



**PUBLIC HEALTH SOLUTION FOR
DISEASE SURVEILLANCE AND MANAGEMENT**

**IMMS REPORT: IMMUNIZATION COVERAGE
REPORT BY AGE-2
IMMUNIZATION
TRAINING**

VERSION: R2.4_v1.0
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REVISION HISTORY

Version	Date Issued	Revision
R2.0_v0.1	2009 Oct 07	Baseline for R2.0 IBM has reviewed and agreed to all changes PMO BA has reviewed and agreed to all changes
R2.0_v0.2	2009 Oct 15	Updated as follows for PMO feedback: Cover page, updated Owner to Sustainment Project Manager Section 1.9.3 fixed font in tables to standard font. Business Rules – added business rule #6 regarding Contraindications. Headers - fixed font and no longer capitalized Section 1.11 - removed blue highlighting Appendix B - fixed table and font format
R2.0_v0.3	2009 Oct 15	Updated as follows for DCL 253 Section 1.12 – updated to read 1+, 2+ doses etc. Section 1.14 - updated prototype column labels

Version	Date Issued	Revision
R2.0_v0.4	2009 Oct 19	Updated as follows for DCL 258 Section 1.10 – updated business rule #1 to read 1 month instead of 30 days. Section 1.12 – added definition of ‘active’ special considerations.
R2.0_v0.5	2009 Oct 20	IBM QA review completed and returned to Author for further update.
R2.0_v0.6	2009 Oct 21	Updated Version numbering to start at R2.0_v0.1 instead of R2.0_v1.0. Updated formatting as per IBM QA review. Section 1.14: Replaced image as one label was cut off.
R2.0_v0.7	2009 Oct 21	Updated sections as follows for DCL 258 1.1 Purpose: Added clarification for running report with JOrg and manual denominator value. 1.10 Business Rule: Added BR12 concerning running report with JOrg and manual denominator value.
R2.0_v0.8	2009 Nov 09	Updated sections as follows for DCL 325 1.10: Removed all occurrences of “Post release 2.0, coverage is evaluated on the day the client reaches the specified age” from BRs. 1.11: JOrg prompt defaults to User’s JORG per DDUC 11201 1.12: Added sort order when JOrg selected. Clarify that there are two Exemption-Immunity reason codes Minor capitalization correction for labels
R2.0_v0.9	2009 Nov 17	Updated sections as follows for DCL 325 Section 1.11 – Gender prompt changed to Mandatory Updated call-out box to remove note about out-of-scope coverage ‘as-of milestone age’ and updated sentence about when a decision on denominator dataset will be made.

Version	Date Issued	Revision
R2.0_v0.10	2009 Nov 18	Updated section 1.6.2 as follows for DCL 330 Added an assumption that the forecaster option of "Extra Dose Safe Rule" will not be enabled.
R2.0_v0.11	2009 Nov 18	IBM QA review completed; made the following changes. Minor updates in Section 1.3 – Consent Table (changed reference to Section 1.8), Section 1.10, 1.11, 1.12 and Appendix A, footer including formatting. Returned to Author for further changes.
R2.0_v0.12	2009 Nov 23	Removed further references to post R2.0 requirements in the footnotes, and spelt out the word Jurisdictional Organization in place of JOrg in section 1.11.
R2.0_v0.13	2009 Nov 23	IBM QA review completed.
R2.0_V0.14	2009 Nov 23	PMO BA Approved
R2.0_v0.15	2009 Nov 24	PMO QA reviewed. This DDUC is being recommended for PMO Approval.
R2.0_v1.0	2009 Nov 24	Approved Product Development Manager. Panorama Management Office. Incrementing version number to next whole number.
R2.3_v1.0	2011 Nov 14	Updated disclaimer information
R2.4_v1.0	2013 Apr 12	Versioned for R2.4.
R2.5_v1.0	2013 Oct 29	Updated Version to R2.5, Date Issued and Copyright to November 2013

SUPPORTING DOCUMENTS

Content from the following list of supporting documents was used or referenced in this document. Please obtain those documents as necessary for details where referenced in this document.

Version	Date Issued	Revision

DOCUMENT CONVENTIONS AND TERMINOLOGY

In Canada, the official name of the application is Panorama. In other countries, the official name of the application is the IBM Public Health Solution for Disease Surveillance and Management, also referred to as Public Health SDSM. Where the terms “application,” “System,” “Panorama,” or “Public Health SDSM” are referenced in this document, they should be interpreted according to the locale in which the system is being used.

The following document conventions have been used in various sections:

- Square brackets ([]) indicate a screen, screen section, button or field.
- Double quotation marks (“ ”) indicate a value.

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1.0 IMMS REPORT: IMMUNIZATION COVERAGE REPORT BY AGE-2

1.1 PURPOSE

Regular assessment of vaccine coverage is important in evaluating progress toward the achievement of goals and targets for vaccine-preventable diseases, and to maximize the benefits and efficiency of the immunization programs. In order to obtain the maximum benefits offered by vaccines, coverage should be as complete as possible and based on the appropriate recommended ages for vaccination. Even in areas with good overall coverage, pockets of poor coverage may exist. It is only by regular and detailed assessments of coverage at the local level that such under immunized groups can be identified and targeted for enhanced programs as needed.¹

Coverage reports are used to assess the population for: complete vs. incomplete immunizations against vaccine preventable diseases by jurisdictional recommendations according to parameters such as date of birth range, gender and geographic location, including the jurisdictional organization structure.

If coverage reports are needed for a Jurisdictional Organization (JOrg) and its child JOrgs using manually entered denominator data, a report must be generated for each JOrg separately and the appropriate denominator value must be entered for each child JOrg.

1.2 REPORT NAME

The report name Imms Report: Immunization Coverage Report by Age-2 is specified according to the naming convention described in Appendix E – Report Naming Convention. The Report Name is the generic name in the case where multiple Report Sub-IDs are applicable within this DRDD.

The Report Type Identifier and Report Sub-ID are listed in Table 1 – Report Type Identifier and Table 2 – Report Sub-ID.

Table 1 – Report Type Identifier

√	Report Prefix	Definition
	IR	In DDUC Report is accessible from a function within the application and may be available from the Select Report Type screen under Reporting & Analysis > Standard Reports.
√	R	Report is accessible from the Select Report Type screen only.

¹ Paragraph was taken from the Public Health Agency of Canada (PHAC) Canadian National Report on Immunization, 1996

√	Report Prefix	Definition
	X	Administrative report is accessible from the Select Report Type screen.

The Report Sub ID indicates a variation of data at a high level, for more detailed information refer to the Report Sub-ID in Section 1.11, Filters.

Table 2 – Report Sub-ID

√	Report Sub-ID	Report Name	Description

1.3 SECURITY PERMISSIONS

The user will require the following security permission:

Report Permission		
Function	Permission Description	Permission Name
The ability to generate and schedule this report	The ability to generate and schedule this report	R6036

The user will require the following consent permissions:

Consent Permission(s)*		
Function	Permission Description	Permission Name
Report is 'Not client identifiable,' therefore consent is not required. See Section 1.8 Client/First Nations Identifiable Content.		

* Refer to DDUC 11201, Schedule Reports (Section 1.2) for the full list of Consent Permissions.

The following table identifies if the report results are filtered based on the user's current organizational-role Data Access Scope value.

√	Data Access Scope
	Results may only include those clients accessible to the user based on their Data Access Scope.

1.4 AD HOC / SCHEDULED REPORT

The following table identifies if the report is either an ad hoc or scheduled report. Some reports can be both ad hoc and scheduled.

√	Ad Hoc / Scheduled Report
	Ad-hoc within Detailed Design Use Case (DDUC)
√	Ad-hoc within Reporting & Analysis, Standard Reports
√	Scheduled within Reporting & Analysis, Standard Reports

1.5 ACCESS POINTS

This section shows the navigation steps for accessing the report from within the application.

If the report is an IR report (accessible while the user is performing a function within the application), the DDUC is listed in the table below.

This section indicates where the report can be triggered from within the application.

#	From DDUC Access Point	Screen	Trigger	Business Rules for enabling this Access Point
1	DDUC 11201 Schedule Reports	Select Report Type screen	Clicking on a Report Name	Enabled when user has been granted appropriate permissions

1.6 PRECONDITIONS AND ASSUMPTIONS

1.6.1 PRECONDITIONS

- a. No precondition

1.6.2 ASSUMPTIONS

In addition to the assumptions in DDUC 11201 Schedule Reports, the following assumptions are applicable to this report:

- a. For the purposes of this DRDD, the report is run against a replicated copy of the operational database.
- b. The Extra Dose Safe Rule in the forecast engine will not be enabled as it is not supported by this coverage report.

1.7 REPORT TYPE

The report category and sub-category are listed in the following table:

Selected Option (√)	
Case	
	Operational Forms and Lists
Immunization	
	Communication Templates
√	Operational Forms and Lists
Index	
	Client
Inventory	
	Operational Forms and Lists
Lab	
	Operational Forms and Lists
	Requisition Labels
	Specimen Labels
PHAC	
	Operational Forms and Lists

Selected Option (√)	
Work Management	
	Operational Forms and Lists
Security	
	Audit
	Consent
Other (please specify):	
	Other (please specify):

1.8 CLIENT/FIRST NATIONS IDENTIFIABLE CONTENT

This report can display the following type of content:

√	Report Content
Is	
	Client identifiable*
√	Not client identifiable
Is	
	First Nations identifiable*
√	Not First Nations identifiable

*If consent is applicable, ensure consent overrides are identified in Section 1.3, Security Permissions.

1.9 REPORT OUTPUT

The default report display and output options are specified in the following section tables:

1.9.1 PAGE ORIENTATION

√	Orientation
√	Landscape
	Portrait

1.9.2 PAGE SIZE

√	Page Size
√	Letter (8 ½" x 11")
	Legal (8 ½" x 14")

1.9.3 REPORT OUTPUT

√	Report Output
√	Formatted (PDF/Crystal Reports)
√	Formatted (Excel – cannot save-as CSV to obtain usable data)
	Data Extract (CSV/Excel)

1.9.4 SPECIAL OUTPUT

√	Special Output
	Bar Code
	Chart (specify type, e.g. pie chart)
	Label (specify size, e.g. 2" x 3")
	Other (specify):

1.10 BUSINESS RULES

This section contains specific business rules that are unique to this report only. (i.e, rules that apply to data the report returns).

For rules pertaining to filters, data and totals for this DRDD, refer to Section 1.11 Filters, Section 1.12 Data – Columns (Body of Report) and Section 1.13 Aggregation.

For rules specific to the scheduling of all reports, refer to DDUC 11201 Schedule Report.

#	Rule
1.	<p>‘Complete for Age’ is determined by the immunization forecast status for the client. A client is ‘Complete for age’ for one or all antigens if the client:</p> <ul style="list-style-type: none"> • does not have an over-due forecast for an immunization containing any of those antigens <p>Assumptions:</p> <ul style="list-style-type: none"> • The over-due date is set by the forecaster and is normally 1

#	Rule
	<p>month past the due date.</p> <ul style="list-style-type: none"> • Clients will have no forecast for immunizations containing antigens for which they have active Special Considerations of type Contraindication or Exemption. These clients may be counted in both the 'Complete for age' and the applicable 'Contraindication' and 'Exemption' categories.
2.	<p>A client is 'Un-immunized- No Immunization Record' for all antigens if the client has:</p> <ul style="list-style-type: none"> • no records in the immunization history tables and • no special consideration records in the system and • an over-due forecast for any immunization <ul style="list-style-type: none"> ○ newborns are 'complete for age' until they become over-due
3.	<p>A client is 'Incomplete for Age' for all antigens selected for the report if the client:</p> <ul style="list-style-type: none"> • has an over-due forecast for an immunization containing any of those antigens and • is not counted in the 'Un-immunized- No Immunization Record' category.
4.	<p>A client is counted in the 'Exemption-Refusal' report category for a single antigen if they have the following active Special Consideration for that antigen:</p> <ul style="list-style-type: none"> • Exemption: Philosophical Reason – Refusal <p>The exemption must be active at the time coverage is evaluated. Coverage is evaluated at the time the report is run.</p>
5.	<p>A client is counted in the 'Exemption-Refusal' report category for <i>all</i> antigens if the client has the following active Special Considerations for <i>every</i> antigen selected:</p> <ul style="list-style-type: none"> • Exemption: Philosophical Reason – Refusal <p>The exemption must be active at the time coverage is evaluated. Coverage is evaluated at the time the report is run.</p>
6.	<p>A client is counted in the 'Contraindication' category for a single antigen if the client has a Special Consideration - Contraindication for that antigen.</p> <p>The contraindication must be active at the time coverage is evaluated. The exemption must be active at the time coverage is evaluated. Coverage is evaluated at the time the report is run.</p>

#	Rule
7.	<p>Coverage is reported for clients whose birth date falls on or within the date of birth range entered and is calculated as of the date the report is run.</p> <p>Note: When the report is run successively for different age ranges, the user must ensure that the 'Date of Birth Range To' and 'Date of Birth Range From' dates do not overlap. To avoid double counting of some clients, the 'To' date of one age range must be prior to the 'From' date of the next age range.</p>
8.	<p>The following clients will be explicitly excluded from this report:</p> <ul style="list-style-type: none"> • Inactive clients • Indeterminate clients • Clients with no gender • Clients with a gender not included in the secured coded concepts of Male, Female or Undifferentiated • Clients with no birth date • Non-human clients
9.	<p>If the Province, City, Postal Code FSA (Forward Sortation Area) or Postal Code prompt is used as the geographic selection criteria and that specific piece of data is missing in the client's preferred address, or the client does not have an address, the client will not be included in the report.</p>
10.	<p>If JOrg is the selection criterion and the client has no JOrg, the client will not be included in the report.</p>
11.	<p>Dose count for an antigen is calculated as follows:</p> <ul style="list-style-type: none"> • If no immunization records containing the antigen have a revised-dose #, count the valid records for that antigen. • If any immunizations containing the antigen have a revised-dose #, the revised-dose # of the latest immunization (by immunization date) is the starting count. Subsequent immunizations (which by construction cannot have a revised-dose #) containing the antigen (and where that antigen is valid) are then individually added to the revised-dose #. <ul style="list-style-type: none"> ○ Records with immunization dates earlier than the latest revised-dose # immunization are ignored. <p>The following examples list immunizations in chronological order based on immunization date:</p> <p style="padding-left: 40px;">DTaP Dose #1 revised Dose #3 (start count at 3)</p> <p style="padding-left: 40px;">DTaP Dose #4 (add 1)</p>

#	Rule
	<p>Dose count for Diphtheria = 4</p> <p>If historical records for dose #1 and dose #2 are subsequently recorded:</p> <p style="padding-left: 40px;">Historical DTaP Dose #1² (ignored)</p> <p style="padding-left: 40px;">Historical DTaP Dose #2³ (ignored)</p> <p style="padding-left: 40px;">DTaP Dose #1 revised Dose #3 (start count at 3)</p> <p style="padding-left: 40px;">DTaP Dose #4 (add 1)</p> <p>Dose count for Diphtheria = 4</p> <p>If records are for different agents:</p> <p style="padding-left: 40px;">DTaP Dose #1 revised-dose #2</p> <p style="padding-left: 40px;">T Dose #1</p> <p style="padding-left: 40px;">DTaP-IPV Dose # 2 revised-dose #4 (start count at 4)</p> <p>Dose count for Tetanus = 4</p>
12.	<p>If a user enters both a denominator value and a JOrg, the report will not know the breakdown of that denominator value for each JOrg one level below the selected JOrg. When a denominator value is specified in combination with the JOrg prompt, suppress the rendering of tables for each child JOrg one level below.</p>

² System would capture this first dose as dose # 5 as it will propagate the dose from forecast.

³ System would capture this second dose as dose #5 as well, as it propagated from forecast. Client is still forecast for dose # 5.

1.11 FILTERS

This section defines the Report Filters page for the report. (Please refer to section Legend immediately below).

Decision Summary: For release R2.0 the denominator population value will be entered instead of entering a denominator data set name. A decision will be made by November 30, 2009 as to when the Denominator Dataset requirement will be implemented.

Prompt Label	Format	Business Screen/ Field Name	Required (Y/N)	Validation	Default Values	Drop list Values	Execution Rules	Report Sub-ID	Static Text (Y/N)
		Exactly one of the Client Geographic Selection Criteria is required	Y	If none selected, error message will display on rendered report.					

Prompt Label	Format	Business Screen/ Field Name	Required (Y/N)	Validation	Default Values	Drop list Values	Execution Rules	Report Sub-ID	Static Text (Y/N)
Jurisdictional Organization	Embedded Find Component	Client Geographic Selection Criteria 1 Maintain Client/Active Jurisdictional Organization		When selected only an Organization of type: "Jurisdictional Organization" can be selected. Error messages will display on rendered report.	User's Jurisdictional Organization	Per EFC	If Jurisdictional Organization (JOrg) has child JOrgs, report body will be rendered once for the JOrg selected and once for each child JOrg one level below. Each will report on all clients belonging to that hierarchy.		N
Province	Drop list	Client Geographic Selection Criteria 2			No default				N
City	Multi select (~100 values)	Maintain Client/ The active Preferred address City		Required if Province is selected	No default	Vocab domain: Subject MgmtSubjectSearchCity			N
Postal Code FSA	Text	Client Geographic Selection Criteria 3 Maintain Client/ The active Preferred address Postal Code		1 st three characters of Postal code Format: (A9A)	No default				N/A

Prompt Label	Format	Business Screen/ Field Name	Required (Y/N)	Validation	Default Values	Drop list Values	Execution Rules	Report Sub-ID	Static Text (Y/N)
Postal Code	Text	Client Geographic Selection Criteria 4 Maintain Client/ The active Preferred address Postal Code		Postal code format (A9A 9A9)	No default				N/A
Gender	Multi select	Client Gender Selection Criteria Maintain Client/Gender	Y		No default	Vocab domain: Administrative Gender			N
Date of Birth From	YYYY-MM-DD	Client Age Selection Criteria Maintain Client/Date of Birth	Y	Valid date From date is less than or equal to Date of Birth To date Cannot be in the future Must be a valid date	No default				N/A

Prompt Label	Format	Business Screen/ Field Name	Required (Y/N)	Validation	Default Values	Drop list Values	Execution Rules	Report Sub-ID	Static Text (Y/N)
Date of Birth To	YYYY- MMM- DD	Client Age Selection Criteria Maintain Client/Date of Birth	Y	Valid date To date is less than or equal to current date Cannot be in the future Must be a valid date	No default				N/A
Denominator Value	Text	The total population being analyzed for coverage	N	Numeric Must be >0 Must be a whole number Field length = 10	No default		If not entered, the clients selected using the above criteria will be counted and used as the denominator value.		N/A
Immunizing Antigen	Multi select (~50 values)	Immunization Antigen	Y		No default	New Coverage Reports vocabulary domain			N

Legend

#	Table Column	Description	Examples
	Prompt Label	Name of field on Report Filters screen.	TB_Test_Result_ID
	Format	<p>Format for data entry of the parameter on Report Filters screen.</p> <p>For drop lists, indicate the potential number of values.</p> <p>For multi-select, indicate the likely number of selections.</p> <p>Refer to DDUC 11201 Schedule Reports, Appendix A – Data, Format column.</p>	<p>Drop list (Expected number of values: Approx. 6), multi-select (Expected number of values: less than 20), text, Embedded Find Component (EFC), etc.</p> <p>In context.</p>
	Business Screen/Field Name	<p>The Panorama screen and field listing the values to be used for the filter. The field stated herein is where the filter data is originally entered for the operational system, i.e. the source of the data that shows up in the drop list being specified.</p> <p>Provide the associated DDUC number for the screen/field if possible (optional).</p> <p>For static text, state N/A in this column and specify the static text values in the Drop list Values column.</p>	Maintain Cohort/Cohort Result Set Name
	Required (Y/N)	Mandatory or Optional	Y, N

#	Table Column	Description	Examples
	Validation	<p>Rules that apply to the values presented to the user.</p> <p>Refer to DDUC 11201 Schedule Reports, Appendix A – Data, Validation column.</p>	To Date cannot precede From Date.
	Default Values	<p>Default displayed when user first enters Report Filters screen.</p> <p>Refer to DDUC 11201 Schedule Reports, Appendix A – Data, Default Values column.</p>	No default, User’s JOrg, today’s date, all, yes.
	Drop list Values	<p>List of values referenced by a Business Screen/Field Name.</p> <p>If static text, specify the static text values.</p>	Y, N
	Execution Rules	Logic for execution of query to retrieve the report’s data.	<p>Compare with “Health Related Event Date”.</p> <p>If No, suppress display of the Value column on the report.</p>
	Report Sub-ID	<p>Indicates if report contains a variation of the data. Denotes a specific report in a series of reports.</p> <p>If left blank this prompt appears in all variations, if a value appears, the prompt will appear in only that variation of the report.</p>	<p>A only (Data on all types of Orgs),</p> <p>B only (Data on Aboriginal Orgs)</p>

#	Table Column	Description	Examples
	Static Text (Y/N)	<p>Indicates if report data requires translation into French.</p> <p>All prompt labels will be translated. This indicator is for drop list values.</p> <p>For data specify if translation is required.</p> <p>Indicate if drop list values are static text and as such require translation.</p>	<p>N</p> <p>Y</p> <p>N/A</p>

1.12 DATA – COLUMNS (BODY OF REPORT)

The body of this report contains two tables – the Immunization Coverage Results table and Coverage by Antigen table.

#	Report Label	Business Purpose (as required)	Business Screen/ Field Name	Calculation	Additional Criteria	Display Format/ Alignment
<p>Section Name: [JOrg Name] (This section heading is only displayed when JOrg prompt is selected) Grouping: The following sub-sections, Immunization Coverage Results and Coverage by Antigen, should always be grouped together when JOrg selected. Both sections are repeated for each JOrg in the hierarchy. Sorting: Display the JOrg selected first followed by the child JOrgs by Name ascending.</p>						
<p>Section Name: Immunization Coverage Results Grouping: None Sorting: None.</p>						
1	Population	Population is the number of people (P) in the denominator OR when no denominator entered, the total number of clients brought back as per the Geographic, Age and Gender report prompts.		Value entered or a count of clients selected using client Geographic, Age and Gender selection criteria		Numeric Whole Number

#	Report Label	Business Purpose (as required)	Business Screen/ Field Name	Calculation	Additional Criteria	Display Format/ Alignment
2	Complete for Age for All Antigen(s) Selected	Count & % (based on N) of population who are not up to date for their age. % = $N^4 / P \times 100$	Client Imms Profile – Immunization Forecast – No Immunizations containing selected antigens are overdue	Clients that have no over-due forecast for any immunizations containing any of the selected antigens for the report.		Numeric and % to one decimal point
3	Incomplete for Age	Count & % (based on N) of population not completely immunized % = $N / P \times 100$	Client Imms Profile – Immunization Forecast – Immunization containing selected antigens are overdue	Clients that have some immunization record(s) for the selected antigens & of which at least one is overdue.	Do not include clients that fall into the “Un-immunized – No immunization record” category.	Numeric and % to one decimal point

⁴ N represents the number of clients counted in each category. It does NOT signify a single value used in all calculations.

#	Report Label	Business Purpose (as required)	Business Screen/ Field Name	Calculation	Additional Criteria	Display Format/ Alignment
4	Exemption - Refusal of All Antigen(s) Selected	Count & % (based on N) of population that have active Refusal(s) for any antigens % = N / P x 100	Special Considerations – Immunization Agent - Antigens.	Clients that have active Refusal(s) for ALL of the selected antigens for the report. Active = effective_from date is less than or equal to the specified date ⁵ AND effective_to date is null or greater than the specified date. Clients may be counted in both Complete for age and Exemption/Refusal sections. See BR #1.	Special Considerations type = Exemption Reason code = “secured jurisdictional iTERM value for Philosophical reason – refusal”	Numeric and % to one decimal point
5	Un-immunized - No Immunization Record	Count & % (based on N) of population that have no immunizations records for antigens selected % = N / P x 100	Client Imms Profile – Immunization Forecast – Immunization containing selected antigens are overdue	Clients with no immunization records (historical or administered, valid or invalid) or any special considerations of any type		Numeric and % to one decimal point
Section Name: Coverage by Antigen Grouping: By JOrg if JOrg filter selected Sorting: Alphabetical by Antigen						

⁵ For R2.0, the specified date is the date the report is run.

#	Report Label	Business Purpose (as required)	Business Screen/ Field Name	Calculation	Additional Criteria	Display Format/ Alignment
6	Immunizing Antigen	Antigens selected for the report				Text
7	Complete for Age for Antigen	Count & % of population up to date for the antigen $\% = N / P \times 100$	Client Imms Profile – Immunization Forecast – No Immunization containing the selected antigens is overdue	Client has no over-due forecast for any immunization containing the selected antigen for the report.		Numeric and % to one decimal point

#	Report Label	Business Purpose (as required)	Business Screen/ Field Name	Calculation	Additional Criteria	Display Format/ Alignment
8	X dose(s) + (x = 1 through 6 Eg. 1 dose +, 2 doses +, etc)	Count & % of population who have received 1 or more through 6 or more valid doses of the antigen. $\% = N / P \times 100$	Client Immunization View/Add Section: Antigen Count / Valid Doses by Antigen also taking into account Immunization records with revised-dose #s	<p>Clients that have 1 or more through 6 or more valid doses of the antigen.</p> <p>Dose counts are cumulative. For example, a client with 2 doses for a given antigen will be counted as having both 1+ and 2+ doses.</p> <p>Counts include only immunizations containing the selected antigens where the dose for that the antigen is valid.</p> <p>If no immunizations contain a revised-dose #, count the records.</p> <p>If any of the immunizations contain a revised-dose #, take the revised-dose # of the latest (by immunization date) as the starting count, and then add subsequent records one at a time.</p>	Records with an immunization date earlier than the latest revised-dose # immunization date will be ignored.	Numeric and % to one decimal point

#	Report Label	Business Purpose (as required)	Business Screen/ Field Name	Calculation	Additional Criteria	Display Format/ Alignment
9	Contraindication	Count & % of population who have contraindications for the antigen % = $N / P \times 100$	Client Immunization View/Add Section: Special Considerations / Contraindications	Clients who have active special considerations of type contraindication for the antigen Active = effective_from date is less than or equal to the specified date ⁶ AND effective_to date is null or greater than the specified date.	Code: CONTRAINDICATION Code Set OID: 2.16.840.1.11388 3.3.122.3.1057	Numeric and % to one decimal point
10	Exemption – Refusal	Count & % of population who have refused the antigen % = $N / P \times 100$	Client Immunization View/Add Section: Special Considerations / Exemptions	Clients who have active, special considerations of type exemption and reason = Philosophical reason – refusal for the antigen Active = effective_from date is less than or equal to the specified date ⁷ AND effective_to date is null or greater than the specified date.	Code: PHILREF Code Set OID: 2.16.840.1.11388 3.3.122.3.11.1003	Numeric and % to one decimal point
	Exemption – Immunity	Count & % of population who have immunity to the antigen % = $N / P \times 100$	Client Immunization View/Add Section: Special Considerations / Exemptions	Clients who have active, special considerations of type exemption and reason = Medical - Documented immunity or Medical - Clinical record of disease	Codes: MEDIMM and MEDCLIN Code Set OID: 2.16.840.1.11388 3.3.122.3.11.1003	Numeric and % to one decimal point

⁶ For R2.0, the specified date is the date the report is run.

⁷ For R2.0, the specified date is the date the report is run.

Legend

Table Column	Description	Examples
#	Corresponds to each field on the report prototype.	1, 2
Report Label	Name of field on report. Allow for shorter column headings.	Result Set ID HA instead of Health Area; if blank then use the Data Name
Business Purpose	Description/purpose of field on report. State why this field is needed on the report.	An Episode Identifier is a unique ID for the notification across all Panorama instances. It is a Concatenation of Panorama Instance ID, Investigation ID, and Disease Event ID.
Business Screen/Field Name	A Panorama screen and field that contains the data to be shown on the report. This is the source of the data. Provide the DDUC number if possible (optional).	Maintain Cohort/Cohort Result Set Name
Calculation	List calculations are required to derive this field for the report.	Qty Variance times WAC.
Additional Criteria	Specified business rules or other criteria that need to be applied to the data for this report.	See Business Rule #12 (where BR 12 states that report shows primary Client name).
Display Format	Format of the data shown on the report.	Text, Numeric, (XXX) XXX-XXXX, YYYY/MM/DD, \$9,999.99, \$(99,999.99), 9,999, bold, italic, etc.
Alignment	Follow the guidelines as specified in DDUC 11201 Schedule Reports, Appendix C – Commonly Used Report Layout Standards. Describe standard alignment and any	Left justified: <ul style="list-style-type: none"> ■ Where Created: Org ■ Column data, except Dollar values ■ “Confidential” footer text

Table Column	Description	Examples
	<p>deviations in Section 1.12, Data – Columns (Body of Report)</p> <p>If nothing is stated here, the standard will be used as displayed in the Examples.</p>	<p>Centered:</p> <ul style="list-style-type: none"> ■ Report Title ■ Column Headers <p>Right justified:</p> <ul style="list-style-type: none"> ■ Panorama Logo ■ Dollar values ■ Page Numbers in format “Page x of y”
Section Name	Corresponds to each section on the report prototype.	<p>Holding Point</p> <p>Alternate ID</p> <p>Risk Factors</p>
Group By	<p>Indicates whether the data is grouped and the order.</p> <p>If this grouping is going to be used for data aggregation, please complete a row in Section 1.13, Aggregation for this Report Label.</p>	<p>Field name 1 Ascending</p> <p>Field name 2 Descending</p>
Sort (within section)	Ascending or descending or not sorted (default). If multiple fields are used for sorting, a number is included to indicate the order of the sort.	<p>Primary Sort (descending by Risk Factor Start Date)</p> <p>Secondary Sort (ascending by Risk Factor Description)</p>

1.13 AGGREGATION

This section specifies the aggregate for the report.

Refer to Legend.

#	Report Label to Aggregate	Aggregation Type	Desired Title for Aggregation	Display Format	Groupings to Aggregate At	Grand Aggregation
1						

Legend

Table Column	Description	Examples
#	Corresponds to each Sub-Total or Total field on the report prototype.	
Report Label to Aggregate	Name of field on the report to aggregate for Sub-Total or Total field from the Report Label column in Section 1.12, Data – Columns (Body of Report).	Count of AEFIs
Aggregation Type	Aggregation type can be one of the following: average, sum, count (number of items), min/max.	Count of AEFIs for the identified combination of immunizing agent/antigen, age group, period of time, etc.
Desired Title for Aggregation	The desired title for the Groupings to Aggregate At and Grand Aggregation shown on the report.	Count of AEFIs for the identified combination of immunizing agent/antigen, age group, period of time etc.
Display Format	Format of the data shown on the report.	Text, Numeric, (XXX) XXX-XXXX, YYYY-MM-DD, \$9,999.99, \$(99,999.99), 9,999, bold, italic, etc.
Groupings to Aggregate At	Specify the “Group By” field names in Section 1.12, Data – Columns (Body of Report)	Field name 1 Field name 2

Table Column	Description	Examples
Grand Aggregation	Indicates if all report data is to be aggregated.	Y, N

1.14 REPORT PROTOTYPE

Immunization Coverage Report by Age																			
Jurisdictional Organization	Victoria Branch																		
Province	--		City																
Postal Code	--		Postal Code FSA		--														
Date of Birth From	2006-Jan-01		Date of Birth To		2007-Jan-01														
Gender	Male, Female, Undifferentiated																		
Denominator Value	--																		
Immunizing Antigen	Diphtheria, Measles, Mumps, Rubella, Tetanus																		
Victoria Branch																			
Immunization coverage results																			
Population	Complete for Age for All Antigen(s) Selected				Incomplete for Age				Exemption - Refusal of All Antigen(s) Selected				Unimmunized - No immunization record						
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%					
P	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%					
Coverage by Antigen																			
Immunizing Antigen	Complete for Age for Antigen		Clients With												Special Considerations				
			1 dose +		2 doses +		3 doses +		4 doses +		5 doses +		6 doses +		Contra-indication		Exemption-Refusal		Exemption-Immunity
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
Diphtheria	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Measles	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Mumps	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Pertussis	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Polio	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Rubella	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Tetanus	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Varicella	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	N	0.0%	
Disclaimer: Completely immunized is defined by the Jurisdictional Immunization Schedules																			

2.0 BUSINESS USAGE PROFILE

Table 3 displays typical usage and the percentage of a user group that would generate the report.

Table 3 – User Type and Percentage

Panorama User Type	Percentage of Panorama User Type
Nurses	25% of Nurses
Nurse Managers	100% of Nurse Managers

Table 4 displays the report run frequency, a typical report scenario, and which end user would typically generate the report.

Table 4 – Run Frequency

Run Frequency Scheduled or Adhoc	Percentage of Time	Typical Scenario (Time and Panorama User Type)
Hourly		
Daily		
Weekly		
Monthly		Occasionally for routine immunizations and for special programs on a monthly basis
Yearly		For routine immunizations: Based on school year for Jurisdictional Health Regions Based on calendar year for Public Health Agencies For special programs: Depending on program, quarterly or 2 times per year.

Table 5 displays the Report Volume along with the typical number of records accessed when generating the report.

Table 5 – Report Volume

√	Report Volume	Report Load
	Low (1 to 2 pages)	Example: <100 records being accessed
	Medium (3 to 10 pages)	Example: >100 to <2500 records being accessed
√	High (more than 10 pages)	Example: >2500 records being accessed

Appendix A – Requests for Clarification

RFC no longer used. This table is kept for historical purposes only if RFCs exist for this DRDD.

RFC	Initiator	Text
1	ZT	<p>Clarification from IBM (Rod) of flow on how the export will occur:</p> <p>Here are the steps for a report from the Launch page:</p> <ol style="list-style-type: none"> 1. The User selects report R6036 from the Reports Launch application 2. The User is shown the Prompts List page for the R6036 report 3. The User enters all prompts for the report and also selects the "Report Output". The "Report Output" can be one of "Crystal Report", "CSV", "Excel" or "PDF" 4. The User clicks on the "Generate Report" button 5. The Report appears in a pop-up in the specified "Report Output". If the user had chosen the "Excel", an excel version of the report appears in the pop-up. 6. The user saves the report on their file system using the browser's "File -> Save As" functionality. With most browsers, you can provide a name for the file (in this case the Excel output of the report) when you save it to the file system
2	YP	<p>Topic: Need to confirm the definition of “complete” or “covered” – document uses “complete”, “complete for age”, “up to date” and subject matter experts have used term “series complete”</p> <div style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Complete/covered is defined by the absence of any forecasted immunizations (containing the antigen in question) that are past due at the time coverage is evaluated (the subject of RFC #3). Status (Sep 10): Confirmed by jurisdictional representatives.</p> </div> <p>Assumptions:</p> <ol style="list-style-type: none"> 1. The forecaster determines a number of “forecasted immunizations” for each client whenever that client’s data (that may impact the forecast) is updated or when the client passes a milestone age.

RFC	Initiator	Text
		<ol style="list-style-type: none"> 2. As a first step in the forecast process each immunization the client has already received is decomposed into its constituent antigen (vaccination) doses and each of these is evaluated for validity (and stored in the database). 3. The forecasting process is driven by a rules.xls file that defines a number of “schedules” or “series” by antigen (though NASI defines them at the agent level). Each antigen will have several schedules to deal with clients of different ages and genders and each schedule contains a number of “rules”. 4. The forecaster does its work at the antigen level and considers only valid (as opposed to invalid) antigen doses. It uses custom java code generated from the rules.xls file to prepare the forecast rather than directly processing that file so its content is not present in the database nor is it available to reporting. 5. The output of the forecast is zero or more forecasted immunization records (rolled up to agents that contain needed antigens) that represent only the next dose (by agent) indicated for that client. 6. All previous forecasted immunization records (from previous runs of the forecaster) are deleted for each client before a new forecast is run. <p>Decision Justification: Given the assumptions above there is no other viable approach for determining coverage other than to use the presence, or more precisely absence, of forecasted immunizations to determine “completeness”.</p> <p>Pseudo-code that makes proposed decision above concrete - but note that the question of when coverage is evaluated (date of report vs date client turns a specific age) is the topic of RFC #3 below</p> <p>Complete for age by Antigen for date report is run</p> <ol style="list-style-type: none"> 1 If client has never received any doses of the antigen: not complete 2 If client has a row in forecasted immunizations for any agent containing the antigen <ol style="list-style-type: none"> a. If the due date is in the future continue to 4 b. If the due date is now or in the past: not complete 3 If there is no row in the forecasted immunization table for any agent containing the antigen: continue to 4

RFC	Initiator	Text
		<p>4 They are complete</p> <p>Original definition (in grey below) not supportable without ER described in RFC #3 and that includes both Agent and Antigen versions.</p> <p>Complete for age by Agent for specified end date</p> <ol style="list-style-type: none"> 1 If client has never received any agent containing any antigen in the specified agent: not complete 2 If client has a row in forecasted immunizations for any agent containing any antigen in the specified agent <ol style="list-style-type: none"> a. If the due date is after specified date continue to 4 b. If the due date is on or before specified date: not complete 3 If there is no row in the forecasted immunization table: continue to 4 4 They are complete <p>Complete for age by Antigen for specified date</p> <ol style="list-style-type: none"> 1 If client has never received any doses of the antigen: not complete 2 If client has a row in forecasted immunizations for any agent containing the antigen <ol style="list-style-type: none"> a. If the due date is after specified date continue to 4 b. If the due date is on or before specified: not complete 3 If there is no row in the forecasted immunization table for any agent containing the antigen: continue to 4 4 They are complete <p>17 Aug 2009: Need to look at the report in its entirety in order to confirm. But looks good so far.</p>
3 (merged in #4)		<p>Topic: Can the system support backdating reports so that they evaluate coverage at some time in the past?</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; background-color: #e0ffe0;"> <p>Decision Summary: Evaluation of coverage status for each individual client is done at time report is run (using the most recent forecast) rather than on the client's birthday.</p> <p>Status (Sep 14): Confirmed by jurisdictional representatives that the report is worth developing without ability report coverage as of a</p> </div>

RFC	Initiator	Text
		<p>Assumptions:</p> <p>As a first step in the forecast process each immunization the client has already received is decomposed into its constituent antigen (vaccination) doses and each of these is evaluated for validity (and stored in the database).</p> <p>The output of the forecast is zero or more forecasted immunization records (rolled up to agents that contain needed antigens) that represent only the next dose (by agent) indicated for that client.</p> <p>All previous forecasted immunization records (from previous runs of the forecaster) are deleted for each client before a new forecast is run.</p> <p>Immunizations records have distinct administerDate and createDate fields to capture when the immunization was administered to the client vs when it was entered into the system.</p> <p>Immunization records may in some cases be entered into the system a couple of months after their administerDate – especially in the cases they are not administered by public health practitioners employed by a jurisdiction.</p> <p>Many antigens are present in multiple schedules – usually that are valid at different client age ranges. In some cases these antigens are modeled within the system as different entities (“d” vs “D” – both are diphtheria). As a result it is possible in some cases for an antigen to be scheduled for a client by more than one schedule and it is not possible for reporting to determine which schedule was responsible for any given forecasted immunization record (this table has no column indicating schedule id).</p> <p>This (and other) coverage reports specify that coverage “completeness” for each client in the report should be evaluated on that specific client’s birthday.</p> <p>Between the time a client turns a specific age (e.g. 2 yrs) and the time a coverage report is run additional immunizations (containing the same or related antigens) for the client may be entered (administered or back data entry) into the system, the client may change demographics data that impacts the forecast (turns 3, has a sex change, changes a risk factor) or inclusion criteria in a coverage report (client moves, changes schools, ...) may change.</p> <p>Immunization records for children in Ontario are generally not available for entry into the</p>

RFC	Initiator	Text
		<p>system until those children are 4 years old (entering preschool).</p> <p>Milestone coverage reports for all children at 2 years of age are a legal requirement in all jurisdictions</p> <p>Issue: Assumptions 9 and 10 are incompatible with the decision justification below.</p> <p>Decision Justification: In order to support “backdating” coverage evaluation (to each client’s birthday or even the same date for all clients) a number of changes will need to be made to the system (one of which is identified in the ER outlined below). Consideration of the list of various factors documented in Assumption #8 above illustrates the numerous ways that validity of the report can be impacted if it is “backdating” coverage evaluation. As it is not viable to attempt any changes at this point backdating cannot be supported.</p> <p>This is in contrast to Overview item #3 in Manitoba Immunization Monitoring System Annual Report which states: “Coverage reports reflect doses a client has received from birth until his/her selected birthday. For example, coverage at age two selects all children who turn two years of age in the calendar year and assesses these children for recommended vaccines on their birthdays. Doses administered to children after each of their selected birthdays will not be reflected in the coverage report, except for influenza vaccine.”</p> <p>17 Aug 2009: Confirmed this is desirable but not supportable (because historical Immunization Forecast data is not available in the system) without an Enhancement Request (details of which are discussed below in grayed out text). The PMO has already confirmed that there is no capacity in R2.0 for any new ERs.</p> <p>Historical forecasts and valid/invalid antigen records are not currently retained by Panorama and without this information (and potentially other changes) it is not possible to evaluate coverage for any Client at a point in the past.</p> <p>Other materials from first discussions of the topic.</p> <p>For the purposes of this report, a birthday is the day the client reaches the age entered in prompt (e.g. 2 months, 4 months, 2 years, etc).</p> <p>If Age as of range is selected, exclude all immunizations administered after client’s birthday</p> <p>If all immunizations recorded on or before client’s birthday</p>

RFC	Initiator	Text
		<p>Use most recent forecast generated on or before client birthday</p> <p>else</p> <p>Use latest forecast where forecast.eff_from_date = latest immunization created date</p> <p>**Assess risk of including doses administered and recorded after client birthday in forecast. These doses cannot be excluded from forecast (without changing Panorama code) and may result in a “complete” status when client was still incomplete on birthday.</p> <p>1. Recommend that an ER be submitted to retain historical forecasts and valid/invalid antigen counts by leveraging existing soft delete (isDeleted="Y") capability to use the created_date and modified_date as the effective range for non-current records. Long term is to effective date each row in those tables.</p> <p>08 Sep 2009: Merged in overlapping RFC #4</p>
4	YP	Merged into RFC #3 for improved clarity
5	YP	<p>Topic: Are two redundant means of specifying client ages for inclusion in the report necessary (especially given limitations documents in RFC #3)?</p> <div data-bbox="554 932 1646 1149" style="border: 1px solid black; border-radius: 15px; padding: 10px; background-color: #e0ffe0;"> <p>Decision Summary: “Date of Birth Range” parameters sole parameters for this report. To avoid user confusion, reserve the “Age as of Date” (and Coverage Age, Age Units) for future reporting (post R2.*) of coverage as of client birthday.</p> <p>Status (Sep 14): Confirmed by jurisdictional representatives.</p> </div> <p>Assumptions:</p> <p>1. This (and other coverage) reports originally specified two types (of which neither or one of the types can be used on any given report) of prompting that support selecting clients by age: “Date of Birth Range” (From/To) and “Age As of Date” (From/To + Coverage Age).</p> <p>2. “Date of Birth Range” prompting implies that clients will be selected for inclusion in the report if their birth date falls in the From/To range AND coverage will be evaluated for all clients</p>

RFC	Initiator	Text
		<p>as of the date the report is run. Note this is the only behaviour supported in RFC #3 above.</p> <p>3. “Age As of Date” prompting allows a specific client age to be specified (e.g. 2 yrs or 3 months in Coverage Age and Age Units prompts) and a date range during which clients that turned that age should be selected for inclusion in the report. There is a business rule (If “Age and Age as of range” is selected as the input parameters, the coverage rates by age reflect selected clients’ status on his/her birthday) that clearly specifies this prompting is used when coverage is to be evaluated on each client’s birthday (which is not supportable as documented in RFC #3 above).</p> <p>Decision Justification: Given that “Age As of Date” prompting implies functionality not supportable with (RFC #3 documented) system limitations, this prompting should be removed from the DRDD (or more precisely reserved for future use if/when the Enhancement Request mentioned in that RFC is completed). Note also that if this prompting was included it would now be redundant with “Date of Birth Range” prompting and substantially increase implementation effort (by technically doubling the number of required subreports).</p>
6	YP	<p>Topic: This (and some other) coverage reports include display of “missing doses” information (and dose number prompting by Agent/Antigen) – is business value high enough to justify effort/risk?</p> <div data-bbox="554 911 1646 1101" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: "Missing Doses" related prompts and information display (to be replaced by a single Incomplete %) will not be included in this report in R2.*.</p> <p>Status (Sep 10): Confirmed by jurisdictional representatives.</p> </div> <p>Sept 16 – New business rule for calculation of incomplete %</p> <p>Percentage of clients with at least 1 immunization record (valid or invalid) containing a selected antigen or at least 1 special consideration and at least one immunization for a selected antigen is due or over-due.</p> <p>Assumptions:</p> <p>1. The number of doses that constitute up-to-date/complete differs depending on the</p>

RFC	Initiator	Text
		<p>schedule applicable to the individual (i.e. The 4-6-year-old (5th) dose of the DTaP-IPV in Ontario’s Schedules 1 and 2 is not necessary if the fourth dose was given after the 4th birthday).</p> <ol style="list-style-type: none"> 2. The forecaster combines the impact of many schedules as it runs but the schedule that determined the forecasted outputs is not available. 3. It is possible for a client to have more than one missing dose for a single Antigen or Agent. 4. The output of the forecast is zero or more forecasted immunization records (rolled up to agents that contain needed antigens) that represent only the next dose (by agent) indicated for that client. Therefore the total number of “missing doses” for any agent/antigen needed for any particular client is therefore not known by the system. 5. This report originally included prompting (Dose) that could optionally be specified for each Antigen (originally Agent/Antigen see RFC #8) for the sole purpose of supporting display values in the “Missing X dose(s)” sections of the report. Business Rule #10 incompletely describes how to apply the Dose number prompt to determine “missing doses” (only describes Agent and does not address Revised Doses or Antigen level validation of Immunizations). 6. The multi-select prompt for Antigen would need to “align” with the multi-select prompt for Dose (by Antigen) in order for the prompt mentioned above to be useful but this is not supported by Business Objects. 7. Business Rule #10 specifies that Dose prompts do not impact coverage “completeness” evaluation. As the schedules utilized by the forecaster vary depending on the client, it is more accurate than specifying Does numbers in any case. <p>Decision Justification:</p> <ul style="list-style-type: none"> ▪ Without Dose prompts supplied, the system cannot support a breakdown of Incomplete for Age into populations of Missing 1 dose, Missing 2 doses, etc. It can derive only a single incomplete N and %. ▪ None of the example coverage reports (provided by the PMO) from jurisdictions includes this feature so it cannot be a critical business need. ▪ Custom prompt development work (see Assumption #6 above) would be required to

RFC	Initiator	Text
		<p>extend the standard mechanism for agent/antigen selection (a multi-select box that would only provide for the entry of a single dose number that applied to all selected) to specify a dose for each antigen. This will significantly increases the development effort for this report.</p> <p>As a result, the recommendation is to remove Dose prompts and display of “Missing X dose(s)” sections from this report, replacing them with a single “Incomplete for Age” %.</p> <p>Implications:</p> <ul style="list-style-type: none"> ▪ Missing 1/2/3 doses are under the sub-heading “Incomplete for Age” in the Vaccine coverage results summary table. This sub-heading needs a % value displayed. The assertion is that this value can be derived from the “Complete for Age” and “Un-immunized” (“Exempt/Refusal of all Vaccine” and “No immunization record”) percentages. <p>Sep 10, 2009: relevant minutes</p> <p>40. Nicole – not absolutely necessary to have this information – this is a different way of looking at the information to understand how far away they are from complete coverage.</p> <p>41. Irene / Dawn – right now don’t identify the number of missing doses</p> <p>44. TF: Don’t see why this information would be required. Probably legacy from the old software.</p> <p>45. AM: Information on the report includes how many doses have been administered.</p> <p>46. AM: “incomplete for age” % needs to be calculated from other % - for example 100% minus % complete for age minus % unimmunized.</p>
7	YP	<p>Topic: The Vaccine coverage results section of the report includes “Exemption/Refusal of All Vaccine” (as well as “No immunization record”) under the heading “Un-immunized” – agreement how to handle potential double counting is needed.</p>

RFC	Initiator	Text
		<div data-bbox="554 302 1646 467" style="border: 1px solid black; border-radius: 10px; padding: 10px; background-color: #e0ffe0;"> <p>Decision Summary: Clients that are partially immunized and exempt due to a Refusal of any of the selected Antigens will be counted in both sections – Incomplete for age and Exemption/Refusal. Status (Sept 16): Confirmed by jurisdictional representatives.</p> </div> <p>Sept 16 – New business rule for Exemption/Refusal category is as follows:</p> <p>Include clients with Special Considerations of type Exemption for ALL of the selected antigens for the report and where reason code = “secured jurisdictional iTERM value for Philosophical reason – refusal”</p> <p>As PHAC recommends utilization of terms: Un-immunized == 0 vaccinations, “Refusal for selected antigens” section should be promoted to a top level heading. “No immunization record” category will be renamed to “Un-immunized - No immunization record.”</p> <p>Assumptions:</p> <ol style="list-style-type: none"> 1. It is possible for a client who has some immunization records to subsequently become exempt due to “Refusal to all Vaccines” 2. It is possible for a client with an active exemption due to “Refusal to all Vaccines” to be forced into an immunization in some circumstances 3. Reporting Section: Vaccine Coverage Results (Col #8) originally included: “Of the clients that are completely unimmunized, count the number that are due to an exemption of Refusal to all Vaccines” 4. PHAC recommends following utilization of terms: under-immunized == not immune but some vaccinations, Un-immunized == 0 vaccinations. 5. Business Rule #4 originally stated: “...Exemptions for refusal and contraindications have their own section but are not considered completely immunized.” <p>Decision Justification: None needed – just confirming an implied business rule.</p>

RFC	Initiator	Text
		<p>10 Sep 2009: relevant minutes</p> <p>Define a business rule to determine how to handle these clients – are they counted as unimmunized or incomplete for age?</p> <p>16 Sep 2009: relevant minutes</p> <p>AM: Population is the number of people in the denominator.</p> <p>AM: Complete for all antigens – count & % (based on population N) who have no record in the forecast table that are overdue for any of the antigens selected & must have at least 1 immunization recorded</p> <p>AM: Incomplete for age – at least 1 immunization record (valid or invalid) & they have at least one that is overdue. (maps to UI due or over-due for forecasted agent)</p> <p>AM: Refusal for selected antigens (new column heading replacing Exemptions/Refusal of all Vaccine) – Summary of any exemptions for antigens selected for this report.</p> <p style="padding-left: 40px;">Lil: Exemption could be medical or religious/philosophical – TF: if you are medically contra-indicated it is stored as that type of special consideration so exemption is really either natural immunity or philosophical objection. TF: I recommend we should be counting: where Special Consider where type equals Exemption for all available antigens.</p> <p style="padding-left: 40px;">AM: Only option is then to interpret this as “exemptions to all antigens selected in this report”</p> <p style="padding-left: 40px;">Dawn: should reflect only for those antigens chosen in the report. This is more useful.</p> <p style="padding-left: 40px;">APO: Header “Refusal to selected antigens”</p> <p>AM: No immunization record – this is a general statement & NOT specific to the antigens selected. If a client has no immunization & no special considerations records at all in the system they will show in this count/%.</p>
8	YP	<p>Topic: All coverage reports currently include prompts to select Agent or Antigen level reporting – is the extra effort required for little used Agent level reporting justified?</p>

RFC	Initiator	Text
		<div data-bbox="556 300 1648 446" style="border: 1px solid black; background-color: #e0ffe0; padding: 10px; margin-bottom: 10px;"> <p>Decision Summary: All coverage reports are based on Antigen (Agent will not be supported). Status (Sep 10): Confirmed by jurisdictional representatives.</p> </div> <p>Assumptions:</p> <ol style="list-style-type: none"> 1. Current understanding is that the majority of jurisdictions do, or are moving to, antigen based reporting (Alberta is only known jurisdiction using Agent level reporting). Per Susan Guild in feedback: “Whether to report by Agent vs. Antigen: BOTH(!) ANTIGEN should be the basis for tabulating coverage data, however some jurisdictions collect and report on data by Agent. National Public Health (PHAC) looks at Antigens [YP: Alberta reports on Agents]. 2. Retaining Agent requirement will double the number of sub-reports (different SQL in addition to prompting) significantly increasing the effort required to complete this report. In particular a number of new business rules will need to be defined to crisp up how to roll up Antigen level content to the Agent level. 3. Version 3.0 of this DRDD describes the (newly named) Vaccine Results by Antigen section as follows: “These should be the antigens selected in the filters. If agents are selected in the filters – then these are the corresponding antigens”. This implies that Agent level reporting is really just a “rollup” of the Antigen level reporting operating behind the scenes. Alternatively, the DRDD may imply that user prompting should independently allow selection of Antigen/Agent and report output rollup detail at either Antigen or Agent (though all needed prompts are not currently specified). This would drive up effort required even further. <p>Decision Justification: Given that public health nationally is moving in the direction of standardizing on Antigen level reporting (and that it is logically superior to Agent level reporting), and the substantial effort and complexity savings possible, Agent level reporting should be dropped.</p> <p>Notes:</p>

RFC	Initiator	Text
		<p>Dropping of Agent level reporting does not remove the need to clarify handling of “dose number” values for Antigen level reporting. This topic is discussed in RFC #12.</p> <p>10 Sep 2009: relevant minutes</p> <p>23. Quebec does not need agent level – antigen level is the most useful level.</p> <p>24. Ontario wants antigen level.</p> <p>25. TF: Believe that BC needs to roll up at agent level.</p> <p>26. Dawn: Ontario has “immunization of school peoples act” – will want to know what coverage is for MMR and DT Polio. These are run frequently during the school year.</p> <p>27. AM: Report @ the antigen level also provides a roll-up for all antigen’s picked for the report. So if you pick M, M, and R antigens then the report will give a break-down by each antigen & also for all antigens.</p> <p>28 Aug 2009: Recent estimate based on assumption that Agent based reporting not required</p> <p>20 Aug 2009: Will require different (sub) reports (2x or 3x multiplier). Coverage by Age and Antigens will prompt and report by Antigen. Coverage by Age and Agent will prompt and report by Agent (or Antigen?).</p>
9	YP	<p>Topic: Reports that require custom prompt variations (especially exclusive input of one or another value or group values) requires the creation of (sub) reports.</p> <div data-bbox="554 1068 1646 1263" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px;"> <p>Decision Summary: Custom prompt pages may be considered in place of separate report variances. Status (Sep 25): Confirmed by jurisdictional representatives that separate report variances are not required for R6036 (see RFC 15).</p> </div> <p>Status: Awaiting resolution of other RFC that will affect the number of sub-reports – defer further discussion on this until the number of sub-reports has been determined.</p> <p>Recommend Exploring development of a standard means to include in-line instructions to</p>

RFC	Initiator	Text
		<p>generated report launch pages. This would remove the need for (sub) reports that exist solely to support prompting variation. Note: This would not prevent the user from disregarding in-line instructions and generating invalid reports.</p> <p>17 Aug 2009: While this is an option we feel this is no longer required seeing prompting will be greatly simplified.</p> <p>Decided against exploring development of a standard means to include in-line instructions to generated report launch pages. If needed for future reports, custom prompt page would support instructional text as is a customer page per report.</p>
10	YP	<p>Topic: R6036 includes prompting for denominator data but it is not clear how this interacts with other prompting (JOrg, City, Postal Code, Client Age) and needed business rules are missing.</p> <div data-bbox="562 711 1654 901" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: For R2.* the denominator population value will be entered instead of entering a denominator data set name. Status (Sep 18): Confirmed by jurisdictional representatives.</p> </div> <p>Assumptions:</p> <ol style="list-style-type: none"> 1. Jurisdictional Organization is an optional prompt – note there is no business rule or optional/mandatory column in the Filters table. (we need explicit required/optional fields) 2. The purpose of denominator data is to provide a long term repository of denominator data values for use in coverage reports. 3. Each row in the denominator data file includes jurisdictional and (optionally) geographic area identification as well as a count of clients by (optional) demographics data. 4. Type (ORG_IDENTIFIER_TYPE in 11700 Maintain denominator data) of geographic areas include: province, postal code, census tract, dissemination area (note City does not appear to be included). 5. Only one ORG_IDENTIFIER_TYPE can be supplied in a denominator data row. This

RFC	Initiator	Text
		<p>implies that prompting for R6036 cannot simultaneously specify Province/City and Postal Code as confirmed by business rules 19 and 20.</p> <ol style="list-style-type: none"> 6. Demographics data includes gender, age ranges (Age From, Age To, Age Units), risk factors (Risk Factor, Risk Factor Value). 7. All specific mentions of denominator data in this DRDD <ol style="list-style-type: none"> a. Section 1.6.1 Col# 2 states Population is “pulled from the selected denominator dataset of the selected parameters” b. Section 1.7 includes “Denominator Dataset Name” of type text with no validation rules or defaults. c. BR #13: “The denominator (ie Population (N)) will either be populated based on the selected denominator set OR based on the parameters selected” d. BR #14: “If Denominator data file is not used to run the report, then the Clients who meeting the Criteria based on parameters are used as the Denominator.” 8. Postal codes are stored as VARCHAR data in the database (at least for Client Physical Address). A mapping from Organizational Unit to Postal Code can be represented in the ORG_UNIT_BOUNDARY and ORG_UNIT_BOUNDARY_POSTL_CD tables but there appears to be no application functionality to maintain or populate this table (TODO Anushka to verify if this is consistent with her understanding). 9. Postal Codes (at 6 digits) are always contained within a single Jurisdictional Organization node. 10. While not explicitly stated in this DRDD in any way, it is now understood that postal code prompts will not typically be used to enter full (6 character) postal codes. TODO verify that this prompt will only be used for 3 char postal code “prefixes” (e.g. “V5H”). 11. The denominator data DDUC is very vague about the granularity of the data (it does not mention that all rows are summaries – no rollups will be supported) and validation rules to be applied. It is implied that DRDDs that use denominator data will specify this detail. DRDD 6036 specifies none of this detail so further assumptions are made below.

RFC	Initiator	Text
		<p>a. Support for using supplied denominator data and deriving denominator data from Panorama data will likely require additional sub reports (factor up to 2x). Originally postulated sub-reports (now understood to probably be incomplete) include (possibly also including full and prefix versions of Postal Code</p> <p>Analysis:</p> <ol style="list-style-type: none"> 1. The main benefit of using a denominator data file is to avoid having to lookup (and enter) that value when a report is run. Note however that with the currently specified approach the user still has to: <ol style="list-style-type: none"> a. Type in the name of the denominator data file (no validation is specified). b. Open up and edit that report each time the denominator data file is re-issued (presumably each year) to “get that value” into the report. This places essentially the same data entry burden on the user as entering the denominator value directly. c. Detect the subtle error cases that are possible when there have been errors in denominator data integration into Panorama. d. Additionally, Panorama specific periodic administrator managed denominator data maintenance is required within the jurisdiction. 2. The natural conclusion to draw is that whatever filters exist for a DRDD that are in common (for this DRDD the list is province, postal code prefix, jurisdictional organization, age range and gender) with supported denominator data columns are used to “select” the one applicable row out of the denominator data file. Note the following: <ol style="list-style-type: none"> a. It is possible for some jurisdictions to supply denominator data at a granularity above the lowest value supported by the file (some columns of the file are always null) or possibly multiple granularities (some columns are null for some rows) – and therefore run their reports at that or multiple granularity as well. b. Age ranges would need to precisely match in order to be used but RFC #5 defers Age as of Date prompting until historical lookup is possible. This will make it very problematic to use this feature of denominator data unless it is changed to (birth)

RFC	Initiator	Text
		<p>data ranges.</p> <ul style="list-style-type: none"> c. Note this point implies City, Census Tract, Dissemination Area, Risk Factor and Risk Factor Value cannot be used with denominator data for R6036. <p>3. Wherever an “exact match” is required between a field in the denominator data file and a report’s prompt the denominator data file values will need to use the exact same format as the application for that field. This is an obligation on the maintainer of denominator data but currently DDUC 11700 is mostly silent on this topic.</p> <ul style="list-style-type: none"> a. Where that field is typed as a terminology value (Province, Gender) presumably it will be desirable to match on the code (even though it is not theoretically unique) rather than the coded concept id. b. For entities in the system that have only a unique identifier (Jurisdictional Organization) its system generated identifier will need to be supplied. c. For data types that are not formally modeled as entities in Panorama (Birth Dates, Postal Codes, Census Tracts and Dissemination Areas) <p>Observation: This appears to be a lot of complexity to avoid looking up a single number and entering it (the current solution requires entering the denominator data file name).</p> <p>28 Aug 2009: Estimates to date have assumed that denominator data will only be used at the Jurisdictional Organization level for R6036. Changing this assumption will increase the number of sub reports (from 4 to potentially 6 or higher) required (and development effort) for the report.</p> <p>Recommendation under investigation</p> <ul style="list-style-type: none"> - Create a sub-report to generate denominator data from Panorama client base. <p>20 Aug 2009: We must keep both. Need to analyze how many sub reports we need for this report. Then decide on if custom prompt pages are required.</p>
12	YP	<p>Topic: The detail table in R6036 includes dose counts for each Antigen included in the report. A clear business rule defining how to determine this count is required.</p>

RFC	Initiator	Text
		<div data-bbox="548 285 1665 500" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin-bottom: 10px;"> <p>Decision Summary: Dose Count for Antigens agree upon. See BR # = max (antigen dose count, max revised-dose# of any Immunization for an Agent that contains that the selected Antigen). Status (Sept 30): Confirmed by PMO representatives.</p> </div> <p>Problem with dose count algorithm and repeating series...what if 1st series of 3 was captured via one dose with revised dose number equal to 3, and the 2nd series of 3 was captured in real time with 3 separate records. Our count will be 4 when in reality we have 6 doses.</p> <p>Discussion from Sept 30th (Susan Guild, Christine Patterson, Shawn Brant and Tracy Forbes representing BC/Y</p> <p>Recommendation: Dose # is only set at the time an Immunization is entered into Panorama – it is never updated by a user or the system after that and defect 4145 is closed with no action. In business terms, dose # means dose number at the time of the creation of the immunization record. Agreed</p> <p>Recommendation: Don't reuse dose numbers across multiple series – keep incrementing. Agreed.</p> <p>Agreed to Shawn's Alternate option C for Dose count:</p> <ul style="list-style-type: none"> • If an immunization has a revised dose #, then the revised dose # is the starting value and any records with earlier immunization dates are not counted. • Latest revised dose # and add on any doses. • If no revised doses, count of the valid antigen records. <p>Assumptions:</p> <p>Dose counts are included in R6036 and R6042. Note R6042 does not include coverage evaluation data.</p>

RFC	Initiator	Text
		<p>Each Antigen can be present in many different Immunizations (Agents) administered to a client. It is safe to assume that when the same Antigen is has been provided in two different Agents that it is providing the same protection in either case.</p> <p>Each Immunization has a Dose # (usually set by the forecaster when forecasted and propagated without change into the Immunization) as well as a Revised/Forced Dose Number (that is used by practitioners to override the Dose # according to their best judgement. It is common for a single historical Immunization to be added with Force Dose Number = <number of doses required in a schedule> in order to “bring a client up to date.</p> <p>There is a defect (4145) currently being worked that may redefine handling of Revised/Forced Dose Numbers within the system. This has been discussed by Yvette Pollock and Susan Guild. From defect 4145: “The forecast engine uses the antigen dose count and revised-dose-# field in validation and forecast logic. The dose-# field is not used.”</p> <p>Decision Justification: BR #11 appears to have been written in error. If revised dose is used by the forecaster, it must also be used to calculate antigen dose counts.</p> <p>Therefore:</p> <p>Dose Count for Antigens = max (antigen dose count, max revised-dose# of any Immunization for an Agent that contains that the selected Antigen)</p> <p>Previous discussions including items only of interest if Agent level reporting returns</p> <p>Dose Count For an Agent:</p> <p>Dose = max (dose/revised dose) of all immunizations for that exact agent.</p>
13	YP	<p>Topic: CSV doesn't lend itself to a report of aggregate values and multiple tables</p> <div data-bbox="562 1214 1654 1380" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Educate users to avoid choosing CSV output option. We will support both PDF and Excel.</p> <p>Status (Sept 23): Confirmed by jurisdictional representatives.</p> </div>

RFC	Initiator	Text
		<p>Extract reports requiring of comma-separated values to view via Excel formatting may contain only a single SQL clause (no queried heading information and only one table).</p> <p>Decision Justification: A code change would be required to suppress the CSV option.</p> <p>NOTE: Potential ER is required to enhance Reports Launch Page to know which formats are supported for which reports.</p>
14	YP	<p>Topic: Confirm the business requirement for include the “include invalid”.</p> <div data-bbox="554 591 1646 756" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Do not include Invalid Antigen doses in this report. Status (Sept 25): Confirmed by jurisdictional representatives.</p> </div> <p>Assumptions:</p> <ol style="list-style-type: none"> 1. The forecaster decomposes each Immunization into “antigen doses” that are validated in advance of forecasting future Immunizations. <ol style="list-style-type: none"> a. Only valid antigen doses are considered by the forecaster and contribute to the % complete. b. Invalid antigen components are stored by the system. 2. The Immunization application handles and displays the concept “Invalid Immunizations” as: <ol style="list-style-type: none"> a. One or more antigen components deemed invalid by forecaster. b. Web application determines that client has already been immunized with same agent that day (agent is not in rules.xls and is therefore not invalidated) 3. BR#12: If invalid doses is selected as a parameter then the invalid doses are counted in the columns 1 dose, 2 dose etc.

RFC	Initiator	Text						
		<p>Decision Justification:</p> <ul style="list-style-type: none"> • Specification states that if included, invalid doses should be counted. Invalid dose are excluded from the calculation for “complete for age”. If included there would be no correlation between the “complete for age” total and the antigen counts for each antigen. • Potential ER to create new report: Could be a different business problem if there is a need to know how many invalid antigens were administered by which providers, etc. <p>Note: Prompt should be dropdown list rather than checkbox (Yes/No)</p>						
15	YP	<p>Topic: Determine required prompting variability to select clients (and optionally calculate denominator) and drive out number of separate (but related) reports.</p> <div style="border: 1px solid black; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Combine all prompts into a single report. To avoid use of sub-reports, prompts that may be left blank must be optional at the UI level but can be enforced at the report level. Status (Sep 23): Confirmed by jurisdictional representatives.</p> </div> <p>The following prompting variations are supportable within the confines of a single report (vs. multiple sub-reports).</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;">User selects Parameter 1</td> <td style="width: 33%; vertical-align: top;">User selects one of the following for Parameter 2 JOrg OR Province and Cities OR Postal Code FSA</td> <td style="width: 33%; vertical-align: top;">User decides to enter or leave blank Parameter 3 Denominator Value</td> </tr> <tr> <td style="vertical-align: top;">DOB range</td> <td style="vertical-align: top;">(1st three characters aka Forward Sortation Area FSA) OR</td> <td></td> </tr> </table>	User selects Parameter 1	User selects one of the following for Parameter 2 JOrg OR Province and Cities OR Postal Code FSA	User decides to enter or leave blank Parameter 3 Denominator Value	DOB range	(1st three characters aka Forward Sortation Area FSA) OR	
User selects Parameter 1	User selects one of the following for Parameter 2 JOrg OR Province and Cities OR Postal Code FSA	User decides to enter or leave blank Parameter 3 Denominator Value						
DOB range	(1st three characters aka Forward Sortation Area FSA) OR							

RFC	Initiator	Text
		<p style="text-align: center;">Postal Code</p> <p>Assumptions:</p> <ol style="list-style-type: none"> 1. It is desirable to have a single report from a usability and development effort perspective. 2. DOB range is required. 3. One of JOrg, Cities or Postal Code Prefix or Postal Code is required. <ul style="list-style-type: none"> ○ This cannot be enforced by the prompt screen without using sub-reports. ○ The prompt page cannot prevent the user from populating all four. 4. The report will contain summary results for the JOrg selected. <ul style="list-style-type: none"> ○ The two tables (coverage results and breakdown by antigen) will be rendered once for the JOrg selected and once for each of its child JOrgs exactly one level below. <ul style="list-style-type: none"> ▪ All clients associated with the JOrg and its descendant JOrgs will be counted and rolled up into the corresponding results tables. ○ If the lowest level JOrg is selected, the report will display results for that single JOrg. ○ A JOrg will be selected and not an Org or AOrg. TODO: can we check in report that a JOrg was selected and return error if ORG or AORG is chosen? 5. The cities displayed in a multi-select box will be drawn from a new jurisdictionally configured vocabulary domain. 6. The Postal Code or Postal Code Prefix is that of client's preferred address. <ul style="list-style-type: none"> ○ The ability to enter multiple values is not yet integrated into the report launch page (though it is available by BO) ○ Custom prompting work or integrating additional prompt definitions into R2.* is not feasible given the current schedule.

RFC	Initiator	Text
		<p>7. If no denominator data value is entered, the report will generate the value by counting all selected clients.</p> <p>8. Gender is an optional prompt (See RFC 18)</p> <p>Decision Justification:</p> <ul style="list-style-type: none"> • Though one of JOrg, Cities, Postal Code or Postal Code Prefix is required, the desired “single report” approach does not support its enforcement at the first (GUI) level. • Recommend that the report produce an error message if the user enters more than one of these 4 values. • As the entry of multiple, common delimited values is not supportable in R2.*, the prompt page will supply a text box for the Postal Code and Postal Code prefix and the user will be expected to enter one or the other (single) value. <ul style="list-style-type: none"> ○ To prevent performance degradation, a generated, indexed column for the first 3 characters in a postal code will be added to the reporting database. <p>Implications</p> <p>IBM must provide some examples of where in-report errors will come up & how this will be consistently applied.</p>
16	YP	Merged with RFC #10
17	YP	<p>Topic: Should the default selection for Agent/Antigen selection be “All” (see section 1.7 Filters)?</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; background-color: #e0ffe0; margin: 10px 0;"> <p>(imposed) Decision Summary: Technical limitation prevents and pre-selection of default choices. Status (Sept 18): Confirmed by Phil Abraham and communicated to jurisdictional representatives via this updated DRDD.</p> </div> <p>Defaulting to select “All” will cause usability problems given the decision to use existing full lists of Agents/Antigens in prompt(s) for this report (RFC 11) and the typical use to run the report</p>

RFC	Initiator	Text
		only on the agents in the recommended schedules. Current vocabulary domain “InventoryMgmtProductAntigensAntigen” contains 70 antigens.
18	YP	<p>Topic: To clarify optional vs required prompts.</p> <div data-bbox="554 428 1644 597" style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Option versus required prompts as outlined below. Status (Sept 28): Confirmed by jurisdictional representatives Sept 28.</p> </div> <p>Required prompt fields:</p> <ul style="list-style-type: none"> • Date of Birth Range From • Date of Birth Range To • Antigen • One of: <ul style="list-style-type: none"> • JOrg • Province AND Cities • Postal Code FSA • Postal Code <p>Optional prompt fields:</p> <ul style="list-style-type: none"> • Denominator value (text box) <ul style="list-style-type: none"> ○ If no denominator data value is entered the report will generate the value by counting all selected clients (without applying condition of coverage). • Gender (a multi-select box containing iTerm values). <ul style="list-style-type: none"> ○ Not selecting a gender is the same as selecting Female, Male and Undifferentiated. ○ This will accommodate the addition of more gender concepts. Ontario has Unknown and unreported in addition to the 3 secure codes for gender. “Undifferentiated” is known to the Forecaster.

RFC	Initiator	Text
		<ul style="list-style-type: none"> ○ Clients with Unknown or Unreported gender, will also not be forecast so they should also be filtered out. From RFC 19: Clients where gender = null should not be included. ○ Only the secured genders iTerm values will be displayed for this report (believe this already maps to an existing vocab domain)
19	YP	<p>Topic: Determine clients statuses that should be included in coverage report</p> <div style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Inactive clients, indeterminate clients, non-human clients and clients with no gender will not be included in the report. Status (Sept 23): Confirmed by jurisdictional representatives.</p> </div> <p>Assumptions:</p> <p>The client record Inactive indicator may contain one of the following values:</p> <ul style="list-style-type: none"> • blank: client is Active • Y: client is Inactive (includes deceased clients and clients lost to follow-up) • I: client has been merged and is “I”dle • B: client has been merged and this is a “B”ack-up record containing additional data needed for any future “unmerge” • Deceased clients are included in the Inactive category. • Indeterminate clients should be filtered out because they can’t be placed on any immunization schedule and therefore they cannot be forecast. • Non-human clients should not be included. • Clients where gender = null should not be included.

RFC	Initiator	Text
		<p>Decision justification</p> <ul style="list-style-type: none"> • It was not well know at the time of the report design how the inactive flag was to be used. There does not appear to be a business reason to include deceased, merged and lost to follow-up clients in a coverage report. • We never want to include deceased and merged clients so we would have to filter them out in all cases as follows. <ul style="list-style-type: none"> ○ Deceased clients (in the target DOB range) will normally be “over-due” for some antigens and should therefore be excluded from this. Post R2.0 we may want to look at the “Date of death” field. ○ Idle or Back-up records should be excluded from all Immunization reports as their inclusion will mean counting the same person multiple times.
20	YP	<p>Topic: Data access controls are required for this report. A user’s Data Access Org should control results to which user has access.</p> <div style="border: 1px solid black; border-radius: 15px; background-color: #e0ffe0; padding: 10px; margin: 10px 0;"> <p>Decision Summary: Data Access Control filters should not be included. Status (Sept 28): Confirmed by jurisdictional representatives.</p> </div> <p>Discussion Sept 28th</p> <ul style="list-style-type: none"> • Because some client’s data may not be up-to-date (i.e. students may have a JOrg of Ottawa but an address in Toronto, we don’t want any filtering by the user’s Data Access Scope. • Will look into adding the filter selections to the report audit records as a future enhancement. <p>BR: Results are filtered on the user’s current organizational-role Data Access Scope. The user’s Data Access Scope must at the same or a higher level as the clients to be included in this report.</p>

RFC	Initiator	Text
		<p>Unless the user has a Data Access Scope set to Ontario Ministry of Health, a user from Toronto who runs a report using a cities filter of Ottawa or an Ottawa postal code will likely generate a report based on zero clients.</p> <ul style="list-style-type: none"> • Should we have an “in-report” error message warning that some clients have been filtered out due to data access restrictions? • If you are a user in Toronto can you select Ottawa? Need to include in discussion of data filtering on Monday. <p>Assumptions</p> <ol style="list-style-type: none"> 1. There is no JOrg enforcement at the client level (BCY has special enhancement for this) but only JOrg should be associated with a client record as JOrg is the “health boundary”. 2. Requirement is that you can only see data on the report for a JOrg that user have access to. 3. Every user that has access to immunization functionality has access to any information for any JOrg (though it must be accessed one client or cohort (through mass-immz) at a time) <ol style="list-style-type: none"> a. Access via application functionality is different than what data they can show in this report so cannot generalize data access available in application to that in a report. b. Even if the client was immunized in your jurisdiction, they should not show up in your coverage report.

Appendix B – Clarifications

This section is retained for historical purposes only.

#	Reference #	Question	Answer
1.			

Appendix C – Sources

This section is retained for historical purposes only (to record Document Clarification List (DCL)#, Enhancement Request (ER)#).

Source Document Reference

Appendix D – Confirmation

This section is retained for historical purposes only.

Date	Attendee
yyyy MMM dd For example, 2009 Mar 01	

Appendix E – Report Naming Convention

The report name is specified according to the naming convention as described in the Solutions Reports and Extracts Use Guide. The convention is summarized below:

A Report number consists of:

- A Report type identifier
- A Detailed Design Use Case (DDUC) number (associated with a Functional Area)
- Alpha characters (if applicable), denoting a specific report in a series of reports.

A Report name consists of:

- A brief description of the report output
 Example: R7500B Maintain Personal Workload – Assignment List

Where

- R = Report type identifier

- 7500 = Associated DDUC number
- B = Alpha character (in this instance, 'B' denotes the second report in the series of 7500 Reports)
- Maintain Personal Workload – Assignment List = Brief description of report