



CCRS Technical Document: RUG Weighted Patient Day (RWPD) Methodology, 2017–2018



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Background

The purpose of this document is to describe how the Resource Utilization Groups (RUG) Weighted Patient Day (RWPD) calculations are performed for a single Continuing Care Reporting System (CCRS) facility for a specified reporting period.

This documentation is a description of how to produce RWPD data that matches the CCRS RWPD program output.

This description covers the processing of CCRS **activities** (e.g., admissions, discharges and assessments) in order to produce RWPD **events** for a given reporting period.

Please note that the methodology and examples described in this document assume that all data has been successfully submitted to CCRS. Additionally, 2014–2015 dates and Case Mix Index (CMI) values are used in this document for fictitious examples of CCRS resident assessment data. These examples are illustrative and are still relevant for more recent fiscal years.

RWPD methodology

CCRS data for each resident is used to create periods of care — patient days — that are classified as being assessed or unassessed.

Assessed patient days are those associated with a CCRS assessment that has a RUG-III (44-group) group. For the purposes of this document, the term “RUG-III” will refer to the RUG-III (44-group) version 5.11b classification scheme. The RUG group is assigned to each assessment using the Canadian version of the RUG-III grouping methodology. Assessed patient days can be further classified as on-time and late patient days. The RWPDs for assessed periods are calculated as the number of days associated with a RUG-III group multiplied by the group-specific Case Mix Index (CMI) value.

Unassessed patient days are those not associated with a RUG group. The RWPDs for unassessed periods are weighted depending on the number of days the person spent at the facility.

RWPD reports that summarize weighted patient days are produced for distinct reporting periods for each facility reporting data to CCRS.

See Appendix 3 for more information about the RUG-III grouping methodology and CMI values published by CIHI.

RWPD reporting period dates

For each RWPD reporting period, there is a reporting period start date and a reporting period end date. To correctly calculate the RWPD patient days, the RWPD process uses an additional date — the RWPD patient day date — which is 1 day after the reporting period end date.

Table 1 shows the RWPD report dates for the reports produced for the 2014–2015 fiscal year.

Table 1 RWPD reporting periods for fiscal year 2014–2015

RWPD reporting period (RP)	Start date (RP_START_DATE)	End date (RP_END_DATE)	RWPD patient day (PD) date (RWPD_PD_DATE)
Quarter 1 April to June	April 1, 2014	June 30, 2014	July 1, 2014
Quarter 2 April to September	April 1, 2014	September 30, 2014	October 1, 2014
Quarter 3 April to December	April 1, 2014	December 31, 2014	January 1, 2015
Quarter 4 April to March	April 1, 2014	March 31, 2015	April 1, 2015

Unassessed patient days

If an assessment is not completed for an episode, the patient days are considered to be unassessed. For example, a resident is discharged from a facility on his or her fifth day without having had an admission assessment completed.

The RWPDs for unassessed episodes are calculated based on the number of days the patient stayed at the facility.

- If the patient was discharged after staying 13 days or less, RWPDs are calculated as the **facility-assessed CMI** value multiplied by the number of patient days.
- If the patient was discharged after staying 14 days or more, the RWPDs are calculated using the **lowest CMI** value (of all RUG group CMI values for the fiscal year) multiplied by the number of patient days.

Assessed patient days

When assessments are completed and submitted according to CCRS guidelines, the patient days are considered to be assessed. The RWPDs are calculated as the number of days associated with a RUG-III group multiplied by the group-specific CMI value.

Late patient days

Late patient days refer to periods where an assessment was not completed according to schedule. There are 2 categories of late patient days:

- An admission assessment was not completed within 14 days of the resident’s admission.
- Other assessments (e.g., quarterly) are completed beyond the time-limited (92-day) association period.

Weighting late patient days

The RWPD process allows 2 approaches for calculating the values for late patient days.

RWPD Weighting Option 1 — Calculate RWPDs for late patient days using the group-specific CMI

The late patient days are weighted using the fiscal year– and RUG group-specific CMI value.

Example

An assessment submitted by a facility is assigned RUG group code SE1 and covers a 100-day period.

Table 2 Example 2014–2015 RWPD calculation using Option 1

RWPD event description	Patient days	Assessment RUG	CMI–2014 value	RWPD assessed
Assessment	92	SE1	0.9767	89.8564
Late assessment	8	SE1	0.9767	7.8136
Total	100	—	—	97.6700

Notes

— Not applicable.

For Option 1, both the first 92 on-time days and the 8 late days are weighted using the group-specific CMI value.

This table shows CMI values from the RUG-III (44-group) methodology for 2014–2015.

RWPDP Weighting Option 2 — Calculate RWPDPs for late patient days using the lowest CMI

The late patient days are weighted using the **lowest CMI** value from among the fiscal year– and RUG group-specific CMI values.

Example

An assessment submitted by an Ontario facility is assigned RUG group code SE1 and covers a 100-day period.

Table 3 Example 2014–2015 RWPDP calculation using Option 2

RWPDP event description	Patient days	Assessment RUG	CMI–2014 value	RWPDP assessed
Assessment	92	SE1	0.9767	89.8564
Late assessment	8	—	0.3819	3.0552
Total	100	—	—	92.9116

Notes

— Not applicable.

This table shows CMI values from the RUG-III (44-group) methodology for 2014–2015.

For Option 2, the first 92 on-time days are weighted using the group-specific CMI value, and the 8 late days are weighted using the lowest CMI value.

The lowest CMI from the RUG-III (44-group) methodology is for RUG-III group “PA1,” which for 2014–2015 has a value of 0.3819.

Currently, CCRS RWPDP reports are created using Option 1.

Basic steps for this approach to creating RWPD data

This document describes an approach to creating RWPD data for a single facility for a specified reporting period. The approach is described in the following sections:

Section 1

Obtain data from CCRS records (admission, discharge, re-entry and assessment records) for episodes where any activity occurred within the specified RWPD reporting period.

Section 2

Use CCRS activity data to create unweighted RWPD events for each resident.

Section 3

For each RWPD event, create weighted events by calculating the RWPD value. Use the weighted events to derive resident totals, facility totals and jurisdiction totals.

Section 4

Using the weighted events, create **weighted, resident** and **facility** RWPD files. These files may be used to produce various RWPD reports.

Appendices with examples of CCRS data and RWPD events

A series of examples has been created to illustrate CCRS data and the corresponding RWPD events that would be produced using this RWPD methodology (see Table 4).

- Appendix 1 events are weighted using RWPD weighting Option 1.
- Appendix 2 events are weighted using RWPD weighting Option 2.

See Appendix 1, Example 10 and Appendix 2, Example 10 regarding Option 1 and Option 2 for weighting late patient days.

Table 4 List of examples included in the appendices

Example	Description
1	An episode with an admission, 3 assessments and a discharge occurring within the RWPDP reporting period
2	An episode with an admission and 3 assessments occurring within the RWPDP reporting period; the resident has not been discharged
3	An episode without an assessment occurring within the RWPDP reporting period; resident discharged and weighted as unassessed 13
4	An episode without an assessment occurring within the RWPDP reporting period lasting 24 days; resident discharged and weighted as unassessed 14
5	An episode with an admission assessment and discharge; then a re-entry within 92 days of the admission assessment and discharge under the same Unique Resident Identifier (URI)
6	A resident with 2 episodes (separate admissions). An episode with an admission assessment and discharge; then a different episode for the same resident captured as a re-entry with discharge under a different URI
7	An episode where there is a significant correction to an admission assessment and another significant correction to a quarterly assessment
8a	An episode where the first assessment is not an admission assessment Note that for Ontario complex continuing care facilities, an admission adjustment is made; for all other facilities (including Ontario long-term care facilities), the admission adjustment is not made.
8b	A re-entry where the entry and discharge occur on the same day (an adjustment to patient days is made)
9	An episode where a discharge assumed event is created
10	An episode where assessments are not completed following CCRS guidelines and where late patient day events are created
11	An episode lasting longer than the RWPDP reporting period; the reports include only patient days within the RWPDP reporting period

Section 1: CCRS data used within RWPD

Data is collected by facilities for each resident within CCRS. The data is collected by facility staff completing MDS 2.0 forms, entering the data into a computer system and submitting the data to CIHI. Data is checked against edit specifications at CIHI and, if accepted, is added to tables within the CCRS database. Data that is not accepted is returned to the facility for correction.

1.1 Fields required for RWPD

To produce the RWPD reports, selected fields are taken from the CCRS database (see Table 5). In rare cases, there is more than one significant correction assessment submitted to CIHI for the same assessment (a correction to a correction). In this case, the completion date is used within the RWPD process to identify the order of significant correction assessments used within RWPD. Please note that as of June 2014, significant correction assessments no longer appear as RWPD events; instead, the associated assessment is updated with the correction once it has been successfully submitted to CCRS.

Table 5 Fields used within RWPD production

CCRS activity	Fields required for RWPD
Admission	Admission date
Discharge	Discharge date
Re-entry	Re-entry date
Admission assessment	Assessment reference date (A3) RUG code* Reason for assessment AA8 = 01
Full assessment	Assessment reference date (A3) RUG code* Reason for assessment AA8 = 02 or 04
Significant change in status assessment	Assessment reference date (A3) RUG code* Reason for assessment AA8 = 03
Quarterly assessment	Assessment reference date (A3) RUG code* Reason for assessment AA8 = 05 or 10

Note

* The RUG code is added to each assessment at CIHI using the RUG-III grouping methodologies.

1.2 Fields required for RWPD identification

A number of identifier fields are also required for the RWPD process.

Facility	facility code
HRN	A6A-health-record-number
URI	unique registration identifier

For the purposes of the RWPD methodology, facility and health record number (HRN) uniquely identify a resident, and the URI identifies a period of care for that resident.

1.3 Sort order for RWPD activities

The activity data contained in the data cut is sorted by

- Facility
- HRN
- URI
- Activity date (e.g., admission date, assessment date)
- Reason for assessment (AA8)
- Completion date (RWPD event end date)

The sort order includes reason for assessment and completion date for cases where one or more significant correction assessments are submitted. Please note that as of June 2014, significant correction assessments no longer appear as RWPD events; instead, the associated assessment is updated with the correction once it has been successfully submitted to CCRS.

The completion date for any RWPD event refers to the start date of the next RWPD event.

1.4 RWPD reporting period start and end dates

RWPD reports can be created for each fiscal quarter or for a longer reporting period. RWPD reports are produced each quarter of the fiscal year, covering a cumulative period.

Refer to Table 1 for the start and end dates for 2014–2015 RWPD reports.

Section 2: Creating unweighted RWPD events for each resident

This section describes the creation of unweighted RWPD events using the activity data contained within the data cut.

The first steps deal with the creation of a basic timeline of events based on activities reported within the data cut. Using the basic timeline, the next steps create the RWPD events that cover the RWPD report period.

2.1 Create the initial timeline of activities

A timeline of CCRS activities is created using the information within the data cut. For each event, the event name, event date, associated assessment reference date and RUG group are set (EVENT_NAME, EVENT_DATE, ASSOCIATED_ASSESSMENT_DATE and RUG). See Table 6 for more details.

Table 6 Events created on the timeline

Event name	Description (event date and RUG group)
Admission	Created based on a CCRS admission/re-entry form <ul style="list-style-type: none"> The event date for this is the admission date on the admission/re-entry form (AB1). If there is an admission assessment completed for the resident, this event has the associated assessment reference date and RUG group from that assessment; otherwise these fields are blank.
Admission assessment	Created using admission assessment information <ul style="list-style-type: none"> The event date and associated assessment date is the assessment reference date (A3). The event RUG group is taken from this assessment.
Full annual assessment	Created using full annual assessment information <ul style="list-style-type: none"> The event date and associated assessment date is the assessment reference date (A3). The event RUG group is taken from this assessment.
Significant change in status assessment	Created using significant change in status assessment information <ul style="list-style-type: none"> The event date and associated assessment date is the assessment reference date (A3). The event RUG group is taken from this assessment.
Quarterly assessment	Created using quarterly assessment information <ul style="list-style-type: none"> The event date and associated assessment date is the assessment reference date (A3). The event RUG group is taken from this assessment.

Event name	Description (event date and RUG group)
Discharge	<p>Created based on a CCRS discharge form</p> <p>(There are 3 discharge reason codes: 06 — discharge — return not anticipated; 07 — discharge — return anticipated; and 08 — discharged prior to completing initial assessment. The differences in discharge type have no impact on RWPDP processing.)</p> <ul style="list-style-type: none"> • The event date is the discharge date. • The RUG group and associated assessment date are blank for this event.
Re-entry	<p>Created based on a CCRS admission/re-entry form</p> <ul style="list-style-type: none"> • The event date is the re-entry date (AB1) on the admission/re-entry form. • This event has the RUG group and associated assessment date from the previous assessment in the timeline.

Note

As of June 2014, significant correction assessments no longer appear as RWPDP events; instead the associated assessment is updated with the correction once it has been successfully submitted to CCRS.

2.2 Add “discharge assumed” events

Discharge assumed events are added to the timeline when the last activity within the data cut is not a discharge **and** no data has been submitted to CCRS for at least one **full** fiscal quarter at the time the RWPDP reports are produced (see Table 7).

Table 7 Discharge assumed event dates for 2014–2015

Scenario	2014–2015
<p>For Q1, Q2, Q3 or Q4 RWPDP reports</p> <p>The last episode activity within the RWPDP data cut</p> <ul style="list-style-type: none"> • Is not a discharge; and • Occurs before April 1, 2014. 	<p>Create a discharge assumed event</p> <p>Event date = April 1, 2014</p>
<p>For Q2, Q3 or Q4 RWPDP reports</p> <p>The last episode activity within the RWPDP data cut</p> <ul style="list-style-type: none"> • Is not a discharge; and • Occurs after March 31, 2014, and before July 1, 2014. 	<p>Create a discharge assumed event</p> <p>Event date = July 1, 2014</p>
<p>For Q3 or Q4 RWPDP reports</p> <p>The last episode activity within the RWPDP data cut</p> <ul style="list-style-type: none"> • Is not a discharge; and • Occurs after June 30, 2014, and before October 1, 2014. 	<p>Create a discharge assumed event</p> <p>Event date = October 1, 2014</p>
<p>For Q4 RWPDP reports</p> <p>The last episode activity within the RWPDP data cut</p> <ul style="list-style-type: none"> • Is not a discharge; and • Occurs after September 30, 2014, and before January 1, 2015. 	<p>Create a discharge assumed event</p> <p>Event date = January 1, 2015</p>

See Example 9 in Appendix 1 for an example of discharge assumed events.

2.3 Adjustment to “admission” event when the admission assessment is replaced with a “significant correction”

In keeping with CCRS guidelines, the first assessment following an admission should be an **admission assessment**.

If the assessment associated with an admission event is replaced by a significant correction assessment, then the admission assessment is overwritten using the assessment information from the significant correction assessment. Please note that as of June 2014, significant correction assessments no longer appear as RWPD events; instead, the associated assessment is updated with the correction once it has been successfully submitted to CCRS.

See Example 7 in Appendix 1 for an example of an admission event weighted using a significant correction assessment.

2.4 Admission adjustment for incorrect assessment type

As mentioned above, in keeping with CCRS guidelines, the first assessment following an admission should be an **admission assessment**.

Ontario CCC facilities

For Ontario complex continuing care (CCC) facilities, when the first assessment after an admission is not an admission assessment, the admission event is treated as unassessed within the RWPD calculations.

For these admission adjustment events, the assessment information is set to blank (the events will be treated as unassessed):

ASSOCIATED_ASSESSMENT_DATE = blank

RUG_GROUP_CODE = blank

Remaining CCRS facilities (including Ontario LTC facilities)

For all other CCRS facilities (including Ontario LTC facilities), the admission adjustment is not applied for RWPD reports.

Example 8a in Appendix 1 includes an admission adjustment for an Ontario CCC facility.

Example 8b in Appendix 1 shows the same scenario for a CCRS facility (not an Ontario CCC facility), but the admission adjustment is **not** applied.

2.5 Add “late assessment” events

For CCRS

- Admission assessments are due within 14 days of an admission; and
- After the admission assessment is completed, assessments are due within 92 days of the most recent assessment.

A late PD (assessment due) event is added to the timeline to mark the date when an assessment was due (but was submitted after the due date).

For this step, the date of the prior assessment and the date of the next event are added to the timeline (PRIOR_ASSESSMENT_DATE and NEXT_EVENT_DATE).

2.5.1 Late admission assessments

If the event is an admission and the next event is an admission assessment that takes place more than 14 days after the admission, a late admission assessment event is created in the RWPD report:

EVENT_DATE = ADMISSION_DATE + 14

EVENT_DESCRIPTION = “Late PD (assessment due)”

2.5.2 Late assessments

If the event is an assessment and the next event is more than 92 days after the assessment date, a late ongoing assessment event is created in the RWPD report:

EVENT_DATE = ASSOCIATED_ASSESSMENT_DATE + 92

EVENT_DESCRIPTION = “Late PD (assessment due)”

2.5.3 Late assessments (after a re-entry)

When there is a discharge and re-entry between assessments, the identification of late patient days is slightly more complex. The guideline that ongoing assessments are due within 92 days of the most recent assessment still applies.

If the event is a re-entry and the number of days between the prior assessment date and the next event date is more than 92 days, a late ongoing assessment event is created in the RWPD report:

`EVENT_DATE = PRIOR_ASSESSMENT_DATE + 92`

- This date is 92 days after the previous assessment.
- This date will be after the re-entry date and before the date of the next event.

`EVENT_DESCRIPTION = "Late PD (assessment due)"`

See Example 10 in Appendix 1 for examples of late patient day events.

2.6 Create basic RWPD events

The timeline of events can now be used to create basic RWPD events. An RWPD event will be created for each event on the timeline using the event information and the date of the next event.

The RWPD fields presented in Table 8 roughly correspond to what is presented in the CIHI CCRS RWPD reports.

Table 8 RWPD event fields

RWPD field	Assigned using
RWPD_EVENT	EVENT_NAME
RWPD_START_DATE	EVENT_DATE
RWPD_END_DATE	Blank (for discharge events) or NEXT_EVENT_DATE (when there is a next event) or RP_PD_DATE (see Table 1)
RWPD_PD	RWPD_PD = blank (for discharge events) or RWPD_PD = (RWPD_END_DATE – RWPD_START_DATE) Patient day adjustment For the following situations, when the number of patient days is 0, the patient days value is assigned a value of 1: <ul style="list-style-type: none"> • There is a same-day admit and discharge. • There is a same-day re-entry and discharge. • There is a same-day admit and assessment and discharge.
RWPD_ASSOCIATED_ASSESSMENT_DATE RWPD_RUG	These fields are assigned using the event associated assessment reference date (A3) and RUG group code.

2.7 Create within reporting period RWPD events

Only patient days within the reporting period are included in RWPD reports. When basic RWPD events include dates before or after the reporting period, the event is split into 2 parts and only days within the current reporting period are included in the RWPD report.

See Table 1 for RWPD reporting period start and end dates.

2.7.1 Events that start before the reporting period and end within the reporting period

For these basic events, the event start date is before the reporting period and the event end date is within the reporting period (see Table 9). The basic event will be split into 2 parts: the part occurring before the reporting period will be discarded, and the part occurring within the reporting period will be used for the RWPD reports.

The example in Table 9 illustrates the process to produce **Q4** reports (April 1, 2014, through March 31, 2015). A basic RWPD event has a start date of **February 25, 2014**, and an end date of **May 25, 2014**.

Table 9 Example of an event covering days before the 2014–2015 reporting period

Part of the event	Event start and end dates
First part	RWPD_START_DATE = February 25, 2014 RWPD_END_DATE = RP_START_DATE = April 1, 2014 (see Table 1) Note that the days within this period are discarded and would be counted in the RWPD report for 2013–2014.
Second part	RWPD_START_DATE = RP_START_DATE = April 1, 2014 (see Table 1) RWPD_END_DATE = May 25, 2014 Note that only days within this period are included in the 2014–2015 RWPD reports.

2.7.2 Events that start within the reporting period and end after the reporting period

For these basic events, the event start date is within the reporting period and the event end date is after the reporting period (see Table 10). The basic event will be split into 2 parts: the part within the reporting period will be used for the RWPD reports, and the part occurring after the reporting period will be discarded.

The example in Table 10 illustrates the process to produce **Q4** reports (April 1, 2014, through March 31, 2015). A basic RWPD event has a start date of **March 13, 2015**, and an end date of **April 9, 2015**.

Table 10 Example of an event covering days after the 2014–2015 reporting period

Part of the event	Event start and end dates
First part	RWPD_START_DATE = March 13, 2015 RWPD_END_DATE = RWPD_PD_DATE = April 1, 2015 (see Table 1) Note that only days within this period are included in the 2014–2015 RWPD reports.
Second part	RWPD_START_DATE = RWPD_PD_DATE = April 1, 2015 (see Table 1) RWPD_END_DATE = April 9, 2015 Note that the days within this period are discarded and would be counted in the RWPD report for 2015–2016.

2.7.3 Define RWPD_PD_RP for all events

The RWPD patient days within the reporting period field describes the number of patient days within the fiscal year covered by an event. For events that were split (since they covered 2 fiscal years), the RWPD patient days within the reporting period value will be different from the basic event RWPD patient days value (RWPD_PD_RP differs from RWPD_PD).

For discharge events:

RWPD_PD_RP = blank

For all other events:

$RWPD_PD_RP = RWPD_END_DATE - RWPD_START_DATE$

2.7.4 Identify within reporting period events

Only the RWPD events that occur within the reporting period are included in the RWPD reports for that reporting period (see Table 11).

Table 11 Dates for identifying “within RP” events (Q4 2014–2015 reports)

Type of event	Dates
Discharge events	$RP_START_DATE \leq RWPD_START_DATE \leq RP_END_DATE$ April 1, 2014 \leq RWPD_START_DATE \leq March 31, 2015 (see Table 1)
Other events	$RP_START_DATE \leq RWPD_START_DATE \leq RP_END_DATE$ and $RP_START_DATE \leq RWPD_END_DATE \leq RWPD_PD_DATE$ April 1, 2014 \leq RWPD_START_DATE \leq March 31, 2015 and April 1, 2014 \leq RWPD_END_DATE \leq April 1, 2015 (see Table 1)

See Example 11 in the appendices for examples of basic RWPD events being split.

2.8 Create an “unweighted RWPD event” disk file

The unweighted RWPD events are written to a disk file.

Section 3: Weighting the event data

A 2-pass approach is used during the weighting process:

- During the first pass, the assessed events are weighted (RWPD assessed values are set). For each facility, totals of assessed values are derived and used to calculate the facility-assessed CMI value.
- For the second pass, the unassessed events are weighted (the RWPD unassessed values are set).

3.1 Add CMI values to assessed events

CMI values corresponding to the fiscal year of the RWPD report period are used for RWPD calculations.

- For all CCRS facilities except Ontario LTC facilities, the RUG-III (44-group) methodology is used. There is a fiscal year–specific CMI value for each of the 44 RUG groups.
- For Ontario LTC facilities, the RUG-III (34-group) methodology is used. There is a fiscal year–specific CMI value for each of the 34 RUG groups.

3.1.1 Add CMI values to all events

The RWPD_CMI value is added to all events:

RWPD_CMI = blank (if RWPD_RUG_GROUP_CODE is blank)

or

RWPD_CMI = appropriate CMI (RWPD_RUG_GROUP_CODE is not blank)

The lowest CMI from the RUG groups for the fiscal year is also identified and added to all events:

LOWEST_CMI = lowest CMI value from fiscal year–specific CMI values

3.1.2 Update CMI if Option 2 is used (late PD assessment events)

As mentioned earlier, 2 options for weighting late assessment events are available within the Ontario RWPD methodology.

1. For Option 1, late patient days are weighted with the group-specific CMI value.
2. For Option 2, late patient days are weighted using the lowest CMI value.

If Option 2 has been selected, change the RWPD_CMI for **late** patient day events:

RWPD_CMI = LOWEST_CMI

The decision to use Option 1 or Option 2 for RWPD weighting is determined by each jurisdiction.

3.2 RWPD pass 1 — Calculate assessed RWPD values

For each event that has an associated assessment — the RWPD_RUG is not blank — the assessed RWPD fields are derived:

$$PD_ASSESSSED = RWPD_PD_RP$$

$$RWPD_ASSESSSED = RWPD_PD_RP \times RWPD_CMI$$

Caution: Note that the reporting period patient days for each RWPD event are used, not the RWPD patient days of the original event.

The facility-assessed CMI based on assessed patient days is calculated after the first pass only. This CMI is defined as the total RWPD assessed divided by the total assessed patient days for all residents in the facility.

$$FACILITY_ASSESSSED_CMI = \text{Total RWPD_ASSESSSED} \div \text{Total PATIENT_DAYS_ASSESSSED}$$

3.3 RWPD pass 2 — Calculate unassessed values

For each event that does not have an associated assessment — RWPD_RUG is blank — the RWPD unassessed values are derived:

If the event RWPD_PD is 13 days or less

$$RWPD_CMI = FACILITY_ASSESSSED_CMI$$

$$PD_UNASSESSSED_13 = RWPD_PD_RP$$

$$RWPD_UNASSESSSED_13 = RWPD_PD_RP \times RWPD_CMI$$

If the event RWPD_PD is 14 days or more

$$RWPD_CMI = \text{LOWEST_CMI}$$

$$PD_UNASSESSSED_14 = RWPD_PD_RP$$

$$RWPD_UNASSESSSED_14 = RWPD_PD_RP \times RWPD_CMI$$

Caution: The RWPD patient days value is used to determine which category to use (unassessed 13 or unassessed 14). However, the RWPD within reporting period patient days value is used to calculate the RWPD values.

Section 4: Additional summary information

Once the RWPD calculations have been completed, additional summary variables are created:

$$\text{FACILITY_ASSESSSED_CMI} = \text{Total RWPD_ASSESSSED} \div \text{Total PATIENT_DAYS_ASSESSSED}$$

$$\text{FACILITY_TOTAL_CMI} = (\text{Total RWPD_ASSESSSED} + \text{Total RWPD_UNASSESSSED}) \div (\text{Total PD_ASSESSSED} + \text{Total PD_UNASSESSSED})$$

Appendix 1: RWPD examples weighted using Option 1

11 examples are presented to illustrate how RWPD events are created.

These examples

- Are not representative of actual residents from CCRS facilities;
- Cover 2014–2015 and are weighted using RUG-III (44-group) CMI-2014 values; and
- Use RWPD weighting Option 1.

Precision for facility-assessed CMI calculation

The CMI values shown in the reports are rounded to 4 digits of precision, but the more precise value is used for RWPD calculations. For this appendix, the facility-assessed CMI is shown as 0.7352, but a more precise value is 0.735246.

Example 1: Episode with admission, assessments and discharge

For this example, after the admission there is an admission assessment, a quarterly assessment and a significant change in status assessment. The last assessment is submitted 2 days before the patient is discharged.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	April 26, 2014	—
Admission assessment	May 10, 2014	RUC
Quarterly assessment	August 10, 2014	RVB
Significant change in status assessment	August 24, 2014	RMA
Discharge	August 26, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Apr–26–14	May–10–14	14	May–10–14	RUC	1.6723	23.4122	—	—
Admission assessment	May–10–14	Aug–10–14	92	May–10–14	RUC	1.6723	153.8516	—	—
Quarterly assessment	Aug–10–14	Aug–24–14	14	Aug–10–14	RVB	1.2310	17.2340	—	—
Significant change in status	Aug–24–14	Aug–26–14	2	Aug–24–14	RMA	0.9981	1.9962	—	—
Discharge	Aug–26–14	—	—	—	—	—	—	—	—
Total	—	—	122	—	—	—	196.4940	0.0000	0.0000

Note

— Not applicable.

Example 2: Episode with admission and assessments but no discharge

For this example, after the admission there is an admission assessment and 2 quarterly assessments. At the time that the RWPD reports are produced, the patient has not been discharged.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	August 2, 2014	—
Admission assessment	August 16, 2014	BB2
Quarterly assessment	November 16, 2014	BB1
Quarterly assessment	February 15, 2015	BA2

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Aug–2–14	Aug–16–14	14	Aug–16–14	BB2	0.5816	8.1424	—	—
Admission assessment	Aug–16–14	Nov–16–14	92	Aug–16–14	BB2	0.5816	53.5072	—	—
Quarterly assessment	Nov–16–14	Feb–15–15	91	Nov–16–14	BB1	0.5529	50.3139	—	—
Quarterly assessment	Feb–15–15	Apr–1–15	45	Feb–15–15	BA2	0.4663	20.9835	—	—
Total	—	—	242	—	—	—	132.9470	0.0000	0.0000

Note

— Not applicable.

Example 3: Unassessed patient days (13 days or less)

This example shows an episode completed without an assessment.

Since there are less than 14 patient days, the patient days are weighted as “unassessed 13” using the facility-assessed CMI.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	January 4, 2015	—
Discharge	January 17, 2015	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Jan–4–15	Jan–17–15	13	—	—	0.7440	—	9.6724	—
Discharge	Jan–17–15	—	—	—	—	—	—	—	—
Total	—	—	13	—	—	—	0.0000	9.6724	0.0000

Note

— Not applicable.

Example 4: Unassessed patient days (14 or more days)

This example shows another type of episode completed without an assessment.

Since the number of patient days is more than 13, the patient days are weighted as “unassessed 14” using the lowest CMI from the 44 RUG groups for the fiscal year. For 2014–2015, the lowest CMI from all RUG groups is 0.3819 (from RUG group PA1).

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	August 7, 2014	—
Discharge	August 31, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Aug-7-14	Aug-31-14	24	—	—	0.3819	—	—	9.1665
Discharge	Aug-31-14	—	—	—	—	—	—	—	—
Total	—	—	24	—	—	—	0.0000	—	9.1665

Note

— Not applicable.

Example 5: Episodes with a re-entry

For this example, data is submitted for 2 episodes of care for the same resident where the second period started with a re-entry.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	June 2, 2014	—
Admission assessment	June 16, 2014	RUA
Discharge	July 9, 2014	—
Re-entry	July 26, 2014	—
Discharge	August 7, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Jun-2-14	Jun-16-14	14	Jun-16-14	RUA	1.2279	17.1906	—	—
Admission assessment	Jun-16-14	Jul-9-14	23	Jun-16-14	RUA	1.2279	28.2417	—	—
Discharge	Jul-9-14	—	—	—	—	—	—	—	—
Subtotal	—	—	37	—	—	—	45.4323	0.0000	0.0000
Re-entry	Jul-26-14	Aug-7-14	12	Jun-16-14	RUA	1.2279	14.7348	—	—
Discharge	Aug-7-14	—	—	—	—	—	—	—	—
Subtotal	—	—	12	—	—	—	14.7348	0.0000	0.0000
Total	—	—	49	—	—	—	60.1671	0.0000	0.0000

Note

— Not applicable.

Example 6: Episodes with different URIs

Compare this example with Example 5 where the similar activities are submitted to CCRS using a re-entry.

For this example, data is submitted for 2 episodes of care for the same resident. Data from the 2 episodes is submitted to CCRS using different URI values — so the episodes are processed independently.

Since the second episode does not include an assessment and the number of patient days is less than 14, the patient days are weighted as unassessed 13 and use the facility-assessed CMI.

Activity data

URI 6.1	Activity	Activity date	RUG-III (44-group)
URI 6.1	Admission	June 2, 2014	—
	Admission assessment	June 16, 2014	RUA
	Discharge	July 9, 2014	—

URI 6.2	Activity	Activity date	RUG-III (44-group)
URI 6.2	Admission	July 26, 2014	—
	Discharge	August 7, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
URI 6.1									
Admission	Jun-2-14	Jun-16-14	14	Jun-16-14	RUA	1.2279	17.1906	—	—
Admission assessment	Jun-16-14	Jul-9-14	23	Jun-16-14	RUA	1.2279	28.2417	—	—
Discharge	Jul-9-14	—	—	—	—	—	—	—	—
Subtotal	—	—	37	—	—	—	45.4323	—	—

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
URI 6.2									
Admission	Jul-26-14	Aug-7-14	12	—	—	0.7440	—	8.9284	—
Discharge	Aug-7-14	—	—	—	—	—	—	—	—
Subtotal	—	—	12	—	—	—	—	8.9284	—
Total	—	—	49	—	—	—	45.4323	8.9284	—

Note

— Not applicable.

Example 7: Episodes with significant correction assessments

For this example, the resident has a significant correction to the admission assessment and to a later quarterly assessment. Note that as of June 2014, significant correction assessments no longer appear as RWPD events; instead, the associated assessment is updated with the correction once it has been successfully submitted to CCRS.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	April 3, 2014	—
Admission assessment	April 17, 2014	CC2
Significant correction assessment	April 17, 2014	CB2
Quarterly assessment	July 17, 2014	CB1
Quarterly assessment	October 17, 2014	CA2
Significant correction assessment	October 17, 2014	CA1
Discharge	December 7, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission*	Apr–3–14	Apr–17–14	14	Apr–17–14	CB2	0.7657	10.7198	—	—
Admission assessment	Apr–17–14	Jul–17–14	91	Apr–17–14	CB2	0.7657	69.6787	—	—
Quarterly assessment	Jul–17–14	Oct–17–14	92	Jul–17–14	CB1	0.7111	65.4212	—	—
Quarterly assessment	Oct–17–14	Dec–07–14	51	Oct–17–14	CA1	0.6166	31.4466	—	—
Discharge	Dec–7–14	—	—	—	—	—	—	—	—
Total	—	—	248	—	—	—	177.2663	0.0000	0.0000

Notes

* The admission event uses the significant correction assessment that replaced the admission assessment (note the RUG group code and CMI values used).

— Not applicable.

Example 8a: Episodes with admission and PD adjustments

For the first episode, the first assessment is a quarterly assessment (rather than an admission assessment). Within RWPD, the admission patient days are treated as unassessed patient days and weighted with the lowest CMI from the 44 RUG groups for the fiscal year. For 2014–2015, the lowest CMI from all 44 RUG groups is 0.3819 (from RUG group PA1). Please note that the RUG group is left blank for the admission event.

For the second episode, there is a re-entry and discharge on the same date. For the RWPD patient day calculations, the re-entry patient day value is set to 1 day.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	April 4, 2014	—
Quarterly assessment	April 18, 2014	RMC
Discharge	May 7, 2014	—
Re-entry	May 31, 2014	—
Discharge	May 31, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission*	Apr–4–14	Apr–18–14	14	—	—	0.3819	—	—	5.3466
Quarterly assessment	Apr–18–14	May–7–14	19	Apr–18–14	RMC	1.3118	24.9242	—	—
Discharge	May–7–14	—	—	—	—	—	—	—	—
Subtotal	—	—	33	—	—	—	24.9242	—	—
Re-entry[†]	May–31–14	May–31–14	1	Apr–18–14	RMC	1.3118	1.3118	—	—
Discharge	May–31–14	—	—	—	—	—	—	—	—
Subtotal	—	—	1	—	—	—	1.3118	—	—
Total	—	—	34	—	—	—	26.2360	—	—

Notes

* The admission is not followed by an admission assessment. The admission event is treated as unassessed. Only Ontario CCC facilities have this admission adjustment applied to their RWPD reports.

† When there is a same-day entry and discharge, 1 patient day is assigned (see Step 2.6).

— Not applicable.

Example 8b: Episodes with admission and PD adjustments

For the first episode, the first assessment is a quarterly assessment (rather than an admission assessment).

For the second episode, there is a re-entry and discharge on the same date. For the RWPD patient day calculations, the re-entry patient day value is set to 1 day.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	April 4, 2014	—
Quarterly assessment	April 18, 2014	RMC
Discharge	May 7, 2014	—
Re-entry	May 31, 2014	—
Discharge	May 31, 2014	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission*	Apr-4-14	Apr-18-14	14	Apr-18-14	RMC	1.3118	18.3652	—	—
Quarterly assessment	Apr-18-14	May-7-14	19	Apr-18-14	RMC	1.3118	24.9242	—	—
Discharge	May-7-14	—	—	—	—	—	—	—	—
Subtotal	—	—	33	—	—	—	43.2894	0.0000	0.0000
Re-entry†	May-31-14	May-31-14	1	Apr-18-14	RMC	1.3118	1.3118	—	—
Discharge	May-31-14	—	—	—	—	—	—	—	—
Subtotal	—	—	1	—	—	—	1.3118	0.0000	0.0000
Total	—	—	34	—	—	—	44.6012	0.0000	0.0000

Notes

* The admission is not followed by an admission assessment.

† When there is a same-day entry and discharge, 1 patient day is assigned (see Step 2.6).

— Not applicable.

Example 9: Episodes with an RWPD discharge assumed event

For this example, the last data submitted for the episode was not a discharge.

At the time when the RWPD reports are produced (here, the end of the fiscal year), a full quarter has passed so a “discharge assumed” is created within the RWPD process.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	May 3, 2014	—
Admission assessment	May 17, 2014	IB2
Quarterly assessment	Aug 17, 2014	IB1

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	May–3–14	May–17–14	14	May–17–14	IB2	0.5902	8.2628	—	—
Admission assessment	May–17–14	Aug–17–14	92	May–17–14	IB2	0.5902	54.2984	—	—
Quarterly assessment	Aug–17–14	Oct–1–14	45	Aug–17–14	IB1	0.5691	25.6095	—	—
Discharge assumed*	Oct–1–14	—	—	—	—	—	—	—	—
Total	—	—	151	—	—	—	88.1707	0.0000	0.0000

Notes

* The discharge assumed event is created using the first day of the fiscal quarter following the latest data activity. Here, the discharge assumed date is October 1.

— Not applicable.

Example 10: Episodes with late PD (assessment due) events

For this example, the admission assessment is 3 days late (more than 14 days after admission) and the significant change in status assessment is 42 days late (more than 92 days after the quarterly assessment).

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	April 13, 2014	—
Admission assessment	April 30, 2014	SSC
Quarterly assessment	July 31, 2014	SSB
Significant change in status assessment	December 16, 2014	SSA
Discharge	January 7, 2015	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Apr–13–14	Apr–27–14	14	Apr–30–14	SSC	0.9406	13.1684	—	—
Late PD (assessment due)*	Apr–27–14	Apr–30–14	3	Apr–30–14	SSC	0.9406	2.8218	—	—
Admission assessment*	Apr–30–14	Jul–31–14	92	Apr–30–14	SSC	0.9406	86.5352	—	—
Quarterly assessment	Jul–31–14	Oct–31–14	92	Jul–31–14	SSB	0.8774	80.7208	—	—
Late PD (assessment due)†	Oct–31–14	Dec–16–14	46	Jul–31–14	SSB	0.8774	40.3604	—	—
Significant change in status assessment†	Dec–16–14	Jan–07–15	22	Dec–16–14	SSA	0.8348	18.3656	—	—
Discharge	Jan–7–15	—	—	—	—	—	—	—	—
Total	—	—	269	—	—	—	241.9722	0.0000	0.0000

Notes

* The admission assessment is 3 days late.

† The significant change in status assessment is 46 days late (the assessment occurs 138 days after the quarterly assessment).

— Not applicable.

For Option 1, the late assessment days use the RUG and CMI from the associated assessment.

Example 11: Episodes longer than the RWPD reporting period

For this example, the episode covers a period longer than the RWPD reporting period.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	March 7, 2014	—
Admission assessment	March 21, 2014	PA1
Quarterly assessment	June 21, 2014	PA2
Quarterly assessment	September 21, 2014	PB1
Quarterly assessment	December 22, 2014	PB2
Annual assessment	March 24, 2015	PC1
Discharge	May 31, 2015	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Start of fiscal year ^{*, †}	Apr–1–14	Jun–21–14	81	Mar–21–14	PA1	0.3819	30.9339	—	—
Quarterly assessment	Jun–21–14	Sep–21–14	92	Jun–21–14	PA2	0.4011	36.9012	—	—
Quarterly assessment	Sep–21–14	Dec–22–14	92	Sep–21–14	PB1	0.4214	38.7688	—	—
Quarterly assessment	Dec–22–14	Mar–24–15	92	Dec–22–14	PB2	0.4195	38.5940	—	—
Full or annual assessment ^{*, ‡}	Mar–24–15	Apr–1–15	8	Mar–24–15	PC1	0.5498	4.3984	—	—
Total	—	—	365	—	—	—	149.5963	0.0000	0.0000

Notes

* The days from March 7 through March 31, 2014, and April 1 through May 31, 2015, would be included in RWPD reports for other reporting periods.

† The start of fiscal year event covers the period from April 1, 2014, to June 21, 2014, and is weighted using the assessment from March 21, 2014 (that occurred before the RWPD reporting period).

‡ The full or annual assessment event covers the period from March 24, 2015, to April 1, 2015 — the day after the reporting period ends. This allows for correct patient day calculations.

— Not applicable.

Facility RWPD summary (RWPD Option 1)

The following table is the facility RWPD summary based on the 11 examples weighted using RWPD Option 1 (excluding Example 8a).

Event	Patient days (PD)	RUG Weighted Patient Days (RWPD)	CMI value
Assessed	1,454	1,075.0997	—
Assessed (late)	49	43.1822	—
Assessed (subtotal)*	1,503	1,118.2819	0.7440
Unassessed 13	25	18.6008	—
Unassessed 14	38	14.5122	—
Unassessed (subtotal)	63	33.1130	—
Total†	1,566	1,151.3949	0.7352

Discharge Assumed Notice

WARNING: There is 1 resident that has been assumed to be discharged from the facility.

Notes

* FACILITY_ASSESSED_CMI = Total RWPD_ASSESSED ÷ Total PATIENT_DAYS_ASSESSED = 0.7440.

† FACILITY_TOTAL_CMI = (Total RWPD_ASSESSED + Total RWPD_UNASSESSED) ÷ (Total PD_ASSESSED + Total PD_UNASSESSED) = 0.7352.

— Not applicable.

Appendix 2: RWPD examples weighted using Option 2

Appendix 2 uses the same basic information as the examples used in Appendix 1 but applies RWPD weighting Option 2 instead of Option 1. Only examples that change due to the different weighting option are repeated in Appendix 2.

What examples change as a result of the RWPD weighting option?

For Option 2, late RWPD events are weighted using the lowest CMI. Any example having a late RWPD event is included.

- Example 10 has several late RWPD events.

Late patient days contribute to the facility-assessed CMI value. Any example with unassessed 13 patient days — weighted using the facility-assessed CMI — is included.

- Examples 3 and 6 have unassessed 13 RWPD events.

Precision for facility-assessed CMI calculation

The CMI values shown in the reports are rounded to 4 digits of precision, but the more precise value is used for RWPD calculations. For this appendix, the facility-assessed CMI is shown as 0.7194, but a more precise value is 0.719361.

Example 3: Unassessed patient days (13 days or less)

This example shows an episode completed without an assessment.

Since there are less than 14 patient days, the patient days are weighted as unassessed 13 using the facility-assessed CMI.

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	January 4, 2015	—
Discharge	January 17, 2015	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Jan–4–15	Jan–17–15	13	—	—	0.7278	—	9.4608	—
Discharge	Jan–17–15	—	—	—	—	—	—	—	—
Total	—	—	13	—	—	—	0.0000	9.4608	0.0000

Note
— Not applicable.

Example 6: Episodes with different URIs

Compare this example with Example 5 from Appendix 1, where the similar activities are submitted to CCRS using a re-entry.

For this example, data is submitted for 2 episodes of care for the same resident. Data from the 2 episodes is submitted to CCRS using different URI values — so the episodes are processed independently.

Since the second episode does not include an assessment and the number of patient days is less than 14, the patient days are weighted as unassessed 13 using the facility-assessed CMI. (See Precision for Facility-Assessed CMI Calculation at the beginning of Appendix 2.)

Activity data

URI 6.1	Activity	Activity date	RUG-III (44-group)
URI 6.1	Admission	June 2, 2014	—
	Admission assessment	June 16, 2014	RUA
	Discharge	July 9, 2014	—

URI 6.2	Activity	Activity date	RUG-III (44-group)
URI 6.2	Admission	July 26, 2014	—
	Discharge	August 7, 2014	—

Note
— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
URI 6.1									
Admission	Jun–2–14	Jun–16–14	14	Jun–16–14	RUA	1.2279	17.1906	—	—
Admission assessment	Jun–16–14	Jul–9–14	23	Jun–16–14	RUA	1.2279	28.2417	—	—
Discharge	Jul–9–14	—	—	—	—	—	—	—	—
Subtotal	—	—	37	—	—	—	45.4323	—	—
URI 6.2									
Admission	Jul–26–14	Aug–7–14	12	—	—	0.7278	—	8.7330	—
Discharge	Aug–7–14	—	—	—	—	—	—	—	—
Subtotal	—	—	12	—	—	—	—	8.7330	—
Total	—	—	49	—	—	—	45.4323	8.7330	—

Note

— Not applicable.

Example 10: Episodes with late PD (assessment due) events

With RWPD weighting Option 2, late patient days are weighted with the lowest CMI. For 2014–2015, the lowest CMI from all RUG groups is 0.3819 (from RUG group PA1).

Activity data

Activity	Activity date	RUG-III (44-group)
Admission	April 13, 2014	—
Admission assessment	April 30, 2014	SSC
Quarterly assessment	July 31, 2014	SSB
Significant change in status assessment	December 16, 2014	SSA
Discharge	January 7, 2015	—

Note

— Not applicable.

RWPD event data

Event	RWPD start date	RWPD end date	Patient days	Associated assessment date	RWPD RUG group	RWPD CMI value	RWPD assessed	RWPD unassessed 13	RWPD unassessed 14
Admission	Apr–13–14	Apr–27–14	14	Apr–30–14	SSC	0.9406	13.1684	—	—
Late PD (assessment due)*	Apr–27–14	Apr–30–14	3	Apr–30–14	SSC	0.3819	1.1457	—	—
Admission assessment*	Apr–30–14	Jul–31–14	92	Apr–30–14	SSC	0.9406	86.5352	—	—
Quarterly assessment	Jul–31–14	Oct–31–14	92	Jul–31–14	SSB	0.8774	80.7208	—	—
Late PD (assessment due)†	Oct–31–14	Dec–16–14	46	Jul–31–14	SSB	0.3819	17.5674	—	—
Significant change in status assessment†	Dec–16–14	Jan–07–15	22	Dec–16–14	SSA	0.8348	18.3656	—	—
Discharge	Jan–7–15	—	—	—	—	—	—	—	—
Total	—	—	269	—	—	—	217.5031	0.0000	0.0000

Notes

* The admission assessment is 3 days late.

† The significant change in status assessment is 46 days late (the assessment occurs 138 days after the quarterly assessment).

— Not applicable.

For Option 2, the late assessment days use the lowest CMI.

Facility RWPDP summary (RWPDP Option 2)

The following table is the facility RWPDP summary based on the 11 examples weighted using RWPDP Option 2 (excluding Example 8a).

Event	Patient days (PDs)	RUG Weighted Patient Days (RWPDPs)	CMI value
Assessed	1,454	1,075.0997	—
Assessed (late)	49	18.7131	—
Assessed (subtotal)*	1,503	1,093.8128	0.7278
Unassessed 13	25	18.1938	—
Unassessed 14	38	14.5122	—
Unassessed (subtotal)	63	32.7060	—
Total†	1,566	1,126.5188	0.7194

Discharge Assumed Notice

WARNING: There is 1 resident that has been assumed to be discharged from the facility.

Notes

* $FACILITY_ASSESSSED_CMI = Total\ RWPDP_ASSESSSED \div Total\ PATIENT_DAYS_ASSESSSED = 0.7278.$

† $FACILITY_TOTAL_CMI = (Total\ RWPDP_ASSESSSED + Total\ RWPDP_UNASSESSSED) \div (Total\ PD_ASSESSSED + Total\ PD_UNASSESSSED) = 0.7194.$

— Not applicable.

Appendix 3: RUG and RWPD resources

RUG and RWPD education

For those interested in a less technical introduction to RWPD, CIHI has developed several web-based courses that cover many of the topics described in this technical document (see [course listings](#)).

RWPD methodology — SAS code for CCRS vendors

The SAS code corresponding to this RWPD methodology is released to CCRS vendors each fiscal year, usually in January, in [Resource Utilization Groups III \(RUG-III\) \(44-Group\) Grouping Methodology](#) in CIHI's eStore.

RUG-III group and CMI values

A RUG-III (44-group) group is assigned to each assessment using the Canadian version of the RUG-III grouping methodology (version 5.11b). The assignment of RUG groups is based on the group with the highest CMI value among all groups that a particular assessment may qualify for (termed the “index-maximizing” approach).

For the production of RWPD reports, each RUG group is associated with a fiscal year– and group-specific CMI value. The CMI value is a measure of relative resource use. Please note that as of June 2014, for the production of RWPD reports, RUG assignment is based on the most recent CMI set available rather than the CMI set associated with the fiscal year. As a result, the most recent CMI set available is applied to past fiscal years.

Detailed information on the 44-group version of the methodology (flowcharts, SAS code and test data) can be found in [Resource Utilization Groups III \(RUG-III\) \(44-Group\) Grouping Methodology](#) in CIHI's eStore.

Fiscal year–specific CMI values are published yearly by CIHI. The CCRS RUG-III (44-group) CMI values for 2014–2015 are shown in the following table.

CCRS RUG-III (44-group) CMI values, 2014–2015

RUG-III (44-group) category	RUG-III (44-group) rank	RUG-III (44-group) name	RUG-III (44-group) CMI 2014
1. Special Rehabilitation — Ultra High	1	RUC	1.6723
	2	RUB	1.3821
	3	RUA	1.2279
1. Special Rehabilitation — Very High	4	RVC	1.3066
	5	RVB	1.2310
	6	RVA	1.0432
1. Special Rehabilitation — High	7	RHC	1.2820
	8	RHB	1.1193
	9	RHA	0.9637
1. Special Rehabilitation — Medium	10	RMC	1.3118
	11	RMB	1.1074
	12	RMA	0.9981
1. Special Rehabilitation — Low	13	RLB	1.0537
	14	RLA	0.7809
2. Extensive Services	15	SE3	1.3701
	16	SE2	1.1222
	17	SE1	0.9767
3. Special Care	18	SSC	0.9406
	19	SSB	0.8774
	20	SSA	0.8348

RUG-III (44-group) category	RUG-III (44-group) rank	RUG-III (44-group) name	RUG-III (44-group) CMI 2014
4. Clinically Complex	21	CC2	0.9484
	22	CC1	0.8275
	23	CB2	0.7657
	24	CB1	0.7111
	25	CA2	0.6916
	26	CA1	0.6166
5. Impaired Cognition	27	IB2	0.5902
	28	IB1	0.5691
	29	IA2	0.4806
	30	IA1	0.4460
6. Behaviour Problems	31	BB2	0.5816
	32	BB1	0.5529
	33	BA2	0.4663
	34	BA1	0.3955
7. Reduced Physical Functions	35	PE2	0.6869
	36	PE1	0.6719
	37	PD2	0.6277
	38	PD1	0.6122
	39	PC2	0.5677
	40	PC1	0.5498
	41	PB2	0.4195
	42	PB1	0.4214
	43	PA2	0.4011
	44	PA1	0.3819



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