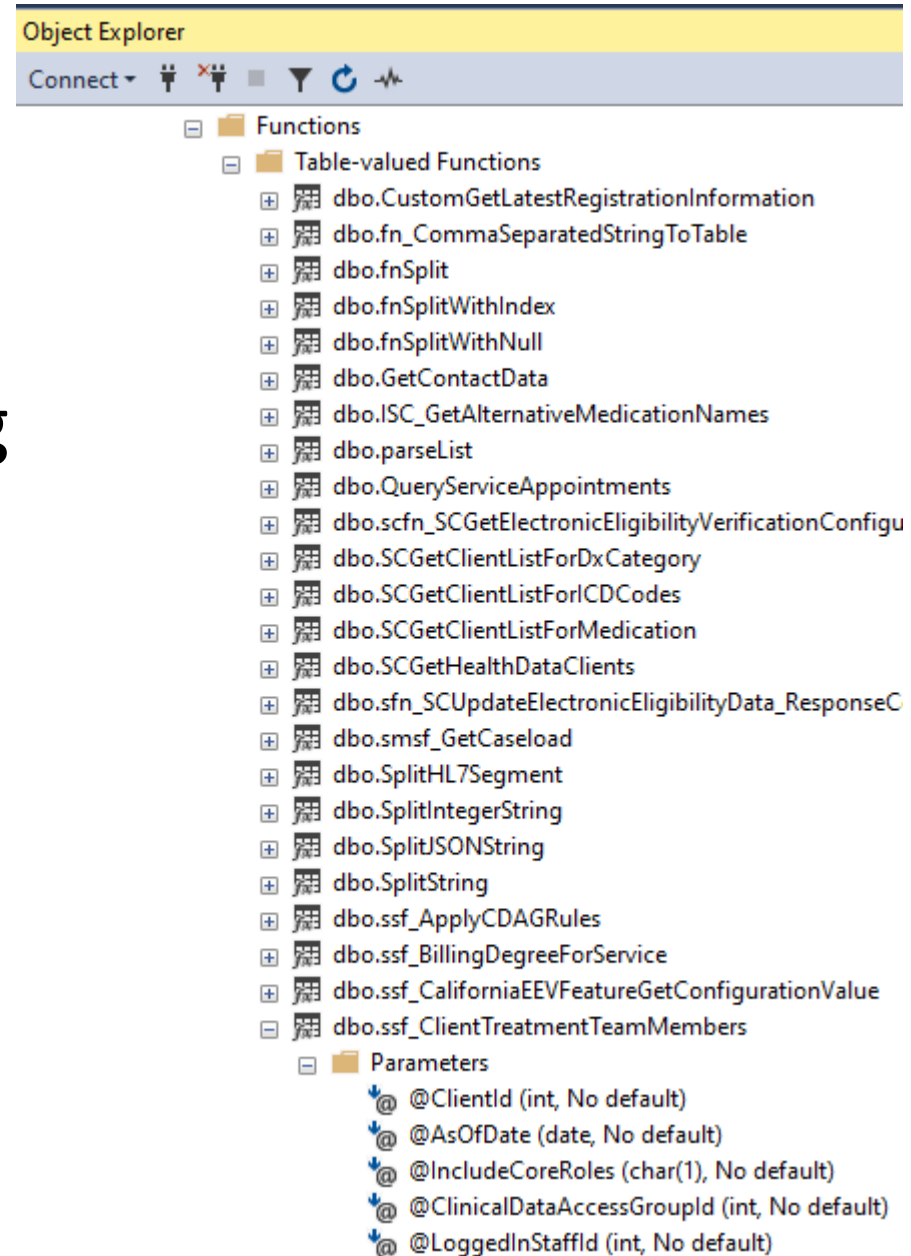
- No need to use cast or datediff function in query

| | Client ID | First Name | Last Name | Age |
|----|-----------|------------|-----------|----------|
| 1 | 1007 | JaCoB | BAizE | 19 Years |
| 2 | 1007 | JaCoB | BAizE | 19 Years |
| 3 | 1007 | JaCoB | BAizE | 19 Years |
| 4 | 1009 | Service | Everyman | 3 Years |
| 5 | 1011 | June | Billing | 33 Years |
| 6 | 1011 | June | Billing | 33 Years |
| 7 | 1011 | June | Billing | 33 Years |
| 8 | 1 | Client | Everyman | 23 Years |
| 9 | 1012 | NULL | NULL | NULL |
| 10 | 1009 | Service | Everyman | 3 Years |
| 11 | 1 | Client | Everyman | 23 Years |
| 12 | 1015 | Jim | Tesla | 43 Years |
| 13 | 1019 | Dwight | Schrute | 38 Years |



FUNCTIONS AVAILABLE

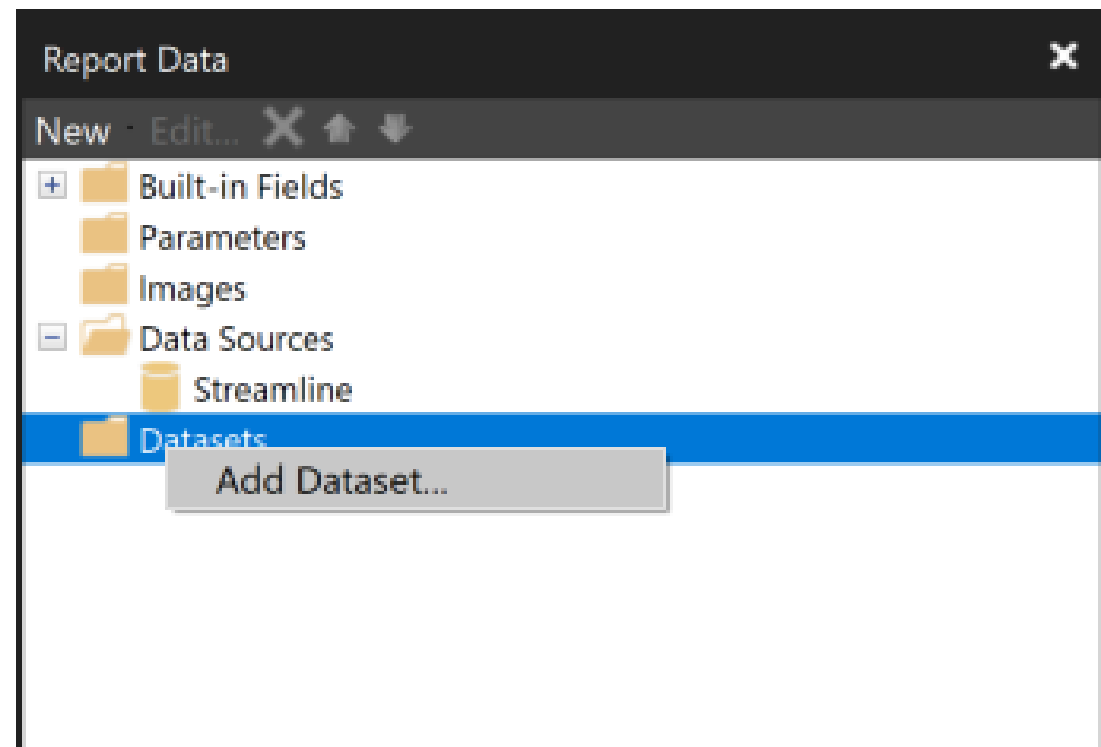
- There are many functions available and expanding the Functions folder and expanding the function will display the parameters that need to be passed to the function



BACK TO MS REPORT BUILDER TO INSERT DATA SET

INSERT DATA SET INTO REPORT

- Copy the SQL query code and go back to **MS Report Builder**
- Right click on **Datasets** and choose **Add Dataset**



INSERT DATA SET INTO REPORT

- Enter the **Dataset** name and choose **Use a dataset embedded in my report**
- Choose **Streamline** Datasource created earlier
- Choose **Text** Query type and insert copied query from SSMS

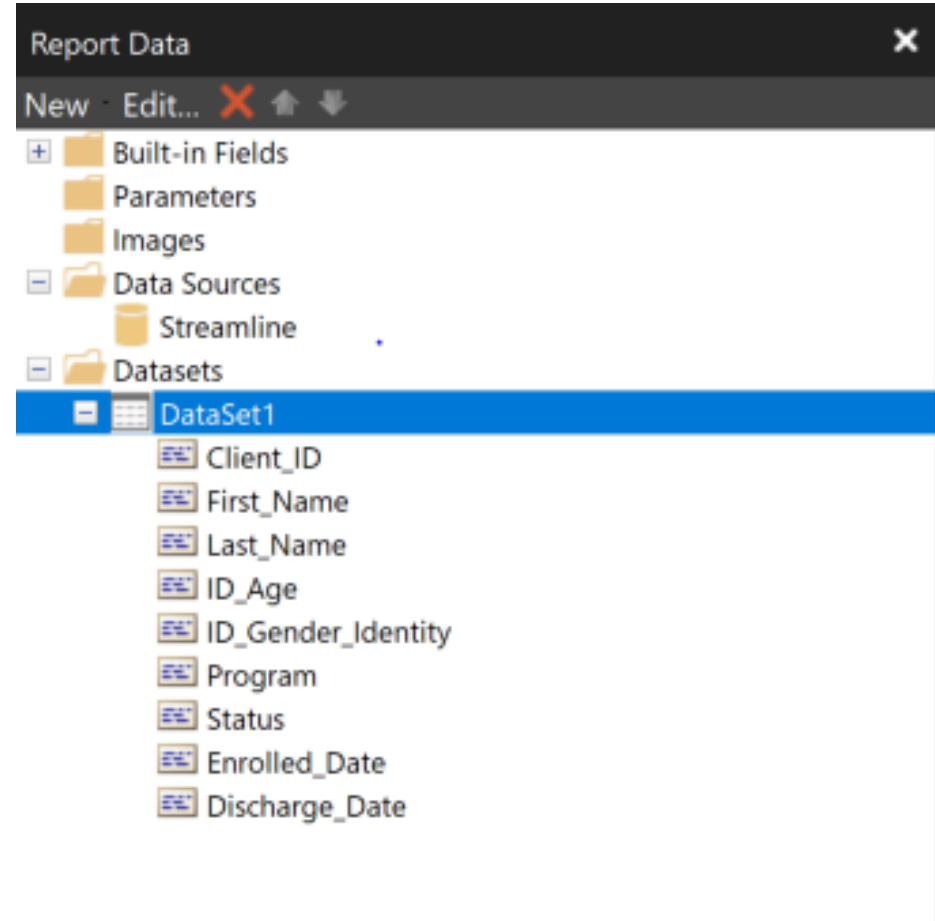
The screenshot shows a configuration window for creating a query. On the left is a sidebar with tabs: Query, Fields, Options, Filters, and Parameters. The main area is titled "Choose a data source and create a query." It contains the following fields and options:

- Name:** A text input field containing "DataSet1".
- Radio buttons:** Two options are present: "Use a shared dataset." (unselected) and "Use a dataset embedded in my report." (selected).
- Data source:** A dropdown menu showing "Streamline" with a "New..." button to its right.
- Query type:** Three radio buttons: "Text" (selected), "Table" (unselected), and "Stored Procedure" (unselected).
- Query:** A text area containing a SQL query:

```
SELECT
c.ClietId as 'Client ID'
,c.FirstName as 'First Name'
,c.LastName as 'Last Name'
,dbo.GetClientAgeByDOB(c.DOB,c.ClietId) as 'Age'
,dbo.ssf_GetGlobalCodeNamebyId(c.GenderIdentity) as 'Gender Identity'
,p.ProgramName as 'Program'
,dbo.ssf_GetGlobalCodeNamebyId(cp.Status) as 'Status'
,cp.EnrolledDate as 'Enrolled Date'
,cp.DischargedDate as 'Discharge Date'
FROM Clients c
JOIN ClientPrograms cp on cp.ClietId=c.ClietId
JOIN Programs p on p.ProgramId=cp.ProgramId
WHERE ISNULL(c.RecordDeleted, 'N')='N'
```

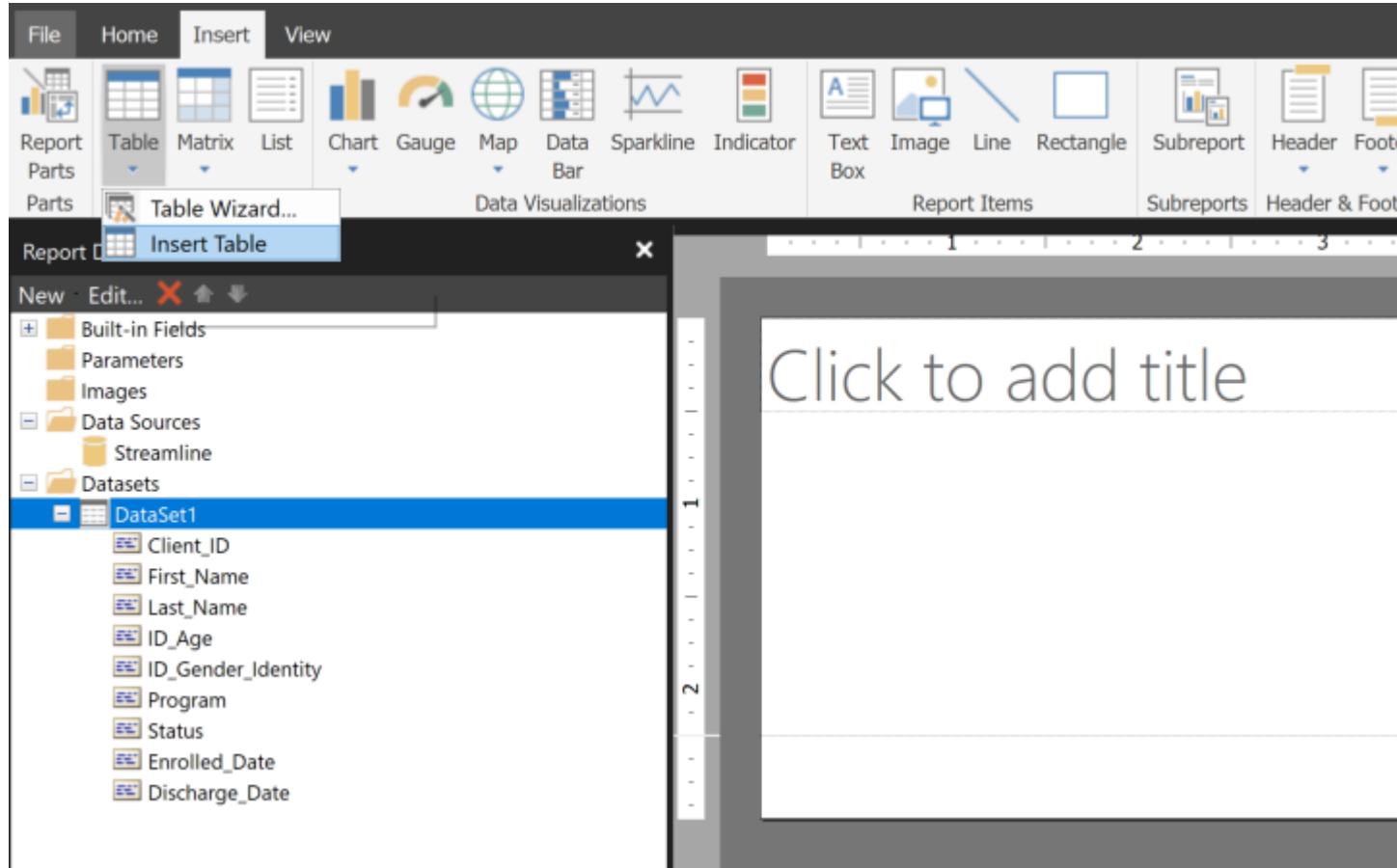
INSERT DATA SET INTO REPORT

- Fields from **Dataset** are now available to be placed in the report



INSERT DATA SET INTO REPORT

- Go to **Insert** menu and choose **Table**



INSERT FIELDS

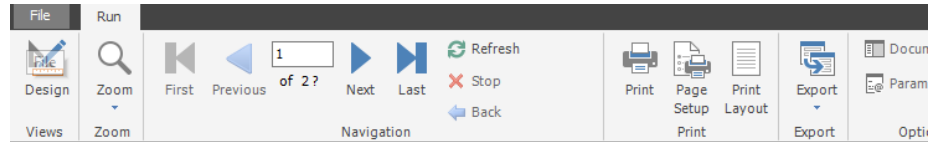
- Click in upper right corner of table column and choose field
- More columns can be added later

The screenshot shows a report titled "Client Programs Report" with a table structure. The table has a header row and a data row. A dropdown menu is open over the data row, listing the following fields for selection:

- Client_ID
- First_Name
- Last_Name
- ID_Age
- ID_Gender_Identity
- Program
- Status
- Enrolled_Date
- Discharge_Date

PRINT PREVIEW

- Click Run in upper left while in Design mode to preview report

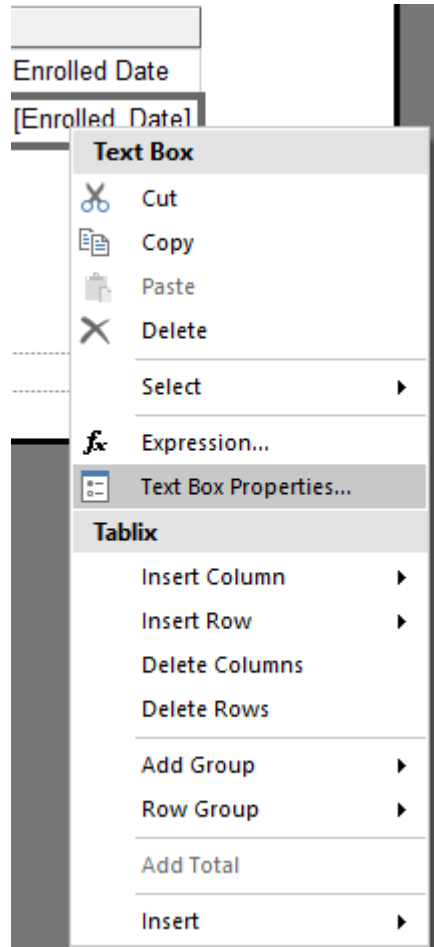


Client Programs Report

| Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|-----------|------------|-----------|----------|-----------------|--------------------------------|------------|--------------------------|
| 1007 | JaCoB | BAizE | 19 Years | Male | MH Screening | Enrolled | 3/7/2022 12:00:00 AM |
| 1007 | JaCoB | BAizE | 19 Years | Male | SUD Screening | Discharged | 3/7/2022 12:00:00 AM |
| 1007 | JaCoB | BAizE | 19 Years | Male | Jacob's Test Program | Enrolled | 3/7/2022 12:00:00 AM |
| 1009 | Service | Everyman | 3 Years | | Access Unit | Enrolled | 2/2/2022 12:00:00 AM |
| 1011 | June | Billing | 33 Years | | Access Unit | Enrolled | 1/1/2022 12:00:00 AM |
| 1011 | June | Billing | 33 Years | | MH Screening | Enrolled | 1/10/2022 12:00:00 AM |
| 1011 | June | Billing | 33 Years | | Main St - Psychiatric Services | Enrolled | 1/10/2022 12:00:00 AM |
| 1 | Client | Everyman | 23 Years | Male | Main St - Psychiatric Services | Enrolled | 3/1/2022 12:00:00 AM |
| 1012 | | | | | No Episode | Enrolled | 1/1/2022 12:00:00 AM |
| 1009 | Service | Everyman | 3 Years | | Jacob's Test Program | Enrolled | 5/10/2022 12:00:00 AM |
| 1 | Client | Everyman | 23 Years | Male | Jacob's Test Program | Enrolled | 5/10/2022 12:00:00 AM |
| 1015 | Jim | Tesla | 43 Years | | Inpatient PHF | Enrolled | 6/1/2022 12:00:00 AM |
| 1019 | Dwight | Schrute | 38 Years | | Adult Crisis Residential | Discharged | 4/1/2022 12:00:00 AM |
| 1022 | Pam | Zimmerman | 40 Years | | Day Treatment Full Day | Enrolled | 5/1/2022 12:00:00 AM |
| 1023 | Michael | Scott | 44 Years | | Day Treatment Half Intensive | Enrolled | 3/31/2022 12:00:00 AM |
| 1024 | Creed | Williams | 75 Years | | Day Treatment Half Rehab | Enrolled | 5/31/2022 12:00:00 AM |
| 1025 | Phyllis | Vance | 42 Years | | Non Perinatal Intensive | Enrolled | 5/31/2022 12:00:00 AM |

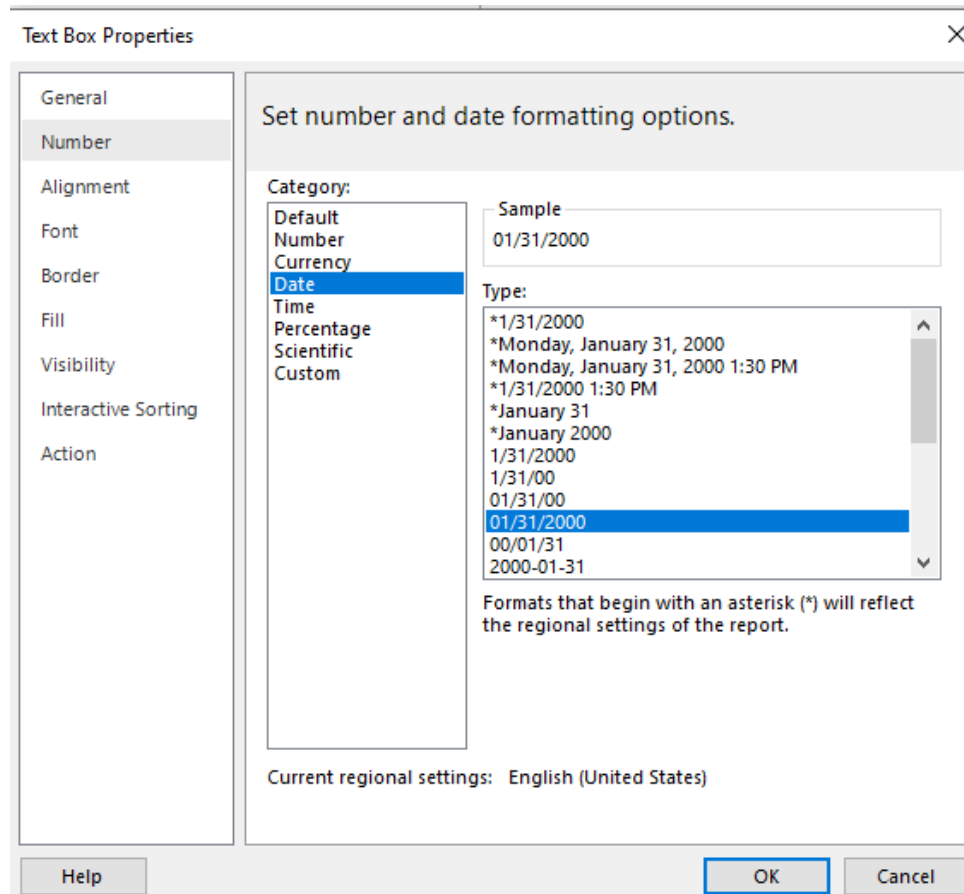
DATE FIELD FORMATTING

- Right click on date/time field in Design tab and select **Text Box Properties**



DATE FIELD FORMATTING

- Right click on date/time field in Design tab and select **Text Box Properties**
- Choose Number and select Date Category and choose desired format



PRINT PREVIEW WITH DATE REFORMATTED

- Other visual options are available in the **Properties** area

Client Programs Report

| Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|-----------|------------|-----------|----------|-----------------|------------------------------------|------------|---------------|
| 1007 | JaCoB | BAiZE | 19 Years | Male | MH Screening | Enrolled | 03/07/2022 |
| 1007 | JaCoB | BAiZE | 19 Years | Male | SUD Screening | Discharged | 03/07/2022 |
| 1007 | JaCoB | BAiZE | 19 Years | Male | Jacob's Test Program | Enrolled | 03/07/2022 |
| 1009 | Service | Everyman | 3 Years | | Access Unit | Enrolled | 02/02/2022 |
| 1011 | June | Billing | 33 Years | | Access Unit | Enrolled | 01/01/2022 |
| 1011 | June | Billing | 33 Years | | MH Screening | Enrolled | 01/10/2022 |
| 1011 | June | Billing | 33 Years | | Main St - Psychiatric Services | Enrolled | 01/10/2022 |
| 1 | Client | Everyman | 23 Years | Male | Main St - Psychiatric Services | Enrolled | 03/01/2022 |
| 1012 | | | | | No Episode | Enrolled | 01/01/2022 |
| 1009 | Service | Everyman | 3 Years | | Jacob's Test Program | Enrolled | 05/10/2022 |
| 1 | Client | Everyman | 23 Years | Male | Jacob's Test Program | Enrolled | 05/10/2022 |
| 1015 | Jim | Tesla | 43 Years | | Inpatient PHF | Enrolled | 06/01/2022 |
| 1019 | Dwight | Schrute | 38 Years | | Adult Crisis Residential | Discharged | 04/01/2022 |
| 1022 | Pam | Zimmerman | 40 Years | | Day Treatment Full Day | Enrolled | 05/01/2022 |
| 1023 | Michael | Scott | 44 Years | | Day Treatment Half Intensive | Enrolled | 03/31/2022 |
| 1024 | Creed | Williams | 75 Years | | Day Treatment Half Rehab | Enrolled | 05/31/2022 |
| 1025 | Phyllis | Vance | 42 Years | | Non Perinatal Intensive Outpatient | Enrolled | 05/31/2022 |
| 1026 | Stanley | Yunis | 55 Years | | Non Perinatal Outpatient | Enrolled | 06/30/2022 |
| 1027 | Kelly | Walla | 36 Years | | NTP Non Perinatal | Enrolled | 04/30/2022 |

Properties ✕

Selected Text

- ▼ **Action**
 - Action **None**
- ▼ **Alignment**
 - > Indent
 - SpaceAfter
 - SpaceBefore
 - TextAlign **Center**
- ▼ **Font**
 - Color **Black**
 - > Font **Arial, 10pt, Default, Bold, Default**
 - LineHeight
- ▼ **General**
 - ToolTip
- ▼ **Lists**
 - ListLevel **0**
 - ListStyle **None**
- ▼ **Localization**
 - Calendar **Default**
 - Language
 - NumeralLar
 - NumeralVar **1**
 - ValueLocID
- ▼ **Number**
 - Format

ADD GROUPING

- Right click on left of detail area and select **Add Group – Parent Group**
- Choose field from **Group by:** prompt
- Add group header and footer if desired

The screenshot shows a report titled "Client Programs Report" with a table containing columns: Client ID, First Name, Last Name, Age, Gender, Program, Status, and Enrolled Date. A context menu is open over the table, and a "Tablix group" dialog box is displayed in the foreground. The dialog box has the following options:

- Group by: [Program]
- Show detail data
- Add group header
- Add group footer

The dialog box also includes "Help", "OK", and "Cancel" buttons.

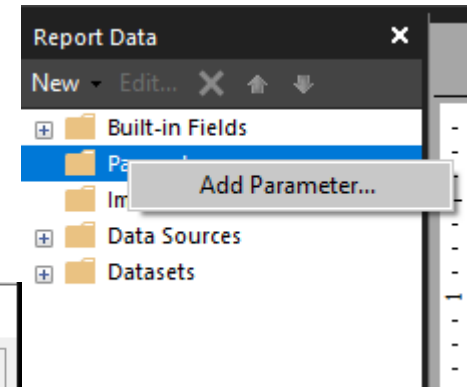
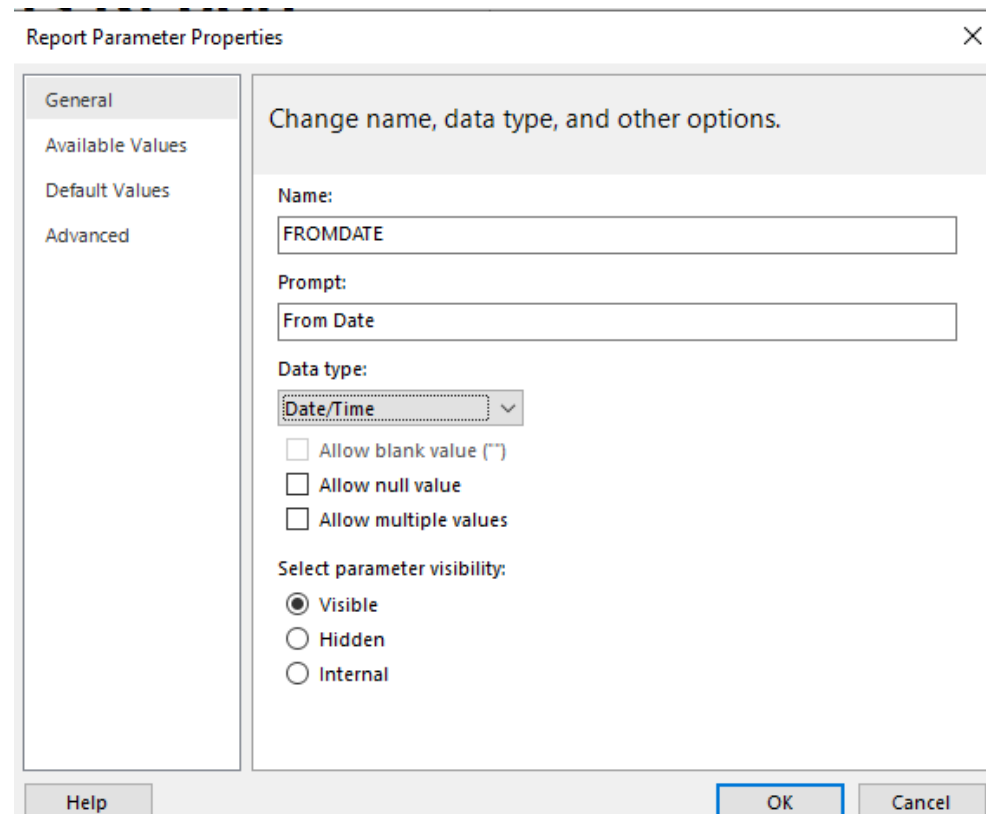
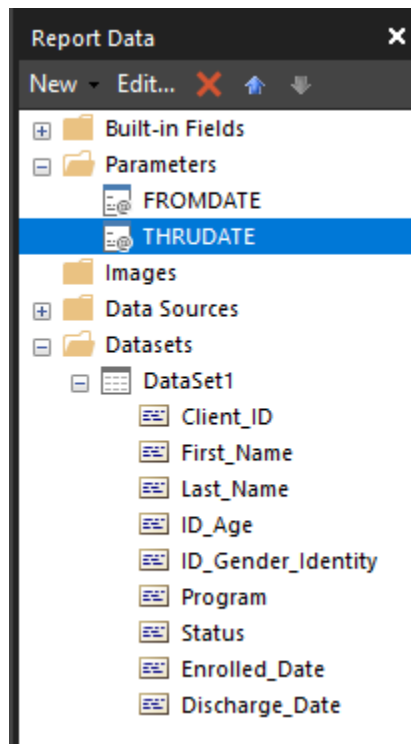
ADD GROUPING - PREVIEW

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|--------------------------|-----------|----------------------|-------------|----------|-----------------|--------------------------|------------|---------------|
| Access Unit | | | | | | | | |
| | 1009 | Service | Everyman | 3 Years | | Access Unit | Enrolled | 02/02/2022 |
| | 1011 | June | Billing | 33 Years | | Access Unit | Enrolled | 01/01/2022 |
| | 1096 | Jason | Asano | 32 Years | | Access Unit | Enrolled | 11/09/2022 |
| | 1097 | Emi | Asano | 8 Years | Female | Access Unit | Enrolled | 11/09/2022 |
| | 1080 | Cindy | Childers | 20 Years | | Access Unit | Enrolled | 11/09/2022 |
| | 1137 | Ducakas | Tim | 17 Years | | Access Unit | Enrolled | 12/01/2022 |
| | 1141 | Sanity | Test | 22 Years | | Access Unit | Enrolled | 08/23/2022 |
| | 1152 | Dinesh | Test | 34 Years | | Access Unit | Enrolled | 12/01/2022 |
| | 1149 | Nam | Test | 32 Years | | Access Unit | Enrolled | 11/01/2022 |
| | 1108 | Mary | CalOMSDetox | 25 Years | | Access Unit | Enrolled | 11/01/2022 |
| | 1166 | Sasha | Smith | 35 Years | | Access Unit | Requested | |
| | 1167 | Jessica | Huron | 12 Years | | Access Unit | Enrolled | 12/05/2022 |
| | 1151 | Harika | Test | 19 Years | | Access Unit | Enrolled | 11/23/2022 |
| | 1139 | Girish1 | Test | 22 Years | | Access Unit | Enrolled | 11/01/2022 |
| | 1170 | Client | Test | 32 Years | | Access Unit | Enrolled | 12/01/2022 |
| | 1189 | StandardIntake Adult | Test | 43 Years | | Access Unit | Enrolled | 12/23/2022 |
| | 1194 | Regular | Tester | 21 Years | | Access Unit | Requested | |
| | 1206 | Jessica | Test | 22 Years | | Access Unit | Enrolled | 12/28/2022 |
| | 1208 | George | Test | 21 Years | | Access Unit | Enrolled | 01/12/2023 |
| | 1239 | Manual | Training | 20 Years | | Access Unit | Enrolled | 01/18/2023 |
| | 1291 | Video | Training | 23 Years | Transgender | Access Unit | Enrolled | 02/12/2023 |
| | 1302 | Rigi | Test | 22 Years | | Access Unit | Enrolled | 03/01/2023 |
| | | | | | | | | |
| Adult Crisis Residential | | | | | | | | |
| | 1019 | Dwight | Schrute | 38 Years | | Adult Crisis Residential | Discharged | 04/01/2022 |

ADD DATE PARAMETERS

- Right click on **Parameters** and select **Add Parameter**
- Enter Name of parameter and prompt
- Choose **Data type**: Date/Time
- Repeat as necessary



ADD DATE PARAMETERS TO DATASET

- Double click on **Dataset** and modify query to include date parameters to Query
- Click **Refresh Fields** when query is finalized and then click **OK**

The screenshot shows the 'Dataset Properties' dialog box with the 'Query' tab selected. The 'Name' field is 'DataSet1'. The 'Data source' is 'Streamline'. The 'Query type' is 'Text'. The 'Query' field contains the following SQL query:

```
SELECT
c.ClientId as 'Client ID'
,c.FirstName as 'First Name'
,c.LastName as 'Last Name'
,dbo.GetClientAgeByDOB(c.DOB,c.ClientId) as 'Age'
,dbo.ssf_GetGlobalCodeNameById(c.GenderIdentity) as 'Gender Identity'
,p.ProgramName as 'Program'
,dbo.ssf_GetGlobalCodeNameById(cp.Status) as 'Status'
,cp.EnrolledDate as 'Enrolled Date'
,cp.DischargedDate as 'Discharge Date'
FROM Clients c
JOIN ClientPrograms cp on cp.ClientId=c.ClientId
JOIN Programs p on p.ProgramId=cp.ProgramId
WHERE ISNULL(c.RecordDeleted, 'N')='N'
AND cp.EnrolledDate between @FROMDATE and @THRUDATE
```

At the bottom of the dialog, there are buttons for 'Query Designer...', 'Import...', and 'Refresh Fields'. The 'Time out (in seconds)' is set to 0. The 'OK' button is highlighted with a blue border.

PRINT PREVIEW WITH DATE PARAMETERS

- Enter data parameter values and click on **View Report**

From Date Through Date [View Report](#)

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|--------------------------|-----------|------------|-----------|----------|-----------------|--------------------------|----------|---------------|
| Access Unit | 1208 | George | Test | 21 Years | | Access Unit | Enrolled | 01/12/2023 |
| | 1239 | Manual | Training | 20 Years | | Access Unit | Enrolled | 01/18/2023 |
| | 1291 | Video | Training | 23 Years | Transgender | Access Unit | Enrolled | 02/12/2023 |
| | 1302 | Rigi | Test | 22 Years | | Access Unit | Enrolled | 03/01/2023 |
| Adult Crisis Residential | 1288 | Pam | Test | 42 Years | Female | Adult Crisis Residential | Enrolled | 02/06/2023 |
| | 1298 | Jay | Test | 26 Years | Male | Adult Crisis Residential | Enrolled | 02/16/2023 |
| | 1302 | Rigi | Test | 22 Years | | Adult Crisis Residential | Enrolled | 03/01/2023 |
| | 1317 | Patrice | Oneal | 53 Years | Male | Adult Crisis Residential | Enrolled | 01/01/2023 |
| | 1318 | Kobe | Bryant | 46 Years | Male | Adult Crisis Residential | Enrolled | 01/03/2023 |
| Adult Residential | 1302 | Rigi | Test | 22 Years | | Adult Residential | Enrolled | 03/01/2023 |
| | 1170 | Client | Test | 32 Years | | Adult Residential | Enrolled | 03/13/2023 |
| | 1326 | Fifty | Cent | 43 Years | Male | Adult Residential | Enrolled | 01/01/2023 |

ADD GROUP TOTAL

- Click on upper right of column in group footer to subtotal and choose field to summarize

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender | Program | Status | Enrolled Date |
|-------------|--------------|-------------|-----------|-----------------|-----------|----------|-----------------|---------------|
| [Program] | | | | | | | | |
| [Client_ID] | [First_Name] | [Last_Name] | [ID_Age] | [ID_Gender_Ide] | [Program] | [Status] | [Enrolled_Date] | |

- Client_ID
- First_Name
- Last_Name
- ID_Age
- ID_Gender_Identity
- Program
- Status
- Enrolled_Date
- Discharge_Date

[&ExecutionTime]

ADD GROUP TOTAL

- Click on upper right of column in group footer to subtotal and choose field to summarize
- Initial subtotal will default to Sum but can be changed

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender | Program | Status | Enrolled Date |
|-----------|-------------|--------------|-------------|----------|-----------------|-----------|----------|-----------------|
| [Program] | [Client_ID] | [First_Name] | [Last_Name] | [ID_Age] | [ID_Gender_Ide] | [Program] | [Status] | [Enrolled_Date] |

[&ExecutionTime]

- Client_ID
- First_Name
- Last_Name
- ID_Age
- ID_Gender_Identity
- Program
- Status
- Enrolled_Date
- Discharge_Date

| | |
|------------------|---|
| Client ID | F |
| [Client_ID] | [|
| [Sum(Client_ID)] |] |

ADD GROUP TOTAL

- Click on upper right of column in group footer to subtotal and choose field to summarize
- Initial subtotal will default to Sum but can be changed

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender | Program | Status | Enrolled Date |
|-----------|-------------|--------------|-------------|----------|-----------------|-----------|----------|-----------------|
| [Program] | [Client_ID] | [First_Name] | [Last_Name] | [ID_Age] | [ID_Gender_Ide] | [Program] | [Status] | [Enrolled_Date] |

- Client_ID
- First_Name
- Last_Name
- ID_Age
- ID_Gender_Identity
- Program
- Status
- Enrolled_Date
- Discharge_Date

[&ExecutionTime]

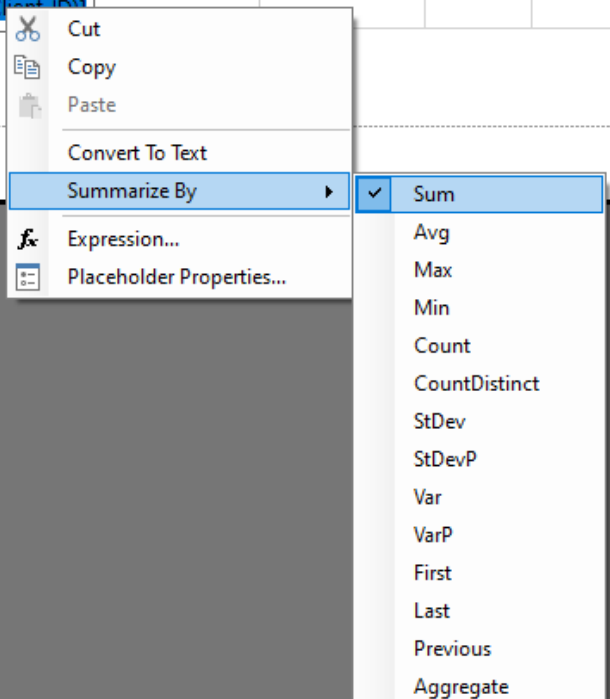
| | |
|------------------|---|
| Client ID | F |
| [Client_ID] | [|
| [Sum(Client_ID)] |] |

CHANGE GROUP TOTAL

- Right click on group total and choose **Summarize By** to change group total from Sum to Count

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender |
|-----------|----------------|--------------|-------------|----------|-----------|
| [Program] | [Client_ID] | [First_Name] | [Last_Name] | [ID_Age] | [ID_Gend] |
| | Sum(Client_ID) | | | | |



A context menu is open over the 'Sum(Client_ID)' cell. The menu includes options: Cut, Copy, Paste, Convert To Text, Summarize By (selected), Expression..., and Placeholder Properties... The 'Summarize By' sub-menu is open, showing a list of aggregation functions: Sum (checked), Avg, Max, Min, Count, CountDistinct, StDev, StDevP, Var, VarP, First, Last, Previous, and Aggregate. A green arrow points from the 'Count' option in the sub-menu towards the right.

Client Progr

| Program | Client ID | F |
|-----------|------------------|---|
| [Program] | [Client_ID] | [|
| | Count(Client_ID) | |



PRINT PREVIEW WITH SUBTOTALS

From Date Through Date

Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|--------------------------|-----------|------------|-----------|----------|--------------------------|--------------------------|------------|---------------|
| Access Unit | | | | | | | | |
| | 1208 | George | Test | 21 Years | | Access Unit | Enrolled | 01/12/2023 |
| | 1239 | Manual | Training | 20 Years | | Access Unit | Enrolled | 01/18/2023 |
| | 1291 | Video | Training | 23 Years | Transgender | Access Unit | Enrolled | 02/12/2023 |
| | 1302 | Rigi | Test | 22 Years | | Access Unit | Enrolled | 03/01/2023 |
| | 4 | | | | | | | |
| Adult Crisis Residential | | | | | | | | |
| | 1288 | Pam | Test | 42 Years | Female | Adult Crisis Residential | Enrolled | 02/06/2023 |
| | 1298 | Jay | Test | 26 Years | Male | Adult Crisis Residential | Enrolled | 02/16/2023 |
| | 1302 | Rigi | Test | 22 Years | | Adult Crisis Residential | Enrolled | 03/01/2023 |
| | 1317 | Patrice | Oneal | 53 Years | Male | Adult Crisis Residential | Enrolled | 01/01/2023 |
| 1318 | Kobe | Bryant | 46 Years | Male | Adult Crisis Residential | Enrolled | 01/03/2023 | |
| | 5 | | | | | | | |
| Adult Residential | | | | | | | | |
| | 1302 | Rigi | Test | 22 Years | | Adult Residential | Enrolled | 03/01/2023 |
| | 1170 | Client | Test | 32 Years | | Adult Residential | Enrolled | 03/13/2023 |
| | 1326 | Fifty | Cent | 43 Years | Male | Adult Residential | Enrolled | 01/01/2023 |
| | 3 | | | | | | | |



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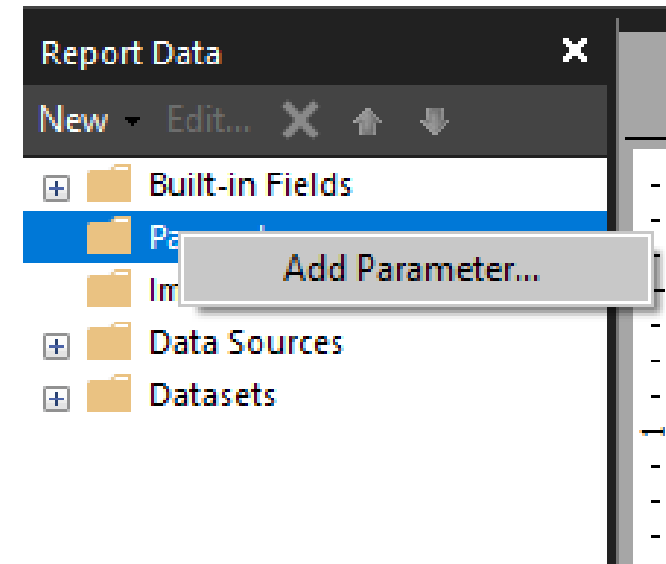
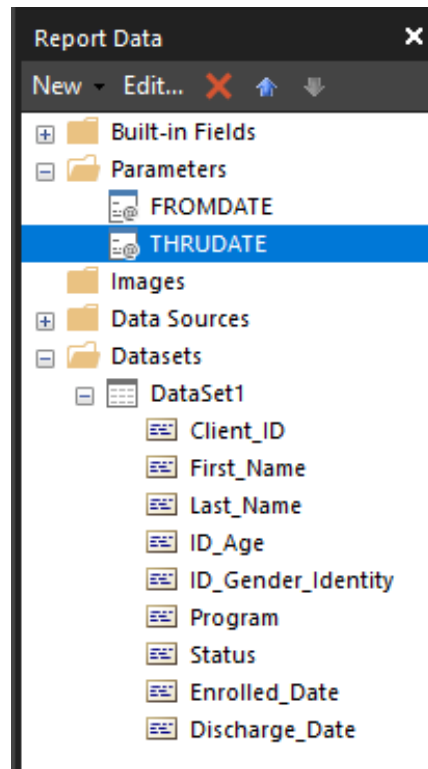
HOW TO ENFORCE CDAG (CFR42) SECURITY IN REPORTS

CDAG ENFORCEMENT

- When creating custom reports in SmartCare, it is up to the report writer to enforce CDAG functionality
- The best way to enforce CDAG in SmartCare reports
 - Create **@ClinicalDataAccessGroupId** and **@ExecutedByStaffId** parameters in all reports
 - SmartCare framework that will automatically add the values for these parameters while opening the report from the system
 - Once the parameters have been added, use of a common function for implementing the logic before the WHERE clause in the dataset
CROSS APPLY dbo.ssf_ApplyCDAGRules(@ClinicalDataAccessGroupId, ProgramId, ClientId, DocumentId, @ExecutedByStaffId)

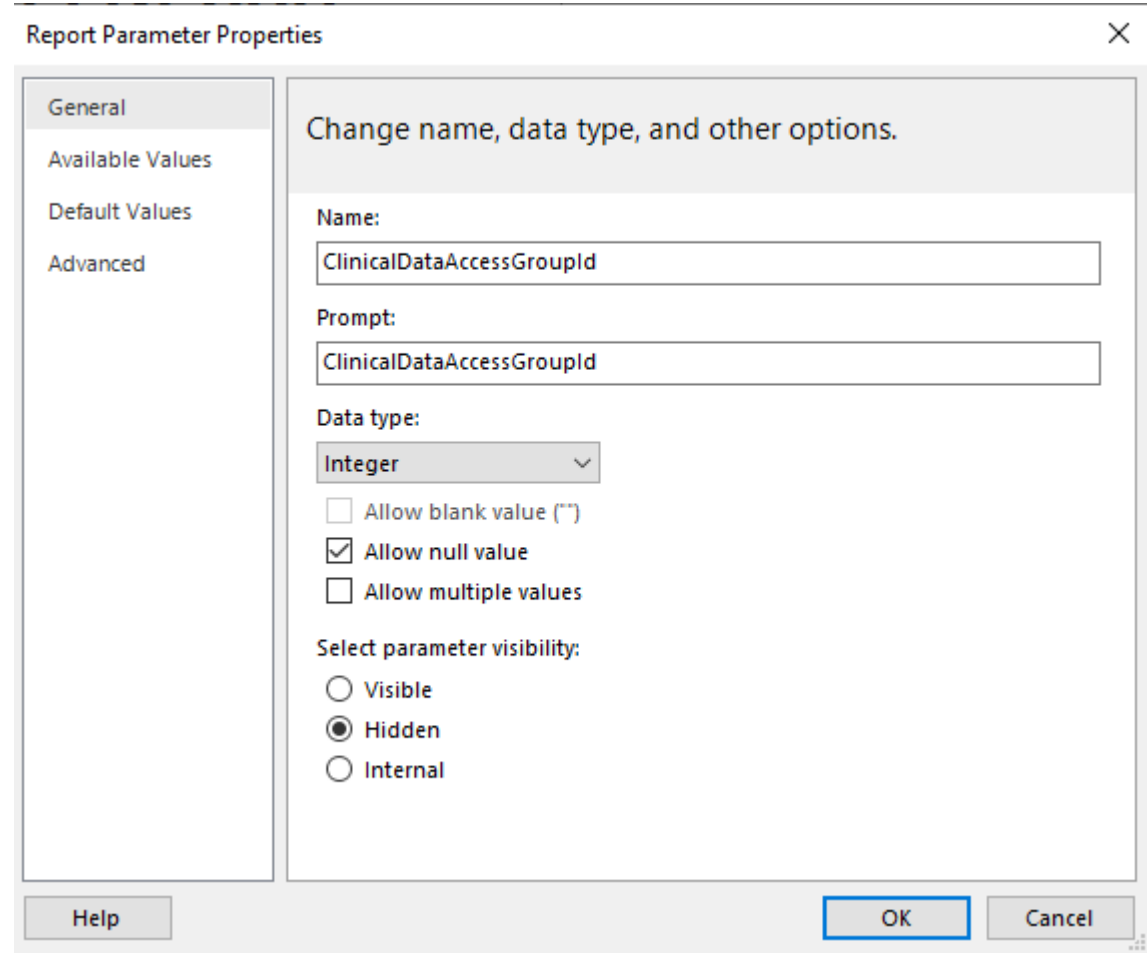
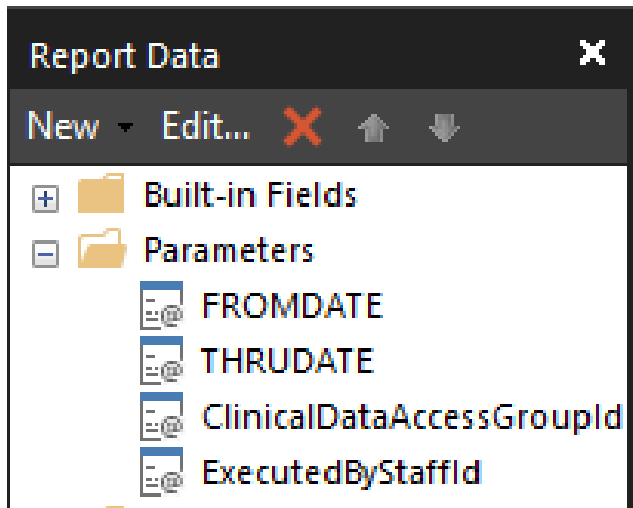
ADD DATE PARAMETERS

- Right click on **Parameters** and select **Add Parameter**
- Enter Name of parameter and prompt
- Choose **Data type**: Date/Time
- Repeat as necessary



ADD CDAG HIDDEN PARAMETERS

- Right click on **Parameters** and select **Add Parameter**
- Enter `ClinicalDataAccessGroupId`
- Check **Allow null value**
- Choose **Data type** = Integer
- Repeat for `@ExecutedByStaffId`



MODIFY DATASET QUERY

- Add **CROSS APPLY**
dbo.ssf_ApplyCDAGRules(
@ClinicalDataAccessGroup
pld, ProgramId, @ClientId,
DocumentId,
@ExecutedByStaffId)
before WHERE clause and
replace Client ID, Program
ID references with fields
from report tables
- If no document ID, is in the
report, replace with null
value

Dataset Properties

Choose a data source and create a query.

Name:
DataSet1

Use a shared dataset.
 Use a dataset embedded in my report.

Data source:
Streamline New...

Query type:
 Text Table Stored Procedure

Query:

```
,c.FirstName as 'First Name'  
,c.LastName as 'Last Name'  
,dbo.GetClientAgeByDOB(c.DOB,c.ClientId) as 'Age'  
,dbo.ssf_GetGlobalCodeNameById(c.GenderIdentity) as 'Gender Identity'  
,p.ProgramName as 'Program'  
,dbo.ssf_GetGlobalCodeNameById(cp.Status) as 'Status'  
,cp.EnrolledDate as 'Enrolled Date'  
,cp.DischargedDate as 'Discharge Date'  
FROM Clients c  
JOIN ClientPrograms cp on cp.ClientId=c.ClientId  
JOIN Programs p on p.ProgramId=cp.ProgramId  
CROSS APPLY dbo.ssf_ApplyCDAGRules(@ClinicalDataAccessGrouppld,  
p.ProgramId, c.ClientId, null, @ExecutedByStaffId)  
WHERE ISNULL(c.RecordDeleted, 'N')='N'  
AND cp.EnrolledDate between @FROMDATE and @THRUDATE
```

Query Designer... Import... Refresh Fields

Time out (in seconds):
0

Help OK Cancel

PRINT PREVIEW WITH CDAG

From Date Through Date

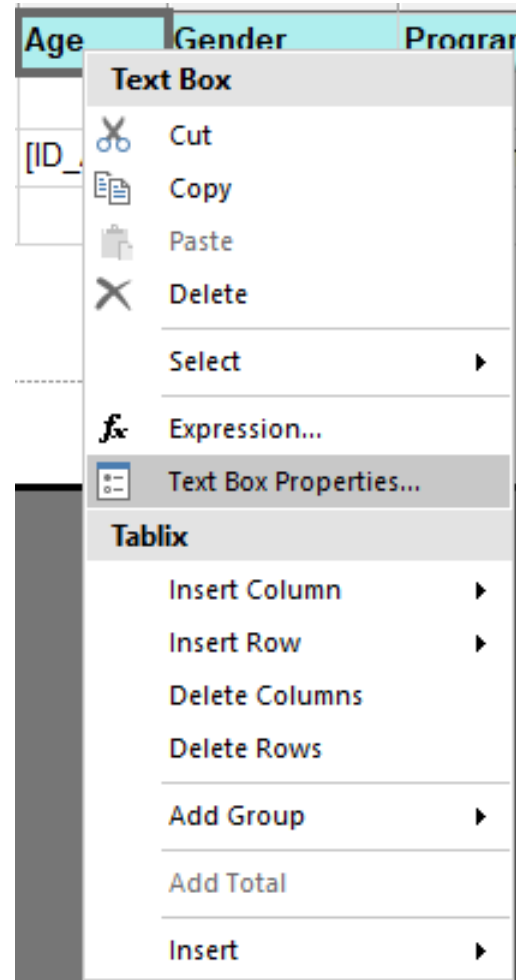
Client Programs Report

| Program | Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|----------------------|-----------|------------|-----------|----------|-----------------|----------------------|------------|---------------|
| CalMHSA Admin | 1243 | Robert | Fripp | 13 Years | | CalMHSA Admin | Enrolled | 01/05/2023 |
| | 1007 | JaCoB | BAizE | 19 Years | Male | CalMHSA Admin | Enrolled | 01/13/2023 |
| | 2 | | | | | | | |
| Outpatient MH Adult | 1282 | Bono | Hewson | 53 Years | Other | Outpatient MH Adult | Enrolled | 01/01/2023 |
| | 1285 | Jose | Testing | 22 Years | Male | Outpatient MH Adult | Enrolled | 01/30/2023 |
| | 2 | | | | | | | |
| SUD Outpatient Adult | 1007 | JaCoB | BAizE | 19 Years | Male | SUD Outpatient Adult | Discharged | 01/06/2023 |
| | 1243 | Robert | Fripp | 13 Years | | SUD Outpatient Adult | Enrolled | 01/09/2023 |
| | 1007 | JaCoB | BAizE | 19 Years | Male | SUD Outpatient Adult | Enrolled | 01/12/2023 |
| | 1285 | Jose | Testing | 22 Years | Male | SUD Outpatient Adult | Enrolled | 02/14/2023 |
| | 4 | | | | | | | |

BONUS FEATURE! INTERACTIVE COLUMN SORTING

HOW TO ENABLE INTERACTIVE SORTING

- Click on column header and choose **Text Box Properties**



HOW TO ENABLE INTERACTIVE SORTING

- Click **Enable interactive sorting** on **this text box**
- Choose **Detail Rows**
- Choose field in **Sort by**

Text Box Properties

Change interactive sort options for the text box.

Enable interactive sorting on this text box

Choose what to sort:

Detail rows

Groups

Sort by:

[ID_Age]

Apply this sorting to all groups and data regions in:

DataSet1

Help OK Cancel

PRINT PREVIEW WITH INTERACTIVE SORTING ON AGE

Client Programs Report



| Program | Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|----------------------|-----------|------------|-----------|----------|-----------------|----------------------|------------|---------------|
| CalMHSA Admin | 1007 | JaCoB | BAizE | 19 Years | Male | CalMHSA Admin | Enrolled | 01/13/2023 |
| | 1243 | Robert | Fripp | 13 Years | | CalMHSA Admin | Enrolled | 01/05/2023 |
| | 2 | | | | | | | |
| Outpatient MH Adult | 1282 | Bono | Hewson | 53 Years | Other | Outpatient MH Adult | Enrolled | 01/01/2023 |
| | 1285 | Jose | Testing | 22 Years | Male | Outpatient MH Adult | Enrolled | 01/30/2023 |
| | 2 | | | | | | | |
| SUD Outpatient Adult | 1285 | Jose | Testing | 22 Years | Male | SUD Outpatient Adult | Enrolled | 02/14/2023 |
| | 1007 | JaCoB | BAizE | 19 Years | Male | SUD Outpatient Adult | Discharged | 01/06/2023 |
| | 1007 | JaCoB | BAizE | 19 Years | Male | SUD Outpatient Adult | Enrolled | 01/12/2023 |
| | 1243 | Robert | Fripp | 13 Years | | SUD Outpatient Adult | Enrolled | 01/09/2023 |
| | 4 | | | | | | | |

4/23/2023 6:53:34 PM



California Mental Health Services Authority

UPLOADING REPORTS INTO SMARTCARE

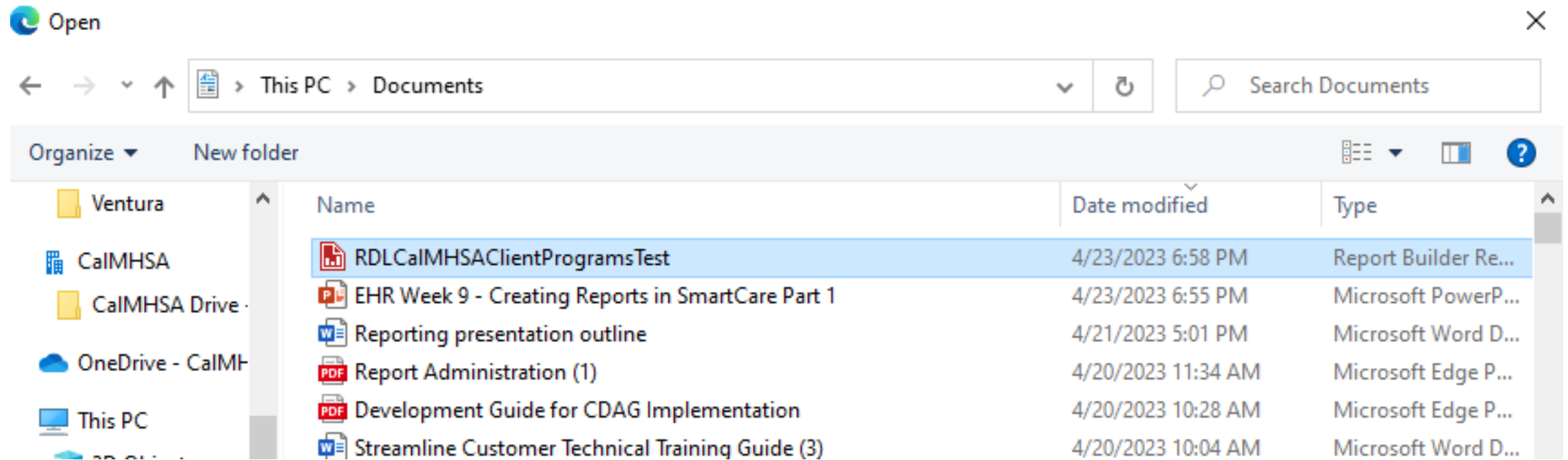
HOW TO UPLOAD REPORTS TO REPORT SERVER

- Open web browser and go to url for report server
 - County Report Server urls will be provided by CalMHSA
- Log in and choose database to upload report
 - Report server credentials should be the same as SQL server credentials

| <input type="checkbox"/> | Type | Name ^ | Description | Size | Modified date | Modified by |
|--------------------------|------|---|-------------|----------|--------------------------|----------------|
| <input type="checkbox"/> | 📄 | 277Reader | ... | 27.78 KB | Sep 28, 2022 10:43:43 PM | SCNET\ssaibabu |
| <input type="checkbox"/> | 📄 | Accounts Receivable - Clinician Dashboard Detail | ... | 69.20 KB | Sep 28, 2022 10:43:48 PM | SCNET\ssaibabu |
| <input type="checkbox"/> | 📄 | Accounts Receivable - Clinician Dashboard Summary | ... | 79.85 KB | Sep 28, 2022 10:43:48 PM | SCNET\ssaibabu |
| <input type="checkbox"/> | 📄 | Accounts Receivable Summary | ... | 52.47 KB | Sep 28, 2022 10:43:53 PM | SCNET\ssaibabu |
| <input type="checkbox"/> | 📄 | Accounts Receivable Summary - Backup | ... | 51.95 KB | Sep 28, 2022 10:43:49 PM | SCNET\ssaibabu |

HOW TO UPLOAD REPORTS TO REPORT SERVER

- Click Upload and navigate to file path where report is saved



HOW TO UPLOAD REPORTS TO REPORT SERVER

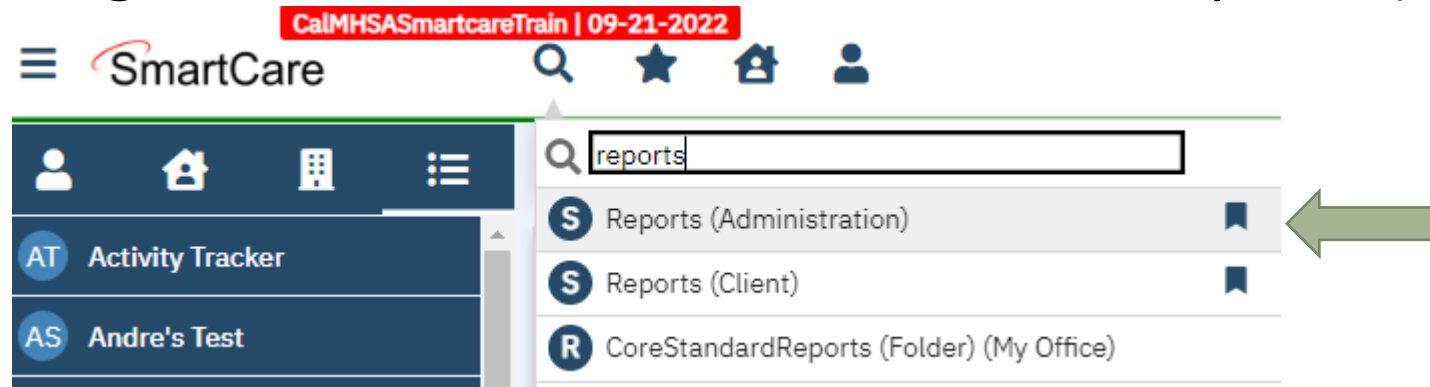
- Verify report RDL file has been uploaded

The screenshot shows a web browser window with the address bar displaying "10.70.16.8/Reports_CalMHSA/browse/Train/SCDocuments". The page title is "SQL Server Reporting Services". The browser's address bar shows "Not secure". The page content includes a breadcrumb trail: "Home > Train > SCDocuments". Below the breadcrumb is a table listing files. A green arrow points to the first row of the table, which is highlighted. The table has columns for "Type", "Name", "Description", "Size", "Modified date", and "Modified by".

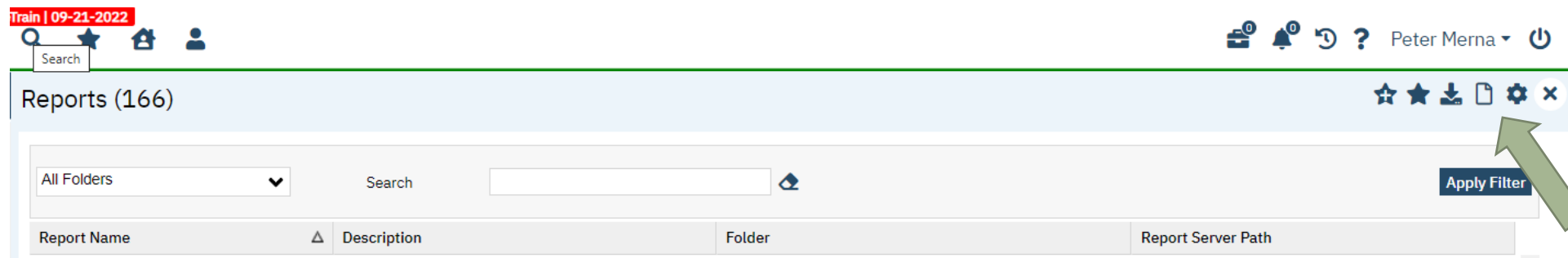
| <input type="checkbox"/> | Type | Name | Description | Size | Modified date | Modified by |
|--------------------------|------|-----------------------------------|-------------|----------|--------------------------|----------------------|
| <input type="checkbox"/> | 📄 | RDLCalMHSAClientProgramsTest | ... | 63.49 KB | Apr 23, 2023 7:01:07 PM | AZURE\calmhsaReports |
| <input type="checkbox"/> | 📄 | RDLGenericNoteReport | ★ ... | 15.34 KB | Apr 20, 2023 10:10:44 AM | AZURE\calmhsaReports |
| <input type="checkbox"/> | 📄 | CountyRDLGenericLetter | ★ ... | 28.06 KB | Apr 12, 2023 2:08:36 PM | AZURE\calmhsaReports |
| <input type="checkbox"/> | 📄 | SubReportCAASAMFinalDetermination | ... | 2.11 MB | Apr 6, 2023 4:46:03 PM | AZURE\chakusui |
| <input type="checkbox"/> | 📄 | RDLFinderFileReport | ... | 10.15 KB | Mar 29, 2023 3:13:43 PM | AZURE\calmhsaReports |

CREATE REPORT IN SMARTCARE

- Login into SmartCare and search for Reports (Administration)



- From list page, click New



CREATE REPORT IN SMARTCARE

- Enter Report Name, Description and choose Report Server
- Select report from Report Server Path field

Report Detail

Report Detail

Report Name Folder

Parent Folder Add as Banner

Description range"/>

Associated With

Report Server

Report Server Path

MODIFY USER ROLE(S) AS NECESSARY

- Go to Role Definition, select role to modify
- Select Reports from drop down menu and click on **Granted** and click on **Save**

Role Definition ⚙️ Save

Roles Export Staff Roles Add Role...

- Admin/Reception/Intake
- Administrator
- Adolescent Patient Portal
- Billing
- Care Coordinator
- CCM
- Claim Manager
- Clinical Supervisor
- Clinician

Permission Utilities

Selected Role: Administrator

[Copy permissions from one role to selected role...](#)

[Remove permissions from selected role...](#)

[Grant complete access to selected role...](#)

Default Permissions for Selected Role +

Reports All Apply Filter

Grant All Deny All

| Permission Type | Parent | Permission Item | Not Allowed | Granted |
|-----------------|--------|--|-------------------|----------------------|
| Reports | | CalMHSA Client Programs Report Test | Deny | Granted |
| Reports | | CalMHSA ER Claim Line Details CSV File | Deny | Granted |
| Reports | | CalMHSA ER Claim Line Details Report | Deny | Granted |

TEST REPORT FROM SMARTCARE

- Log off and Log back in
- Go to form search and locate report

CalMHSA SmartCareTrain | 09-21-2022

SmartCare

Search: calmhsa c

CalMHSA Client Programs Report Test (My Office)

Caseload

| | Current | Not Seen in 3 Mos | Last Year |
|---------|---------|-------------------|-----------|
| Primary | 0 | 0 | 0 |
| Total | 0 | 0 | 0 |

PRINT PREVIEW FROM SMARTCARE

☆☆ Fax

FROMDATE 1/1/2023 THRU DATE 3/31/2023

View Report

1 of 2 ? Find | Next

Client Programs Report

4/24/2023 11:41:47 AM

| Program | Client ID | First Name | Last Name | Age | Gender Identity | Program | Status | Enrolled Date |
|--------------------------|-----------|------------|-----------|----------|-----------------|--------------------------|----------|---------------|
| Access Unit | 1208 | George | Test | 21 Years | | Access Unit | Enrolled | 01/12/2023 |
| | 1239 | Manual | Training | 20 Years | | Access Unit | Enrolled | 01/18/2023 |
| | 1291 | Video | Training | 23 Years | Transgender | Access Unit | Enrolled | 02/12/2023 |
| | 1302 | Rigi | Test | 22 Years | | Access Unit | Enrolled | 03/01/2023 |
| | 4 | | | | | | | |
| Adult Crisis Residential | 1288 | Pam | Test | 42 Years | Female | Adult Crisis Residential | Enrolled | 02/06/2023 |
| | 1298 | Jay | Test | 26 Years | Male | Adult Crisis Residential | Enrolled | 02/16/2023 |
| | 1302 | Rigi | Test | 22 Years | | Adult Crisis Residential | Enrolled | 03/01/2023 |
| | 1317 | Patrice | Oneal | 53 Years | Male | Adult Crisis Residential | Enrolled | 01/01/2023 |
| | 1318 | Kobe | Bryant | 46 Years | Male | Adult Crisis Residential | Enrolled | 01/03/2023 |
| | 5 | | | | | | | |



California Mental Health Services Authority

FUTURE STEPS

FUTURE STEPS FOR REPORTS

- CalMHSA to create forum on 2023.calmhsa.org website
 - Report sharing/repository
 - Report examples, tips, etc.
 - Sample queries, etc.
 - Report documentation
- Report request hub for CalMHSA vetted reports
- Report user group
- Report workshops

CalMHSA

California Mental Health Services Authority

QUESTIONS?