Canadian Joint Replacement Registry Minimum Data Set Manual, 2015–2016

Standards and Data Submission

Canadian Institute for Health Information
Institut canadien d'information sur la santé

Our Vision

Better data. Better decisions.
Healthier Canadians.

Our Mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

Our Values

Respect, Integrity, Collaboration, Excellence, Innovation

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Changes for 2015–2016 CJRR Minimum Data Set Manual

There are no changes from the *Canadian Joint Replacement Registry Minimum Data Set Manual 2014–2015*.

Introduction

About the Canadian Joint Replacement Registry

The Canadian Joint Replacement Registry (CJRR) is a pan-Canadian information system for hip and knee replacement operations. Its mandate is to record and analyze clinical parameters and outcomes of primary and revision hip and knee replacement operations over time. The registry was developed through a joint effort between the Canadian Institute for Health Information (CIHI) and orthopedic surgeons in Canada. The goal of CJRR is to provide information to help improve the quality of care and clinical outcomes of joint replacement recipients.

CIHI captures administrative (including diagnoses and procedure codes) and demographic information on all discharges from acute care facilities in Canada, including hip and knee joint replacements and revisions, through the Hospital Morbidity Database (HMDB). CJRR was developed to provide a rich set of additional patient, clinical, surgical and prosthesis information to complement what is captured in the HMDB, to enable more in-depth analysis of hip and knee replacements and revisions. The goal of CJRR is to provide information that is designed to help improve the quality of care and clinical outcomes of joint replacement recipients.

In addition to the partnership between CIHI and orthopedic surgeons across the country, several key partners have greatly contributed to the successful development and implementation of CJRR, including the Canadian Orthopaedic Association, orthopedic patients, the Arthritis Society of Canada and federal, provincial and territorial ministries of health.

Privacy and Confidentiality

As a custodian of numerous registries and databases, CIHI has stringent policies to ensure that the privacy, confidentiality and security of its data holdings are protected. Information on CIHI's privacy and confidentiality policies and procedures are available on its website at www.cihi.ca.

For further information about CJRR's products and services, please visit our website at www.cihi.ca/cjrr.

Chapter 1—Canadian Joint Replacement Registry Data Submissions

There are two modes of submission to CJRR:

1. **Electronic file submission:** Electronic data is submitted directly by the physicians' coordinators, hospitals or third-party vendors based on pre-defined CJRR specifications.

2. **CJRR Web-Based Data Submission and Reports Tool:** Data is submitted through this stand-alone application that enables surgeons or their designated staff to submit data electronically to CJRR through a secure internet connection. This tool is available in both English and French and also allows users to run and view surgeon-specific summary reports.

Unless otherwise indicated by an exclamation point,  the field applies to all methods of submission.

Paper form submissions have been phased out. CJRR no longer accepts paper-based data submissions.

Note: When communicating with CJRR about specific records, **do not send personal health information (PHI) via email or fax**. For details on deleting or correcting CJRR records, refer to Appendix D.

Chapter 2—Record Information (Electronic File Submission Only)

Fields in this chapter apply to electronic file submissions only.

Field 01: Record ID (Electronic File Submission Only)

Specifications	
Field Length	11 numeric digits
Field Status	Mandatory
Valid Data	0–9
Joint Type	Knee and hip

Definition

The Record ID is an 11-digit code that uniquely identifies the record in the database. The number **must** remain unchanged and should be referenced if the record needs to be updated.

Note

A unique ID for each record should be supplied by the data provider. Data suppliers will have to keep track of this number.

Field 02: Record Type (Electronic File Submission Only)

Specifications	
Field Length	1 alphanumeric character
Field Status	Mandatory
Valid Data	H, K
Joint Type	Knee and hip

Definition

The Record Type defines whether the record refers to a hip or a knee replacement procedure.

The Record Type codes are the following:

Code	Description
H	Hip
K	Knee

Field 03: Fiscal Year (of Surgery) (Electronic File Submission Only)

Specifications	
Field Length	4 numeric digits
Field Status	Mandatory
Valid Data	0–9
Joint Type	Knee and hip

Definition

The Fiscal Year (of Surgery) identifies the fiscal year to which the record should be allocated.

Note

The value is based on the surgery date. For example, if the surgery date is between April 1, 2012, and March 31, 2013, then the Fiscal Year (of Surgery) is 2012.

Example: The surgery was performed on May 18, 2012.

Fiscal Year (of Surgery)

2	0	1	2

Field 04: Hospital Province (Electronic File Submission Only)

Specifications	
Field Length	2 alphanumeric characters
Field Status	Mandatory
Valid Data	NL, PE, NS, NB, QC, ON, MB, SK, AB, BC, YT, NT, NU
Joint Type	Knee and hip

Definition

The Hospital Province code identifies the province or territory of the institution where the joint replacement was performed.

The provincial/territorial codes are the following:

Code	Province/Territory
NL	Newfoundland and Labrador
PE	Prince Edward Island
NS	Nova Scotia
NB	New Brunswick
QC	Quebec
ON	Ontario
MB	Manitoba
SK	Saskatchewan
AB	Alberta
BC	British Columbia
YT	Yukon
NT	Northwest Territories
NU	Nunavut

Field 05: Submission Type (Electronic File Submission Only)

Specifications	
Field Length	1 alphanumeric character
Field Status	Mandatory
Valid Data	I, U
Joint Type	Knee and hip

Definition

The Submission Type defines the specific operation to be performed with the record.

The Submission Type codes are the following:

Code	Description
I	Insert
U	Update

Note

Records are classified as I—*insert* (new records) or U—*update* (updated records). Resubmitted records are to be classified as updates and should use the original Record ID number. Insert records submitted in one fiscal period will be rejected if they are resubmitted as inserts in the next fiscal period. If the Submission Type is U, only clinical data can be updated, not patient and surgeon data.

Chapter 3—Surgeon Demographics

Field 06: Surgeon ID (Electronic File Submission Only)

Specifications	
Field Length	11 numeric digits
Field Status	Mandatory
Valid Data	0–9
Joint Type	Knee and hip

Definition

The Surgeon ID is a CIHI-assigned identification number for the orthopedic surgeon who performed the hip/knee replacement procedure. A Surgeon ID needs to be assigned prior to sending data to CJRR.

Note

The Surgeon ID will be provided to data providers in advance.

Field 07: Surgeon Last Name

Specifications	
Field Length	25 alphabetic and special characters
Field Status	Mandatory
Valid Data	A–Z, space ( ), hyphen (-), period (.), apostrophe (’)
Joint Type	Knee and hip

Definition

Surgeon Last Name is the surname (or family name) of the orthopedic surgeon who performed the hip/knee replacement procedure.

Note

The surgeon must be pre-registered with CJRR. The last name submitted must exactly match the last name in the CJRR database (as supplied upon pre-registration).

Example: The surgeon’s last name is O’Leary.

Surgeon Last Name

O	’	L	E	A	R	Y

Chapter 4—Patient Demographics

Field 08: Patient First Name

Specifications	
Field Length	2–25 alphabetic and special characters
Field Status	Mandatory
Valid Data	A–Z, space ( ), hyphen (-), period (.), apostrophe (’)
Joint Type	Knee and hip

Definition

Patient First Name is the first name (or given name) of the patient.

Example: The patient’s first name is Jean-Michel.

Patient First Name

J	E	A	N	-	M	I	C	H	E	L

Field 09: Patient Last Name

Specifications	
Field Length	2–25 alphabetic and special characters
Field Status	Mandatory
Valid Data	A–Z, space ( ), hyphen (-), period (.), apostrophe (’)
Joint Type	Knee and hip

Definition

Patient Last Name is the surname (or family name) of the patient.

Example: The patient’s last name is van der Vaart.

Patient Last Name

V	A	N		D	E	R		V	A	A	R	T

Field 10: Health Card Issuing Authority Code

Specifications	
Field Length	3 alphanumeric characters
Field Status	Mandatory
Valid Data	NL, PE, NS, NB, QC, ON, MB, SK, AB, BC, YT, NT, NU, CA, N/A
Joint Type	Knee and hip

Definition

Health Card Issuing Authority Code is the code indicating the provincial/territorial authority that issued the health card.

The provincial/territorial authority codes are the following:

Code	Province/Territory
NL	Government of Newfoundland and Labrador
PE	Government of Prince Edward Island
NS	Government of Nova Scotia
NB	Government of New Brunswick
QC	Government of Quebec
ON	Government of Ontario
MB	Government of Manitoba
SK	Government of Saskatchewan
AB	Government of Alberta
BC	Government of British Columbia
YT	Government of Yukon
NT	Government of the Northwest Territories
NU	Government of Nunavut
CA	Government of Canada
N/A	Not applicable

Note

Use N/A when the HCN is not available (is blank).

Example: An Alberta resident had knee replacement surgery in a British Columbia facility. The patient's nine-digit Alberta HCN is recorded in the Health Card Number field and the Health Card Issuing Authority Code is recorded as AB (Alberta) in the data file from the facility in British Columbia.

Health Card Number												Province Code		
			1	2	3	4	5	6	7	8	9		A	B

Example: An RCMP officer (who has federal insurance coverage) had knee replacement surgery in a Nova Scotia facility.

Health Card Number												Province Code		
							1	2	3	4	5		C	A

Example: The patient is a resident of Saskatchewan but does not have provincial/territorial health coverage.

Health Card Number												Province Code		
												N	/	A

Field 11: Health Card Number

Specifications	
Field Length	12 alphanumeric characters
Field Status	Mandatory
Valid Data	0–9, A–Z, blank
Joint Type	Knee and hip

Definition

Health Card Number is the patient's health care/card number.

The Health Card Number will be validated according to the provincial/territorial algorithm.

This field must be completed in conjunction with the Health Card Issuing Authority Code field.

A federal Health Card Number (RCMP, veterans, etc.) will not be validated by CIHI.

The province-/territory-specific HCN value details are the following:

Province/Territory	Value Details
NL	12 numeric; a valid MOD 10 check digited number
PE	8 numeric; a valid MOD 10 check digited number
NS	10 numeric; a valid MOD 10 check digited number
NB	9 numeric; a valid MOD 10 check digited number
QC	12 digits (4 alpha, 8 numeric)
ON	10 digits (record an additional one or two alpha characters for version codes if applicable); a valid MOD 10 check digited number
MB	9 numeric
SK	9 numeric; validation is done via a lookup table provided to CIHI by Saskatchewan Health

(cont'd on next page)

Province/Territory	Value Details
AB	9 numeric; the 5th digit is the check digit. The algorithm for validating the HCN involves two tables: Table A and Table B. Table A is 0246813579 Table B is 0987654321 Add together these values: 1st digit of HCN + 3rd digit of HCN + 6h digit of HCN + 8th digit of HCN + Table A value at position (value of 2nd digit of HCN + 1) + Table A value at position (value of 4th digit of HCN +1) + Table A value at position (value of 7th digit of HCN +1) + Table A value at position (value of 9th digit of HCN + 1) Divide that total by 10, giving a remainder. The 5th digit of HCN must = Table B value at position (remainder + 1).
BC	10 numeric; the validation is done using the first 10 digits only, with the 10th digit as the check digit. Add together these values: 2nd digit of HCN times 2 + 3rd digit of HCN times 4 + 4th digit of HCN times 8 + 5th digit of HCN times 5 + 6th digit of HCN times 10 + 7th digit of HCN times 9 + 8th digit of HCN times 7 + 9th digit of HCN times 3 Divide the total by 11, giving a remainder. The 10th digit of HCN must = 11 − remainder.
YT	9 numeric; a valid MOD 10 check digited number
NT	8 digits (1 alpha (N, M, T, D, H), 7 numeric; MOD 10 validation applied on first 8 digits with a 0 inserted as the first digit
NU	9 numeric; first digit must be1; last digit must be in (3,4,5,6,7,8) and the 2nd through 8th digits of the HCN must be a valid MOD 10 check digited number

Notes

Leave blank when the HCN is not available. In this case, Health Card Issuing Authority Code must be N/A.

For details on MOD 10 calculation, refer to Appendix F.

Example: Please see the examples for Field 10.

Field 12: Patient Birthdate

Specifications	
Field Length	8 numeric digits
Field Status	Mandatory
Valid Data	0–9 in date format YYYYMMDD
Joint Type	Knee and hip

Definition

Patient Birthdate is the calendar date the patient was born. The year must be four digits; the month and day must each be two digits.

Note

Age at time of surgery must be in the range 13 to 130 years.

Example: The birthdate for a patient born on March 26, 1933, is recorded as 19330326.

Patient Birthdate

1	9	3	3	0	3	2	6
Y	Y	Y	Y	M	M	D	D

Example: For web: The birthdate for a patient born on March 26, 1933, is recorded as 1933 MAR 26.

Birthdate

1	9	3	3		M	A	R		2	6
Y	Y	Y	Y		M	M	M		D	D

Field 13: Gender

Specifications	
Field Length	2 alphanumeric characters
Field Status	Mandatory
Valid Data	1, 2, ZZ
Joint Type	Knee and hip

Definition

The Gender code describes the sex of the patient.

The Gender codes are the following:

Code	Description
1	Male
2	Female
ZZ	Other

Field 14: Patient Postal Code

Specifications	
Field Length	6 alphanumeric digits
Field Status	Mandatory
Valid Code Format	Z9Z9Z9, Z9Z9Z, Z9Z9, Z9Z
Valid Data	A–Z, 0–9
Joint Type	Knee and hip

Definition

The Patient Postal Code is the alphanumeric code assigned by Canada Post to identify the patient's place of residence.

The province-/territory-specific postal code details are the following:

Province/Territory	Value Details
NL	Starts with A
PE	Starts with C
NS	Starts with B
NB	Starts with E
QC	Starts with G, H, J
ON	Starts with K, L, M, N, P
MB	Starts with R
SK	Starts with S
AB	Starts with T
BC	Starts with V
YT	Starts with Y
NT	Starts with X0E, X1A, X0G
NU	Starts with X0A, X0B, X0C

Note

If the patient does not have a postal code, if the postal code is unknown or if the patient has an international postal code, record Patient Postal Code as Z9Z9Z9.

If the postal code is incomplete (that is, in format Z9Z9Z, Z9Z9, Z9Z) a non-severe error (warning) will be issued. Refer to Appendix E for details.

Example: The patient's postal code is V6T 5A9.

Patient Postal Code

V	6	T	5	A	9
Z	9	Z	9	Z	9

Field 15: Hospital Institution Number (Electronic File Submission Only)

Specifications	
Field Length	5 alphanumeric characters
Field Status	Mandatory
Valid Data	A–Z, 0–9
Joint Type	Knee and hip

Definition

The Hospital Institution Number is a unique number that identifies the institution where the joint replacement was performed. The first digit specifies the province/territory.

The province/territory codes are as follows:

Province/Territory	Code
NL	0
PE	1
NS	2
NB	3
QC	0–9
ON	5
MB	6
SK	7
AB	8
BC	9
YT	Y
NT	N
NU	V

Example: The patient's surgery was performed in an Alberta facility whose code is 89546.

Hospital Institution Number

8	9	5	4	6

Field 15: Hospital Name (Web Submission Only)

Specifications	
Field Length	No fixed length
Field Status	Mandatory
Valid Data	A–Z, 0–9
Joint Type	Knee and hip

Definition

The Hospital Name is the name of the facility where the joint replacement was performed.

Field 16: Chart Number

Specifications	
Field Length	12 alphanumeric characters
Field Status	Mandatory
Valid Data	A–Z, 0–9
Joint Type	Knee and hip

Definition

The Chart Number is the unique number assigned by the admitting institution to identify the patient.

Note

Chart Number cannot be fewer than four characters.

Health Card Number is not permitted in Chart Number field. For instances where Chart Number is not available or Health Card Number is included in the Chart Number, enter “UNKNOWN.”

Field 17: Surgery Date

Specifications	
Field Length	8 numeric digits
Field Status	Mandatory
Valid Data	0–9 in date format YYYYMMDD
Joint Type	Knee and hip

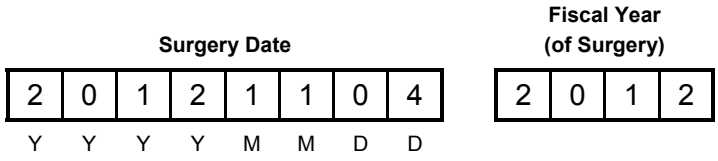
Definition

The date of the hip or knee replacement surgery.

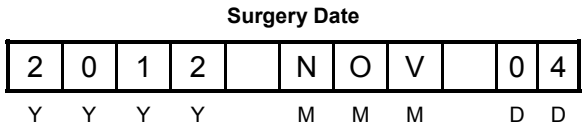
Note

For electronic file submissions, this date should be within the corresponding fiscal year; see Field 03: Fiscal Year (of Surgery).

Example: A knee replacement surgery that was performed on November 4, 2012, is recorded as 20121104, with Fiscal Year (of Surgery) recorded as 2012.



Example: For web: A knee replacement surgery that was performed on November 4, 2012, is recorded as 2012 NOV 04.



Chapter 5—General Procedure Information

Field 18: Side (Location)

Specifications	
Field Length	1 numeric digit
Field Status	Mandatory
Valid Data	1–4
Joint Type	Knee and hip

Definition

The Side (Location) indicates whether a unilateral or a bilateral (right/left) joint replacement surgery was performed. Bilateral procedures are cases where both joints are done under the same anesthesia.

The Side (Location) codes are the following:

Code	Description
1	Unilateral right
2	Unilateral left
3	Bilateral right
4	Bilateral left

Note

If bilateral, submit one record per side.

Field 19: Type of Replacement

Specifications	
Field Length	1 numeric digit
Field Status	Mandatory
Valid Data	1, 2
Joint Type	Knee and hip

Definition

The Type of Replacement field indicates the replacement type: primary or revision.

The Type of Replacement codes are the following:

Code	Description
1	Primary
2	Revision

Field 20: Type of Primary Procedure

Specifications	
Field Length	3 alphanumeric characters
Field Status	Mandatory if Type of Replacement = 1
Valid Data	Knee: 1–5, OTH; Hip: 6–9, OTH
Joint Type	Knee and hip

Definition

The Type of Primary Procedure indicates the primary procedure type performed on the patient. Refer to Appendix A for the corresponding component/prosthesis information required for each type of primary procedure.

The Type of Primary Procedure codes for knee and hip procedures are the following:

Code	Description	Joint Type
1	Total knee arthroplasty (TKA), including patella	Knee
2	Total knee arthroplasty (TKA), excluding patella	Knee
3	Unicompartmental arthroplasty (UKA), medial	Knee
4	Unicompartmental arthroplasty (UKA), lateral	Knee
5	Patellofemoral arthroplasty (PFA)	Knee
6	Total hip arthroplasty	Hip
7	Resurfacing	Hip
8	Monopolar/unipolar hemiarthroplasty	Hip
9	Bipolar hemiarthroplasty	Hip
OTH	Other	Knee and hip

Example: The patient had a primary knee procedure, specifically a total knee arthroplasty excluding patella.

Type of Replacement	Type of Primary Procedure		
1			2

Example: The patient had a revision procedure.

Type of Replacement	Type of Primary Procedure		
2			

Field 21: Diagnosis Grouping (Primary Procedures Only)

Specifications	
Field Length	2 alphanumeric characters
Field Status	Mandatory if Type of Replacement = 1
Valid Data	Knee: 1–6, ZZ; Hip: 1–5, 7–9, ZZ
Joint Type	Knee and hip

Definition

The Diagnosis Grouping field indicates the patient's *most responsible* diagnosis grouping (as determined post-operatively) for the involved joint.

The Diagnosis Grouping codes for knee and hip procedures are the following:

Code	Description	Joint Type
1	Degenerative arthritis (e.g. OA)	Knee and hip
2	Inflammatory arthritis (e.g. RA, AS, SLE)	Knee and hip
3	Osteonecrosis (e.g. AVN)	Knee and hip
4	Infection	Knee and hip
5	Tumour (primary and metastatic, including synovial)	Knee and hip
6	Fracture (femur or tibia)	Knee
7	Acute hip fracture (femur)	Hip
8	Childhood hip problem (e.g. hip dysplasia)	Hip
9	Old hip fracture (e.g. non-union, hardware failure)	Hip
ZZ	Other	Knee and hip

Example: The patient's most responsible diagnosis for a primary hip replacement was an acute hip fracture.

Type of Replacement	Diagnosis Grouping	
1		7

Example: The patient had a revision procedure.

Type of Replacement	Diagnosis Grouping	
2		

Field 22: Reason for Revision (Revision Procedures Only)

Specifications	
Field Length	3 alphanumeric characters
Field Status	Mandatory if Type of Replacement = 2
Valid Data	Knee: 1–13, OTH; Hip: 1–8, 11–12, 14–17, OTH
Joint Type	Knee and hip

Definition

The Reason for Revision field indicates the patient's *most responsible* reason for revision (determined post-operatively) for the involved joint.

The Reason for Revision codes for knee and hip procedures are the following:

Code	Description	Joint Type
1	Aseptic loosening	Knee and hip
2	Bearing wear (e.g. poly wear)	Knee and hip
3	Osteolysis	Knee and hip
4	Instability (e.g. dislocation, excludes patella for knee)	Knee and hip
5	Infection—single-stage revision	Knee and hip
6	Infection—stage 1 of two-stage revision	Knee and hip
7	Infection—stage 2 of two-stage revision	Knee and hip
8	Pain of unknown origin	Knee and hip
9	Patella maltracking or instability	Knee
10	Peri-prosthetic fracture (femur or tibia)	Knee
11	Implant fracture (any component)	Knee and hip
12	Implant dissociation (e.g. stem from tibial tray, head from trunnion)	Knee and hip
13	Arthritis in previously unresurfaced compartment (e.g. patellofemoral, medial or lateral compartment)	Knee
14	Peri-prosthetic fracture, femur	Hip
15	Peri-prosthetic fracture, acetabulum	Hip
16	Acetabular erosion (e.g. hemiarthroplasty)	Hip
17	Leg length discrepancy	Hip
OTH	Other	Knee and hip

Example: The patient had a revision procedure due to arthritis in the previously unresurfaced patellofemoral compartment.

Type of Replacement	Reason for Revision	
2	1	3

Chapter 6—Knee Replacement Prosthesis Information

General Information

Knee replacement prosthesis information is gathered from the manufacturer's sticker for each component replaced. If a sticker is present, all of the following elements must be entered: manufacturer, product number and lot number. A maximum of three stickers for each component and two stickers for cement may be entered.

Refer to Appendix A for the corresponding component/prosthesis information required for each type of primary procedure, and to Appendix B for a reference guide on categorizing implant components.

As of April 2013, the CJRR electronic file submission and Web-Based Data Submission and Reports Tool systems were modified to accept product and lot numbers for implant components and cement that have been scanned directly from barcodes. The CJRR system is still able to accept manually entered implant information when scanning barcodes is not an option. Refer to Appendix C for detailed instructions for both methods of data entry.

Note that CJRR does not require sticker information for sundry pieces involved in knee replacements, including augments, centralizers, rings, tapers and cages. Please contact CJRR if further details are required.

Fields 23, 27, 31: Femoral Component—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if femoral component was used
Valid Data	1–11, OTH
Joint Type	Knee and hip

Definition

The Femoral Component—Manufacturer field indicates the manufacturer of the femoral component used for the procedure.

The Femoral Component—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 24, 28, 32: Femoral Component—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Femoral Component—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee and hip

Definition

The Femoral Component—Manufacturer (Other) field indicates the manufacturer of the femoral component if *other* is indicated in the Femoral Component—Manufacturer field.

Example: The patient’s knee replacement used a femoral component made by the manufacturer Stryker.

Femoral Component—Manufacturer

		7

Femoral Component—Manufacturer (Other)

Example: The patient’s knee replacement used a femoral component made by the manufacturer ABC Manufacturer.

Femoral Component—Manufacturer

O	T	H

Femoral Component—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 25, 29, 33: Femoral Component—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if femoral component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Femoral Component—Product Number field indicates the product (reference, catalogue or other) number of the femoral component used for the procedure.

Fields 26, 30, 34: Femoral Component—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if femoral component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Femoral Component—Lot Number field indicates the lot number of the femoral component used for the procedure.

Fields 35, 39, 43: Tibial Component—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if tibial component was used
Valid Data	1–11, OTH
Joint Type	Knee

Definition

The Tibial Component—Manufacturer field indicates the manufacturer of the tibial component used for the procedure. This includes all-poly tibias.

The Tibial Component—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 36, 40, 44: Tibial Component—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Tibial Component—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee

Definition

The Tibial Component—Manufacturer (Other) field indicates the manufacturer of the tibial component if *other* is indicated in the Tibial Component—Manufacturer field. This includes all-poly tibias.

Example: The patient’s knee replacement used a tibial component made by the manufacturer Ceraver.

Tibial Component—Manufacturer

		2

Tibial Component—Manufacturer (Other)

Example: The patient’s knee replacement used a tibial component made by the manufacturer ABC Manufacturer.

Tibial Component—Manufacturer

O	T	H

Tibial Component—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 37, 41, 45: Tibial Component—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if tibial component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee

Definition

The Tibial Component—Product Number field indicates the product (reference, catalogue or other) number of the tibial component used for the procedure. This includes all-poly tibias.

Fields 38, 42, 46: Tibial Component—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if tibial component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee

Definition

The Tibial Component—Lot Number field indicates the lot number of the tibial component used for the procedure. This includes all-poly tibias.

Fields 47, 51, 55: Tibial Insert—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if tibial insert was used
Valid Data	1–11, OTH
Joint Type	Knee

Definition

The Tibial Insert—Manufacturer field indicates the manufacturer of the tibial insert used for the procedure.

The Tibial Insert—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 48, 52, 56: Tibial Insert—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Tibial Insert—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee

Definition

The Tibial Insert—Manufacturer (Other) field indicates the manufacturer of the tibial insert if *other* is indicated in the Tibial Insert—Manufacturer field.

Example: The patient’s knee replacement used a tibial insert made by the manufacturer MicroPort/Wright Medical.

Tibial Insert—Manufacturer

		5

Tibial Insert—Manufacturer (Other)

Example: The patient’s knee replacement used a tibial insert made by the manufacturer ABC Manufacturer.

Tibial Insert—Manufacturer

O	T	H

Tibial Insert—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 49, 53, 57: Tibial Insert—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if tibial insert was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee

Definition

The Tibial Insert—Product Number field indicates the product (reference, catalogue or other) number of the tibial insert used for the procedure.

Fields 50, 54, 58: Tibial Insert—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if tibial insert was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee

Definition

The Tibial Insert—Lot Number field indicates the lot number of the tibial insert used for the procedure.

Fields 59, 63, 67: Patellar Component—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if patellar component was used
Valid Data	1–11, OTH
Joint Type	Knee

Definition

The Patellar Component—Manufacturer field indicates the manufacturer of the patellar component used for the procedure.

The Patellar Component—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 60, 64, 68: Patellar Component—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Patellar Component—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee

Definition

The Patellar Component—Manufacturer (Other) field indicates the manufacturer of the patellar component if *other* is indicated in the Patellar Component—Manufacturer field.

Example: The patient’s knee replacement used a patellar component made by the manufacturer Zimmer.

Patellar Component—Manufacturer

		4

Patellar Component—Manufacturer (Other)

Example: The patient’s knee replacement used a patellar component made by the manufacturer ABC Manufacturer.

Patellar Component—Manufacturer

O	T	H

Patellar Component—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 61, 65, 69: Patellar Component—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if patellar component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee

Definition

The Patellar Component—Product Number field indicates the product (reference, catalogue or other) number of the patellar component used for the procedure.

Fields 62, 66, 70: Patellar Component—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if patellar component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee

Definition

The Patellar Component—Lot Number field indicates the lot number of the patellar component used for the procedure.

Fields 71, 75: Cement Details—Name

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if cement was used (if cement sticker is available)
Valid Data	1–8, OTH
Joint Type	Knee and hip

Definition

The Cement Details—Name field indicates the name of the cement used.

The Cement Details—Name codes are the following:

Code	Description
1	Simplex
2	Palacos
3	CMW
4	Cerafix
5	SmartSet
6	Refobacin
7	Versabond
8	Osteobond
OTH	Mix/other

Fields 72, 76: Cement Details—Name (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Cement Details—Name = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee and hip

Definition

The Cement Details—Name (Other) field indicates the name of the cement if *other* is indicated in the Cement Details—Name field.

Example: The patient’s knee replacement was performed using Palacos cement.

Cement Details—Name

		2

Cement Details—Name (Other)

Example: The patient’s knee replacement was performed using ABC Cement.

Cement Details—Name

O	T	H

Cement Details—Name (Other)

											A	B	C		C	E	M	E	N	T

Fields 73, 77: Cement Details—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if cement was used (if cement sticker is available)
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Cement Details—Product Number field indicates the product (reference, catalogue or other) number of the cement used for the procedure.

Fields 74, 78: Cement Details—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if cement was used (if cement sticker is available)
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Cement Details—Lot Number field indicates the lot number of the cement used for the procedure.

Chapter 7—Hip Replacement Prosthesis Information

General Information

Hip replacement prosthesis information is gathered from the manufacturer's sticker for each component replaced. If a sticker is present, all of the following elements must be entered: manufacturer, product number and lot number. A maximum of three stickers for each component and two stickers for cement may be entered.

Please refer to Appendix A for the corresponding component/prosthesis information required for each type of primary procedure, and to Appendix B for a reference guide on categorizing implant components.

As of April 2013, the CJRR electronic file submission and Web-Based Data Submission and Reports Tool systems were modified to accept product and lot numbers for implant components and cement that have been scanned directly from barcodes. The CJRR system is still able to accept manually entered implant information when scanning barcodes is not an option. Refer to Appendix C for detailed instructions for both methods of data entry.

Note that CJRR does not require sticker information for sundry pieces involved in hip replacements, including augments, centralizers, rings, tapers and cages. Please contact CJRR if further details are required.

Fields 23, 27, 31: Femoral Component—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if femoral component was used
Valid Data	1–11, OTH
Joint Type	Knee and hip

Definition

The Femoral Component—Manufacturer field indicates the manufacturer of the femoral component used for the procedure. This includes modular body/stem/neck combinations and monoblock implants for hemiarthroplasties.

The Femoral Component—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 24, 28, 32: Femoral Component—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Femoral Component—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee and hip

Definition

The Femoral Component—Manufacturer (Other) field indicates the manufacturer of the femoral component if *other* is indicated in the Femoral Component—Manufacturer field. This includes modular body/stem/neck combinations and monoblock implants for hemiarthroplasties.

Example: The patient’s hip replacement used a femoral component made by the manufacturer Biomet.

Femoral Component—Manufacturer

		1

Femoral Component—Manufacturer (Other)

Example: The patient’s hip replacement used a femoral component made by the manufacturer ABC Manufacturer.

Femoral Component—Manufacturer

O	T	H

Femoral Component—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 25, 29, 33: Femoral Component—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if femoral component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Femoral Component—Product Number field indicates the product (reference, catalogue or other) number of the femoral component used for the procedure. This includes modular body/stem/neck combinations and monoblock implants for hemiarthroplasties.

Fields 26, 30, 34: Femoral Component—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if femoral component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Femoral Component—Lot Number field indicates the lot number of the femoral component used for the procedure. This includes modular body/stem/neck combinations and monoblock implants for hemiarthroplasties.

Fields 35, 39, 43: Femoral Head—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if femoral head was used
Valid Data	1–11, OTH
Joint Type	Hip

Definition

The Femoral Head—Manufacturer field indicates the manufacturer of the femoral head used for the procedure. This includes bipolar heads, bipolar liners and bipolar cups/shells for hemiarthroplasties.

The Femoral Head—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 36, 40, 44: Femoral Head—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Femoral Head—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Hip

Definition

The Femoral Head—Manufacturer (Other) field indicates the manufacturer of the femoral head if *other* is indicated in the Femoral Head—Manufacturer field. This includes bipolar heads, bipolar liners and bipolar cups/shells for hemiarthroplasties.

Example: The patient’s hip replacement used a femoral head made by the manufacturer DePuy/Finsbury.

Femoral Head—Manufacturer

		3

Femoral Head—Manufacturer (Other)

Example: The patient’s hip replacement used a femoral head made by the manufacturer ABC Manufacturer.

Femoral Head—Manufacturer

O	T	H

Femoral Head—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 37, 41, 45: Femoral Head—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if femoral head was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Hip

Definition

The Femoral Head—Product Number field indicates the product (reference, catalogue or other) number of the femoral head used for the procedure. This includes bipolar heads, bipolar liners and bipolar cups/shells for hemiarthroplasties.

Fields 38, 42, 46: Femoral Head—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if femoral head was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Hip

Definition

The Femoral Head—Lot Number field indicates the lot number of the femoral head used for the procedure. This includes bipolar heads, bipolar liners and bipolar cups/shells for hemiarthroplasties.

Fields 47, 51, 55: Acetabular Component—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if acetabular component was used
Valid Data	1–11, OTH
Joint Type	Hip

Definition

The Acetabular Component—Manufacturer field indicates the manufacturer of the acetabular component used for the procedure.

The Acetabular Component—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 48, 52, 56: Acetabular Component—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Acetabular Component—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Hip

Definition

The Acetabular Component—Manufacturer (Other) field indicates the manufacturer of the acetabular component if *other* is indicated in the Acetabular Component—Manufacturer field.

Example: The patient’s hip replacement used an acetabular component made by the manufacturer Medacta International.

Acetabular Component—Manufacturer

		8

Acetabular Component—Manufacturer (Other)

Example: The patient’s hip replacement used an acetabular component made by the manufacturer ABC Manufacturer.

Acetabular Component—Manufacturer

O	T	H

Acetabular Component—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 49, 53, 57: Acetabular Component—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if acetabular component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Hip

Definition

The Acetabular Component—Product Number field indicates the product (reference, catalogue or other) number of the acetabular component used for the procedure.

Fields 50, 54, 58: Acetabular Component—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if acetabular component was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Hip

Definition

The Acetabular Component—Lot Number field indicates the lot number of the acetabular component used for the procedure.

Fields 59, 63, 67: Acetabular Insert/Liner—Manufacturer

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if acetabular insert/liner was used
Valid Data	1–11, OTH
Joint Type	Hip

Definition

The Acetabular Insert/Liner—Manufacturer field indicates the manufacturer of the acetabular insert/liner used for the procedure. The Acetabular Insert/Liner—Manufacturer codes are the following:

Code	Description
1	Biomet
2	Ceraver
3	DePuy/Finsbury/J&J
4	Zimmer/Sulzer/Centerpulse
5	MicroPort/Wright Medical
6	Smith & Nephew
7	Stryker/Osteonics/Howmedica
8	Medacta International
9	Link
10	Corin
11	Tecres Medical
OTH	Other

Fields 60, 64, 68: Acetabular Insert/Liner—Manufacturer (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Acetabular Insert/Liner—Manufacturer = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Hip

Definition

The Acetabular Insert/Liner—Manufacturer (Other) field indicates the manufacturer of the acetabular insert/liner if *other* is indicated in the Acetabular Insert/Liner—Manufacturer field.

Example: The patient’s hip replacement used an acetabular insert/liner made by the manufacturer Smith & Nephew.

Acetabular Insert/Liner—Manufacturer

		6

Acetabular Insert/Liner—Manufacturer (Other)

Example: The patient’s hip replacement used an acetabular insert/liner made by the manufacturer ABC Manufacturer.

Acetabular Insert/Liner—Manufacturer

O	T	H

Acetabular Insert/Liner—Manufacturer (Other)

					A	B	C		M	A	N	U	F	A	C	T	U	R	E	R

Fields 61, 65, 69: Acetabular Insert/Liner—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if acetabular insert/liner was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Hip

Definition

The Acetabular Insert/Liner—Product Number field indicates the product (reference, catalogue or other) number of the acetabular insert/liner used for the procedure.

Fields 62, 66, 70: Acetabular Insert/Liner—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if acetabular insert/liner was used
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Hip

Definition

The Acetabular Insert/Liner—Lot Number field indicates the lot number of the acetabular insert/liner used for the procedure.

Fields 71, 75: Cement Details—Name

Specifications	
Field Length	3 alphanumeric characters
Field Status	Applicable only if cement was used (if cement sticker is available)
Valid Data	1–8, OTH
Joint Type	Knee and hip

Definition

The Cement Details—Name field indicates the name of the cement used.

The Cement Details—Name codes are the following:

Code	Description
1	Simplex
2	Palacos
3	CMW
4	Cerafix
5	SmartSet
6	Refobacin
7	Versabond
8	Osteobond
OTH	Mix/other

Fields 72, 76: Cement Details—Name (Other)

Specifications	
Field Length	45 alphanumeric characters
Field Status	Applicable only if Cement Details—Name = OTH
Valid Data	0–9, A–Z, space ( ), hyphen (-), period (.), apostrophe (’), ampersand (&)
Joint Type	Knee and hip

Definition

The Cement Details—Name (Other) field indicates the name of the cement if *other* is indicated in the Cement Details—Name field.

Example: The patient’s hip replacement was performed using CMW cement.

Cement Details—Name

		3

Cement Details—Name (Other)

Example: The patient’s hip replacement was performed using ABC Cement.

Cement Details—Name

O	T	H

Cement Details—Name (Other)

											A	B	C		C	E	M	E	N	T

Fields 73, 77: Cement Details—Product Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if cement was used (if cement sticker is available)
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Cement Details—Product Number field indicates the product (reference, catalogue or other) number of the cement used for the procedure.

Fields 74, 78: Cement Details—Lot Number

Specifications	
Field Length	60 alphanumeric characters
Field Status	Applicable only if cement was used (if cement sticker is available)
Valid Data	0–9, A–Z, underscore (_), space ( ), hyphen (-), period (.), apostrophe (’), percent sign (%), ampersand (&), plus sign (+), forward slash (/), dollar sign ($), right square bracket (]), cedilla (¸)
Joint Type	Knee and hip

Definition

The Cement Details—Lot Number field indicates the lot number of the cement used for the procedure.

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Cement Details—Name (Other)	Hip/knee	72, 76
Chart Number	Hip/knee	16
Diagnosis Grouping (Primary Procedures Only)	Hip/knee	21
Femoral Component—Product Number	Hip/knee	25, 29, 33
Femoral Component—Lot Number	Hip/knee	26, 30, 34
Femoral Component—Manufacturer	Hip/knee	23, 27, 31
Femoral Component—Manufacturer (Other)	Hip/knee	24, 28, 32
Femoral Head—Product Number	Hip	37, 41, 45
Femoral Head—Lot Number	Hip	38, 42, 46
Femoral Head—Manufacturer	Hip	35, 39, 43

(cont'd on next page)

Field Name	Joint Type	Field
Femoral Head—Manufacturer (Other)	Hip	36, 40, 44
Fiscal Year (of Surgery)	Hip/knee	03
Gender	Hip/knee	13
Health Card Number	Hip/knee	11
Hospital Institution Number/Hospital Name	Hip/knee	15
Hospital Province	Hip/knee	04
Patellar Component—Product Number	Knee	61, 65, 69
Patellar Component—Lot Number	Knee	62, 66, 70
Patellar Component—Manufacturer	Knee	59, 64, 67
Patellar Component—Manufacturer (Other)	Knee	60, 64, 68
Patient Birthdate	Hip/knee	12
Patient First Name	Hip/knee	08
Patient Last Name	Hip/knee	09
Patient Postal Code	Hip/knee	14
Health Card Issuing Authority Code	Hip/knee	10
Reason for Revision (Revision Procedures Only)	Hip/knee	22
Record ID	Hip/knee	01
Record Type	Hip/knee	02
Side (Location)	Hip/knee	18
Submission Type	Hip/knee	05
Surgeon ID	Hip/knee	06
Surgeon Last Name	Hip/knee	07
Surgery Date	Hip/knee	17
Tibial Component—Product Number	Knee	37, 41, 45
Tibial Component—Lot Number	Knee	38, 42, 46
Tibial Component—Manufacturer	Knee	35, 39, 43
Tibial Component—Manufacturer (Other)	Knee	36, 40, 44
Tibial Insert—Product Number	Knee	49, 53, 57
Tibial Insert—Lot Number	Knee	50, 54, 58
Tibial Insert—Manufacturer	Knee	47, 51, 55
Tibial Insert—Manufacturer (Other)	Knee	48, 52, 56
Type of Primary Procedure	Hip/knee	20
Type of Replacement	Hip/knee	19

Appendix A—Prosthesis Information Required, by Type of Primary Procedure

Knee—Type of Primary Procedure	Mandatory Components	Additional Components (if Applicable)
Total knee arthroplasty (TKA), including patella	Femoral, tibial and patellar component	Tibial insert
Total knee arthroplasty (TKA), excluding patella	Femoral and tibial component	Tibial insert
Unicompartmental arthroplasty (UKA), medial	Femoral and tibial component	Tibial insert
Unicompartmental arthroplasty (UKA), lateral	Femoral and tibial component	Tibial insert
Patellofemoral arthroplasty (PFA)	Femoral and patellar component	
Other	Any component involved (at least one)	
Knee—Revision	Any component involved (at least one)	

Hip—Type of Primary Procedure	Mandatory Components	Additional Components (if Applicable)
Total hip arthroplasty	Femoral component, femoral head and acetabular component	Acetabular insert/liner
Resurfacing	Femoral head	Acetabular component
Monopolar/unipolar hemiarthroplasty	Femoral component	Femoral head
Bipolar hemiarthroplasty	Femoral component and femoral head	
Other	Any component involved (at least one)	
Hip—Revision	Any component involved (at least one)	

Appendix B—Component Information Categorization

HIP / HANCHE	
Femoral component / Composant fémoral	
EN	• Modular body/stem/neck combinations • Femoral component/femoral stem • Monoblock implant for hemiarthroplasty (for example, Austin-Moore, Thompson implants) • Endoprosthesis • Prefabricated femoral component cement spacer, temporary joint prosthesis or mould
FR	• Combinaisons de corps/tige/col modulaires • Composant fémoral/prothèse fémorale/tige fémorale/implant fémoral • Prothèse monobloc pour les hémiarthroplasties (p.ex. prothèse d'Austin-Moore ou prothèse de Thompson) • Composant fémoral préfabriqué, moule ou dispositif d'espacement en ciment • Composant fémoral préfabriqué, moule ou « spacer » en ciment
Femoral head / Tête fémorale	
EN	• Bipolar head (bipolar cup and bipolar liner/bipolar shell) • Monopolar head • Femoral head • Resurfacing head • Prefabricated femoral head cement spacer, temporary joint prosthesis or mould
FR	• Tête bipolaire et cupule bipolaire • Tête fémorale/tête sphérique • Prothèse de resurfaçage • Tête fémorale préfabriquée, moule ou dispositif d'espacement en ciment • Tête fémorale préfabriquée, moule ou « spacer » en ciment
Acetabular component / Composant acétabulaire	
EN	• Acetabular component/acetabular shell/acetabular cup/hemispherical shell • Cluster acetabular shell • Monoblock acetabular cup/one-piece cup • All-polyethylene acetabular cup • Prefabricated acetabular component cement spacer, temporary joint prosthesis or mould
FR	• Composant acétabulaire • Cotyle/cotyle en polyéthylène • Prothèse cotyloïdienne • Prothèse de cupule acétabulaire • Cupule hémisphérique • Coque acétabulaire • Renfort acétabulaire • Composant acétabulaire préfabriqué, moule ou dispositif d'espacement en ciment • Composant acétabulaire préfabriqué, moule ou « spacer » en ciment

(cont'd on next page)

HIP / HANCHE (cont'd)	
Acetabular liner/insert / Insert acétabulaire	
EN	• Acetabular liner/acetabular insert • Polyethylene/metal/ceramic insert
FR	• Noyau/noyau en polyéthylène • Insert/insert acétabulaire • Insert en polyéthylène/métal/céramique
KNEE / GENOU	
Femoral component / Composant fémoral	
EN	• Femoral component • Trochlear component • Femoral stem/modular femoral stem • Prefabricated femoral component cement spacer, temporary joint prosthesis or mould
FR	• Composant fémoral • Composant trochléen • Prothèse fémoro-patellaire • Tige fémorale/tige fémorale modulaire • Composant fémoral préfabriqué, moule ou dispositif d'espacement en ciment • Composant fémoral préfabriqué, moule ou « spacer » en ciment
Tibial component / Composant tibial	
EN	• Monoblock (all polyethylene) tibial component • Tibial component/tibial baseplate/tibial tray • Stemmed tibial component • Tibial stem/modular tibial stem • Modular tibial system • Prefabricated tibial component cement spacer, temporary joint prosthesis or mould
FR	• Tibia tout polyéthylène • Embase tibiale/implant tibial • Plateau tibial monobloc • Tige tibiale/tige tibiale modulaire • Composant tibial préfabriqué, moule ou dispositif d'espacement en ciment • Composant tibial préfabriqué, moule ou « spacer » en ciment
Tibial insert / Insert tibial	
EN	• Tibial insert/tibial plateau • Poly insert • Articular surface • Meniscal bearing
FR	• Plateau tibial • Surface articulaire
Patellar component / Composant rotulien	
EN	• Patellar component • All-poly patella
FR	• Bouton rotulien • Bouton rotulien monobloc

(cont'd on next page)

EXCLUSIONS	
EN	**FR**
• Rings • Cages • Screws • Augments/blocks/wedges/cones • Plugs • Cables • Plates • Centralizers • Stem extenders • Cement restrictors • Tapers/taper sleeves/sleeves/adapters/ adapter sleeves	• Bagues • Cages • Vis • Blocs d’augmentation/cônes • Bouchons/obturateurs • Câbles • Plaques • Centreurs • Tiges d’extension • Obturateurs en ciment • Cônes/manchons de cônes

Appendix C—Entering Prosthesis and Cement Information

Data submitters are provided with two options when entering product or cement information: barcode scanning and manual entry. This appendix presents instructions for both methods of entry along with samples of fictitious product labels based on actual manufacturer stickers. Note that this is not an exhaustive list and is intended for demonstration purposes only.

If you notice any discrepancies or new sticker variations, please inform CJRR by email at cjrr@cihi.ca.

The following guidelines apply to the entry of implant sticker information (for manual entry of data, skip to Step 3C):

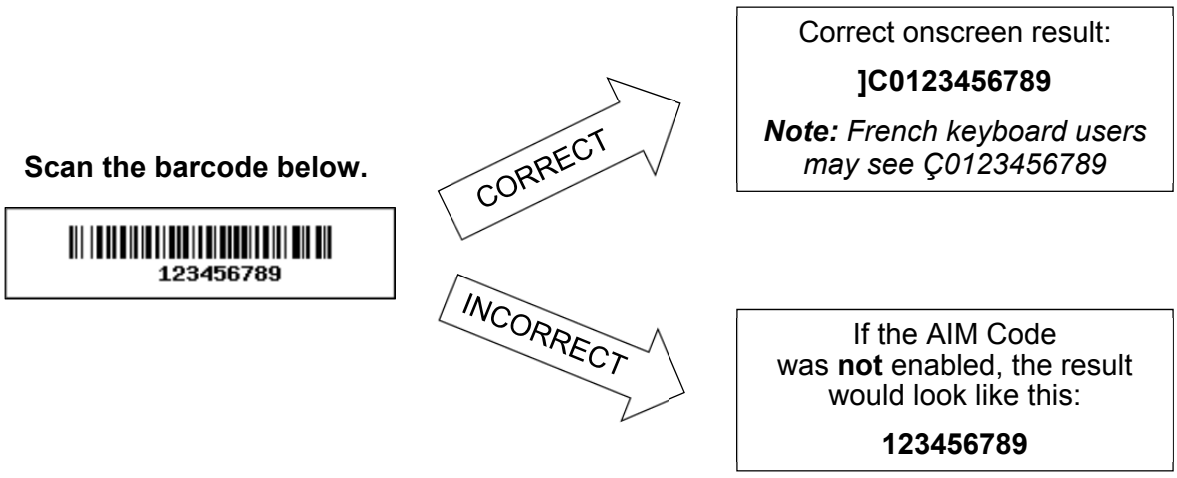
Step 1: Setting Up a Barcode Scanner

The first step is **to enable transmission of the Automatic Identification and Mobility (AIM) Code**. Refer to the scanner's user manual for more information. Scanner settings are often enabled or disabled by scanning special barcodes provided in the user manual.

Enabling the AIM Code is necessary for the CJRR internal system to recognize the entry as a scanned barcode rather than a manually entered value. Without the AIM Code, the CJRR system will not trigger the extraction of a clean product and lot number.

Note: If the AIM Code is not enabled, the CJRR system will not extract the product and lot numbers from the scanned value.

Step 2: Verifying That the AIM Code Transmission Is Enabled

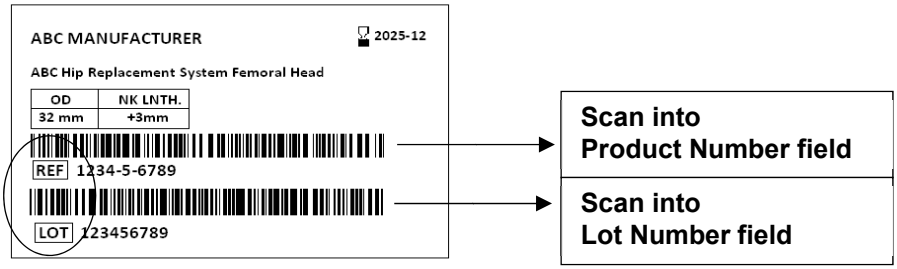


Step 3: Scanning Barcodes

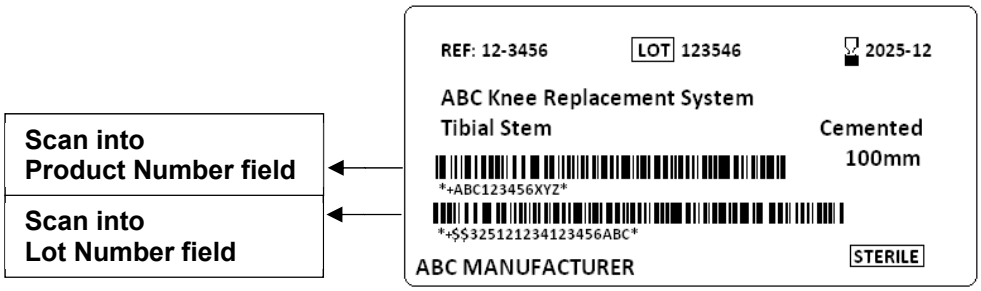
- With the AIM Code enabled, each scanned barcode should lead with a square bracket (“]”). If this is missing, it may be an indication that the AIM Code was not enabled. (See Step 1.)
  - French keyboard users: In place of the leading], scanned output will lead with a cedilla (either “¸” or “Ç”).
- **The Three General Categories of Product Label Appearance**

A. Implant Stickers With Two Barcodes

1. Is this a product sticker from the manufacturer Link?
   - For Link products, do not scan the barcode. The product and lot numbers need to be manually entered (exactly as they appear on the sticker).
   - If not, proceed.
2. Does the sticker identify the product or lot number under each barcode?
   - If so, scan the applicable barcodes into the Product Number and Lot Number fields.

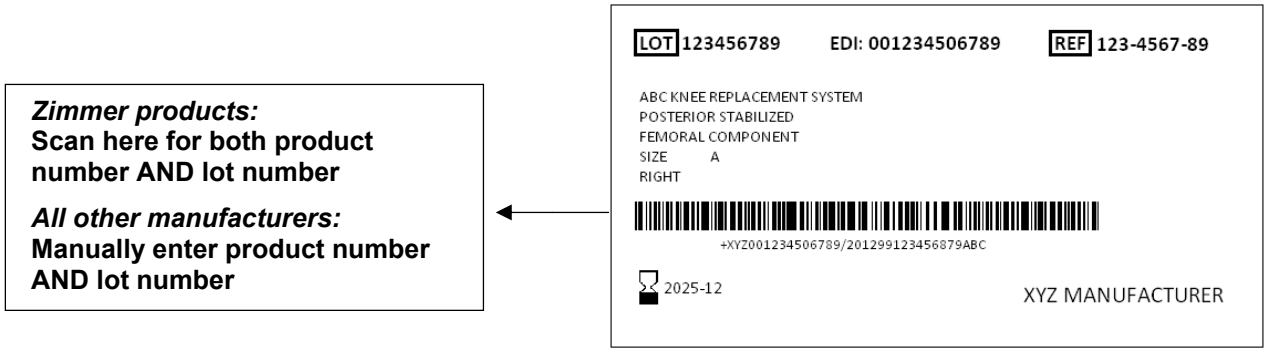


   - If not, scan the top barcode into the Product Number field and the bottom barcode into the Lot Number field.



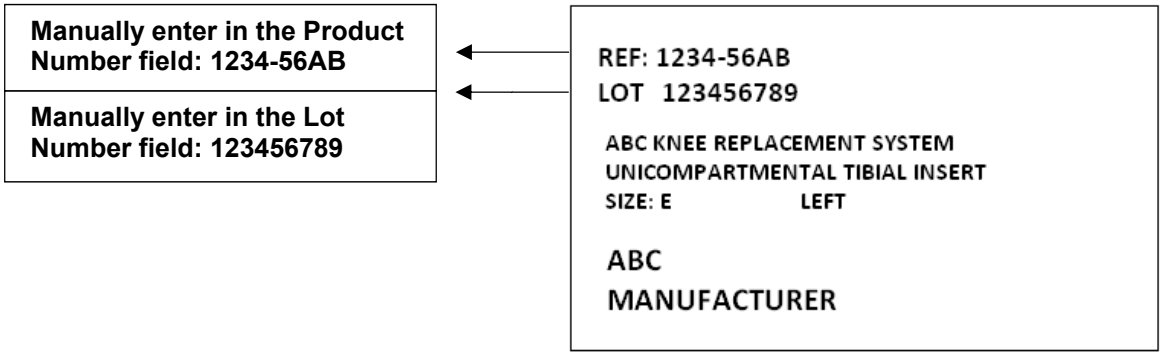
B. Implant Stickers With One Barcode

1. Is this a product sticker from the manufacturer Zimmer?
   - For Zimmer products (with only one barcode), scan the same barcode into both the Product Number and Lot Number fields.
   - For all other manufacturers, **manually enter** the catalogue/reference number in the Product Number field and the lot number in the Lot Number field.

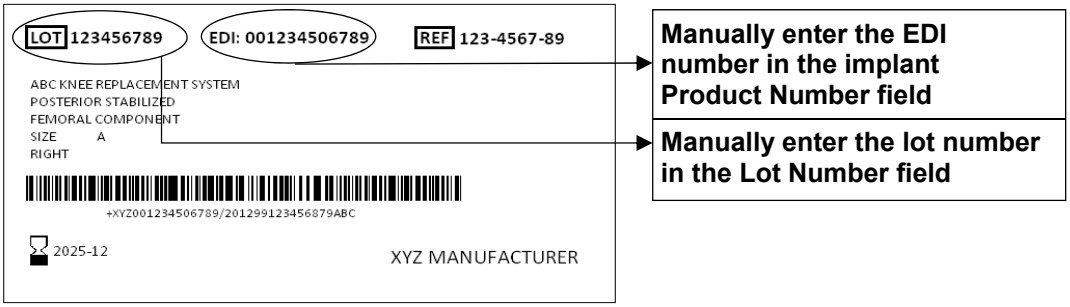


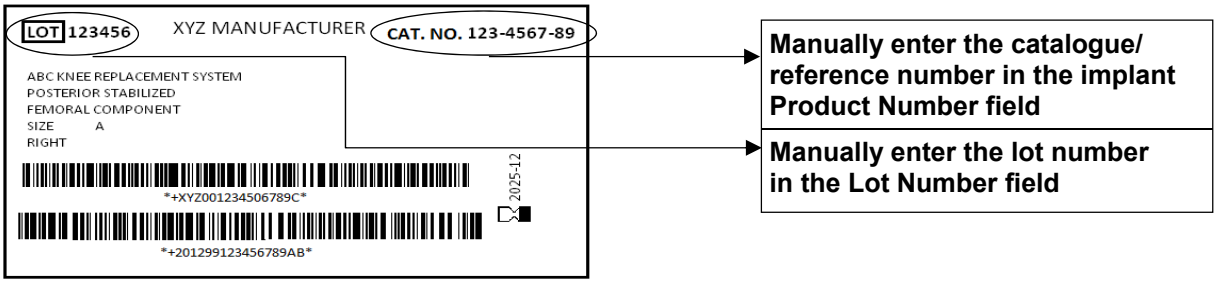
C. Implant Stickers Without a Barcode or Manual Entry Option

- Enter the catalogue/reference number in the Product Number field and the lot number in the Lot Number field.
- All information should be entered exactly as it appears on the sticker.



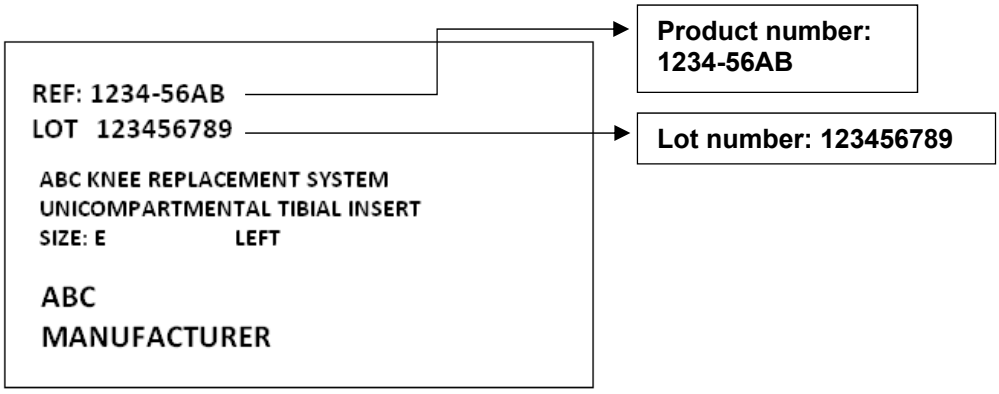
- For Zimmer products, the product number is often referred to as the EDI number.
  - If there is an EDI number, manually enter it in the implant Product Number field.
  - If there is no EDI number, manually enter the catalogue number (also known as the reference number) in the implant Product Number field.

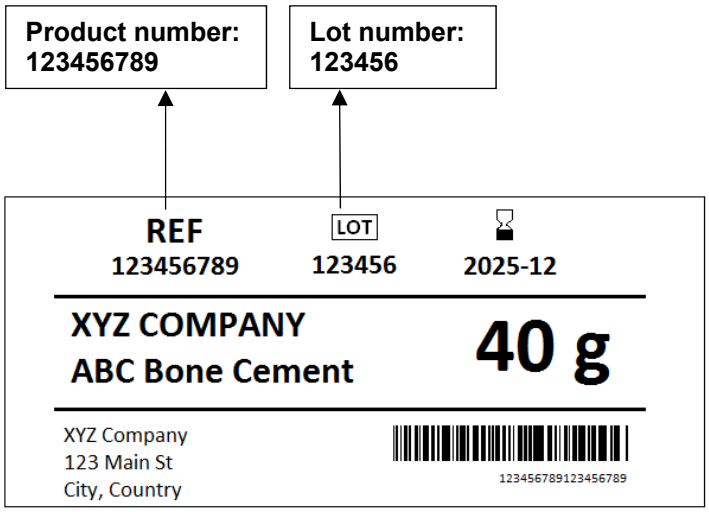


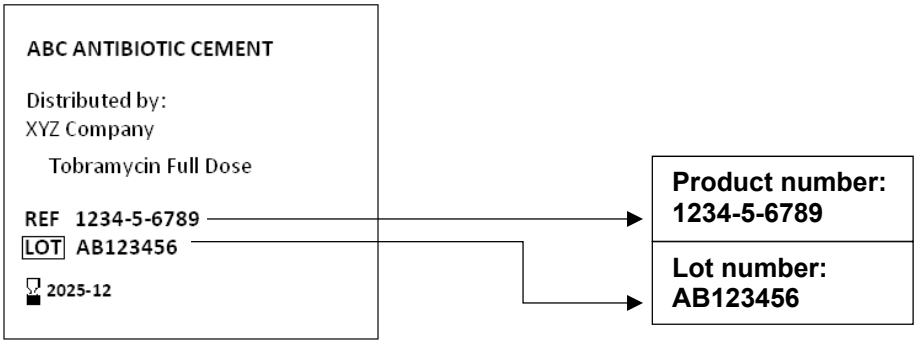


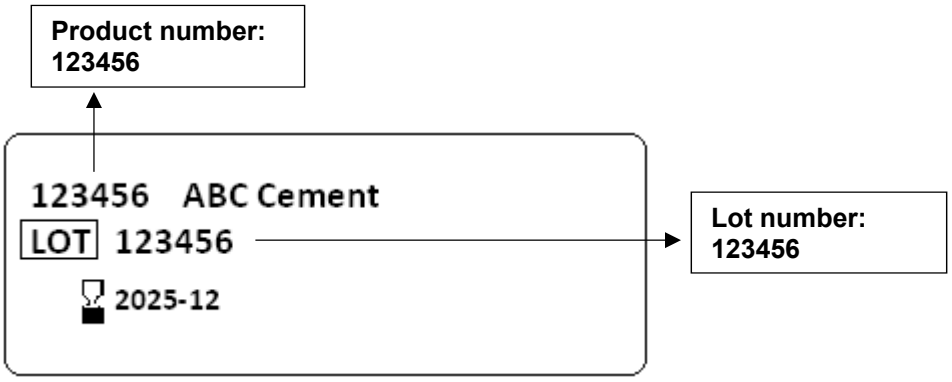
Sticker Examples for Manual Entry

This section presents a sample of fictitious product labels based on actual manufacturer stickers. This is not an exhaustive list; it is intended for demonstration purposes only.



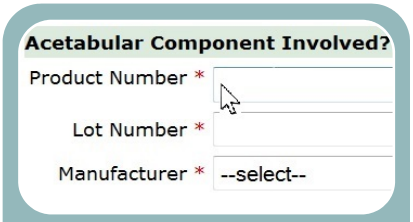





Product number:
123456
123456 ABC Cement
LOT 123456
2025-12
Lot number:
123456

Demonstration

This is an example of a product sticker with two unlabelled barcodes (that are not from the manufacturer Link).



Place computer cursor in the appropriate Product Number field (where you want the information to be entered).

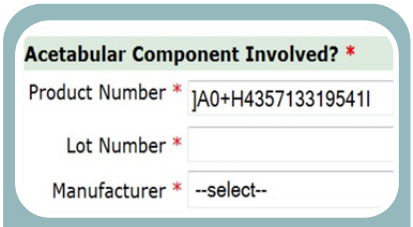
Align barcode scanner to product label. Be careful when scanning the barcode.

Scan the **top** number into the **Product Number** field.

Note: Ref Number = 71331954

Value under the barcode =

+H435713319541I



The resulting output should look like this.

Each scanned barcode should lead with a square bracket ( ]). If this is missing, it may be an indication that the AIM Code was not enabled. (See Step 1.)

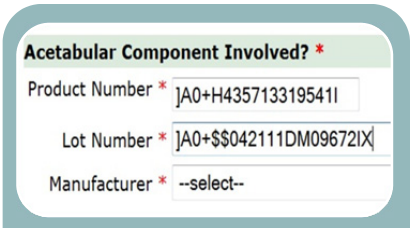
Note: It is acceptable for the output to look completely different than the value under the barcode. **Do not modify** the scanned output (for example, do not delete characters or symbols).

Scan the **bottom** barcode into the **Lot Number** field.

Note: Lot Number= 11DM09672

Value under the barcode =

+$$04211DM096721X



The resulting output should look like this.

Each scanned barcode should lead with a square bracket ( ]). If this is missing, it may be an indication that the AIM Code was not enabled. (See Step 1.)

Note: It is acceptable for the output to look completely different than the value under the barcode.

Do not modify the scanned output.

Note

French keyboard users: In place of the leading "]," scanned output will lead with a cedilla (either "¸" or "Ç").

Appendix D—Deleting and Correcting CJRR Records

When communicating with CJRR about specific records, **do not send personal health information (PHI) via email or fax**, as these are not secure methods of data transmission. To delete a patient or procedure record or to update existing patient information, contact CJRR by email (cjrr@cihi.ca) and provide the information listed below.

1. For the CJRR Web-Based Data Submission and Reports Tool
   a. To delete a patient, provide this information:
      - Surgeon_patient_id
      - Surgeon name
   b. To delete a procedure, provide this information:
      - Joint_replacement_id
      - Surgery date
      - Surgeon_patient_id
   c. To correct existing patient information, follow this process:
      - Contact CJRR by email (cjrr@cihi.ca) for specific instructions. **Do not send PHI via email or fax.**
2. For electronic file submission
   a. To delete a patient, follow this process:
      - Contact CJRR by email (cjrr@cihi.ca) for specific instructions. **Do not send PHI via email or fax.**
   b. To delete a procedure, provide this information:
      - Record_id
      - Surgery date
      - Joint type
      - Side (location)
      - Type of replacement
      - Surgeon_id
   c. To correct existing patient information, follow this process:
      - Contact CJRR by email (cjrr@cihi.ca) for specific instructions. **Do not send PHI via email or fax.**

Appendix E—CJRR Error Decoder

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Record ID (H and K)	1-1	Field is blank	Missing value	Severe	Record rejected
	1-2	Field is not numeric	Invalid value		
	1-3	Field length is not between 1 and 11 digits	Out of range		
	1-4	If submission type is U and Record ID does not exist in the database	Corresponding record does not exist in the database for the submitted update record		
	1-5	If submission type is I and Record ID already exists in the database	Record ID already exists in database		
	1-6	More than one record with the same Record ID is in the same file	More than one record with the same Record ID found in the submission file		
Record Type (H and K)	2-1	Field is blank	Missing value	Severe	Record rejected
	2-2	Value in field is not one of the two options	Invalid value		
	2-3	Value in field doesn't match the value in control record	Record type mismatch with value in control record		
Fiscal Year (of surgery) (H and K)	3-1	Field is blank	Missing value	Severe	Record rejected
	3-2	Fiscal year is not the same as the year in control record	Fiscal year mismatch with year in control record		
Hospital Province (H and K)	4-1	Field is blank	Missing value	Severe	Record rejected
	4-2	Invalid value	Invalid value		
Submission Type (H and K)	5-1	Field is blank	Missing value	Severe	Record rejected
	5-2	Invalid value	Invalid value		
Surgeon ID (H and K)	6-1	Field is blank	Missing value	Severe	Record rejected
	6-2	Surgeon ID not found in database	Value not found in database		
	6-3	If submission type is U and Surgeon ID is not the same	Surgeon ID cannot be updated		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Surgeon Last Name (H and K)	7-1	Surgeon last name not found in database	Value not found in database	Severe	Record rejected
	7-2	Field is blank	Missing value		
	7-3	Surgeon last name and surgeon ID do not match	Surgeon last name and surgeon ID do not match		
Patient First Name (H and K)	8-1	Field is blank	Missing value	Severe	Record rejected
	8-2	Field length is outside range	Out of range		
	8-3	Invalid format	Invalid value		
	8-4	If submission type is U and patient information does not match database	Record type is U but patient values do not match database		
Patient Last Name (H and K)	9-1	Field is blank	Missing value	Severe	Record rejected
	9-2	Field length is outside range	Out of range		
	9-3	Invalid format	Invalid value		
	9-4	If submission type is U and patient information does not match database	Record type is U but patient values do not match database		
Health Card Issuing Authority (H and K)	10-1	Code is invalid	Invalid value	Severe	Record rejected
	10-2	Field is blank	Missing value		
	10-3	If submission type is U and patient information does not match database	Record type is U but patient values do not match database		
Health Card Number (H and K)	11-1	Field is blank and Health Card authority code ≠ N/A	Missing value	Severe	Record rejected
	11-2	Field contains more than 12 characters	Out of range		
	11-3	Value not valid according to Province Issuing Health Card rules	Invalid combination		
	11-4	Health Card Authority code = N/A and field is populated	Invalid combination		
	11-5	Submission type is U and patient information does not match database	Record type is U but patient values do not match database		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Patient Birth Date (H and K)	12-1	Field is blank	Missing value	Severe	Record rejected
	12-2	Date format is invalid (month and day combination is not valid)	Invalid date		
	12-3	Patient is too old/young	Invalid value, out of range		
	12-4	If submission type is U and patient information does not match database	Record type is U but patient values do not match database		
Gender (H and K)	13-1	Field is blank	Missing value	Severe	Record rejected
	13-2	Invalid character	Invalid value		
	13-3	If submission type is U and patient information does not match database	Record type is U but patient values do not match database		
Patient Postal Code (H and K)	14-1	Field <3 characters	Out of range	Severe	Record rejected
	14-2	Field is blank	Missing value		
	14-3	Format for postal code is incorrect	Invalid value		
	14-4	Field has 3, 4 or 5 characters	Postal code is incomplete	Non-severe	None
	14-5	Postal code is Z9Z9Z9	Postal code does not match province	Non-severe	None
Hospital Institution Number (H and K)	15-1	Field is blank	Missing value	Severe	Record rejected
	15-2	Hospital Institution Number is not found in the database	Value not found in database		
	15-3	If starting digit for facility does not belong to the province (QC excluded from validation)	The facility number does not belong to the selected province		
Chart Number (H and K)	16-1	Field is blank	Missing value	Severe	Record rejected
	16-2	Length is less than 4 or greater than 12	Out of range		
	16-3	Invalid value	Invalid value		
	16-4	Value matches Health Card Number (field 11)	Health Card Number is not permitted in Chart Number field	Severe	None
Surgery Date (H and K)	17-1	Field is blank	Missing value	Severe	Record rejected
	17-2	Surgery date is not within the corresponding fiscal year of surgery	Surgery date must be within the Fiscal Year of Surgery		
	17-3	Invalid date	Invalid value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Side (Location) (H and K)	18-1	Field is blank	Missing value	Severe	Record rejected
	18-2	Invalid value	Invalid value		
Type of Replacement (H and K)	19-1	Field is blank	Missing value	Severe	Record rejected
	19-2	Invalid value	Invalid value		
Type of Primary Procedure (H and K)	20-1	If Type of Replacement is 1 (primary) and this field is blank	Missing value	Severe	Record rejected
	20-2	If Type of Replacement is 2 (revision) and this field is populated	Type of primary procedure is not applicable for revisions		
	20-3	Record Type is K and Type of Primary Procedure not in 1, 2, 3, 4, 5, OTH	Invalid value		
	20-4	Record Type is H and Type of Primary Procedure not in 6, 7, 8, 9, OTH	Invalid value		
	20-5	If Type of Primary Procedure is 1, 2, 3, 4 or 5 and femoral component sticker information is missing	Femoral component sticker information is missing		
	20-6	If Type of Primary Procedure is 1, 2, 3 or 4 and tibial component sticker information is missing	Tibial component sticker information is missing		
	20-7	If Type of Primary Procedure is 1 or 5 and patellar component sticker information is missing	Patellar component sticker information is missing		
	20-8	If Type of Primary Procedure is 2, 3 or 4 and any patellar component stickers are present	Patellar component sticker information must be blank for this type of primary procedure		
	20-9	If Type of Primary Procedure is 5 and any tibial component stickers are present	Tibial component sticker information must be blank for this type of primary procedure		
	20-10	If Type of Primary Procedure is 5 and any tibial insert stickers are present	Tibial insert sticker information must be blank for this type of primary procedure		
	20-11	If Type of Primary Procedure is 6, 8 or 9 and femoral component sticker information is missing	Femoral component sticker information is missing		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Type of Primary Procedure (H and K) (cont'd)	20-12	If Type of Primary Procedure is 6, 7 or 9 and femoral head sticker information is missing	Femoral head sticker information is missing		
	20-13	If Type of Primary Procedure is 6 and acetabular component sticker information is missing	Acetabular component sticker information is missing		
	20-14	If Type of Primary Procedure is 7 and any femoral component stickers are present	Femoral component sticker information must be blank for this type of primary procedure		
	20-15	If Type of Primary Procedure is 7, 8 or 9 and any acetabular insert/liner stickers are present	Acetabular insert/liner sticker information must be blank for this type of primary procedure		
	20-16	If Type of Primary Procedure is 8 or 9 and any acetabular component stickers are present	Acetabular component sticker information must be blank for this type of primary procedure		
Diagnosis Grouping (primary procedures only) (H and K)	21-1	If Record Type is K and Type of Replacement is equal to 1 and this field does not have a valid value from the list of valid values	Invalid value	Severe	Record rejected
	21-2	If Record Type is H and Type of Replacement is equal to 1 and this field does not have a valid value from the list of valid values	Invalid value		
	21-3	If Type of Replacement is 1 and this field is blank	Missing value		
	21-4	If Type of Replacement is 2 and this field is populated	Invalid combination		
	21-5	The field contains an invalid value	Invalid value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Reason for Revision (revision procedures only) (H and K)	22-1	If Record Type is K and Type of Replacement is equal to 2 and this field does not have a valid value from the list of valid values	Invalid value	Severe	Record rejected
	22-2	If Record Type is H and Type of Replacement is equal to 2 and this field does not have a valid value from the list of valid values	Invalid value		
	22-3	If Type of Replacement is 2 and this field is blank	Missing value		
	22-4	If Type of Replacement is 1 and this field is populated	Invalid combination		
	22-5	The field contains an invalid value	Invalid value		
	A	If no component is present	At least one component must be completed	Severe	Record rejected
Femoral component sticker information					
	B	If stickers are not completed in sequential order	Femoral component stickers must be completed in sequential order	Severe	Record rejected
Femoral Component—Manufacturer (H and K)	23-1	The value in this field is not found in the manufacturer table	Value not found in database	Severe	Record rejected
	23-2	For each sticker present, if manufacturer is missing	Missing value		
Femoral Component — Manufacturer (Other) (H and K)	24-1	Field contains invalid value	Invalid value	Severe	Record rejected
	24-2	Length of field exceeded	Out of range		
	24-3	If option OTH is selected and details are missing	Manufacturer Other and details are missing		
	24-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Femoral Component—Product (H and K)	25-1	Field contains invalid value	Invalid value	Severe	Record rejected
	25-2	Length of field exceeded	Out of range		
	25-3	For each sticker present, if product number is missing	Missing value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Femoral Component—Lot (H and K)	26-1	Field contains invalid value	Invalid value	Severe	Record rejected
	26-2	Length of field exceeded	Out of range		
	26-3	For each sticker present, if lot number is missing	Missing value		
Femoral head sticker information					
	C	If stickers are not completed in sequential order	Femoral head stickers must be completed in sequential order	Severe	Record rejected
Femoral Head—Manufacturer (H)	35-1	Manufacturer codes for femoral head and femoral component (hip) are not the same (first stickers only)	Manufacturer for femoral component and femoral head does not match	Non-severe	None
	35-2	Manufacturer code does not exist in the manufacturer table	Value not found in database	Severe	Record rejected
	35-3	For each sticker present, if manufacturer is missing	Missing value		
Femoral Head—Manufacturer (Other) (H)	36-1	Field contains invalid value	Invalid value	Severe	Record rejected
	36-2	Length of field exceeded	Out of range		
	36-3	If option OTH is selected and details are missing	Manufacturer is Other and details are missing		
	36-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Femoral Head—Product (H)	37-1	Field contains invalid value	Invalid value	Severe	Record rejected
	37-2	Length of field exceeded	Out of range		
	37-3	For each sticker present, if product number is missing	Missing value		
Femoral Head—Lot (H)	38-1	Field contains invalid value	Invalid value	Severe	Record rejected
	38-2	Length of field exceeded	Out of range		
	38-3	For each sticker present, if lot number is missing	Missing value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Acetabular component sticker information					
	D	If stickers are not completed in sequential order	Acetabular component stickers must be completed in sequential order	Severe	Record rejected
Acetabular Component—Manufacturer (H)	47-1	Manufacturer code does not exist in the manufacturer table	Value not found in database	Severe	Record rejected
	47-2	For each sticker present, if manufacturer is missing	Missing value		
Acetabular Component—Manufacturer (Other) (H)	48-1	Field contains invalid value	Invalid value	Severe	Record rejected
	48-2	Length of field exceeded	Out of range		
	48-3	If option OTH is selected and details are missing	Manufacturer is Other and details are missing		
	48-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Acetabular Component—Product (H)	49-1	Field contains invalid value	Invalid value	Severe	Record rejected
	49-2	Length of field exceeded	Out of range		
	49-3	For each sticker present, if product number is missing	Missing value		
Acetabular Component—Lot (H)	50-1	Field contains invalid value	Invalid value	Severe	Record rejected
	50-2	Length of field exceeded	Out of range		
	50-3	For each sticker present, if lot number is missing	Missing value		
Acetabular insert/liner sticker information					
	E	If stickers are not completed in sequential order	Acetabular insert/liner stickers must be completed in sequential order	Severe	Record rejected
Acetabular Insert/Liner—Manufacturer (H)	59-1	Manufacturer codes for acetabular component and insert/liner are not the same (first stickers only)	Manufacturer for acetabular component and insert/liner does not match	Non-severe	None
	59-2	Manufacturer code does not exist in the manufacturer table	Value not found in database	Severe	Record rejected
	59-3	For each sticker present, if manufacturer is missing	Missing value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Acetabular Insert/Liner—Manufacturer (Other) (H)	60-1	Field contains invalid value	Invalid value	Severe	Record rejected
	60-2	Length of field exceeded	Out of range		
	60-3	If option OTH is selected and details are missing	Manufacturer is Other and details are missing		
	60-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Acetabular Insert/Liner—Product (H)	61-1	Length of field exceeded	Out of range	Severe	Record rejected
	61-2	Field contains invalid value	Invalid value		
	61-3	For each sticker present, if product number is missing	Missing value		
Acetabular Insert/Liner—Lot (H)	62-1	Length of field exceeded	Out of range	Severe	Record rejected
	62-2	Field contains invalid value	Invalid value		
	62-3	For each sticker present, if lot number is missing	Missing value		
Tibial component sticker information					
	F	If stickers are not completed in sequential order	Tibial component stickers must be completed in sequential order	Severe	Record rejected
Tibial Component—Manufacturer (K)	35-1	Manufacturer code not found in the manufacturer table	Value not found in database	Severe	Record rejected
	35-2	For each sticker present, if manufacturer is missing	Missing value		
Tibial Component—Manufacturer (Other) (K)	36-1	Field contains invalid value	Invalid value	Severe	Record rejected
	36-2	Length of field exceeded	Out of range		
	36-3	If option OTH is selected and details are missing	Manufacturer is Other and details are missing		
	36-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Tibial Component—Product (K)	37-1	Length of field exceeded	Out of range	Severe	Record rejected
	37-2	Field contains invalid value	Invalid value		
	37-3	For each sticker present, if product number is missing	Missing value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Tibial Component—Lot (K)	38-1	Length of field exceeded	Out of range	Severe	Record rejected
	38-2	Field contains invalid value	Invalid value		
	38-3	For each sticker present, if lot number is missing	Missing value		
Tibial insert sticker information					
	G	If stickers are not completed in sequential order	Tibial insert stickers must be completed in sequential order	Severe	Record rejected
Tibial Insert—Manufacturer (K)	47-1	Manufacturer codes for tibial component and tibial insert are not the same (first stickers only)	Manufacturer for tibial insert and tibial component does not match	Non-severe	None
	47-2	Manufacturer code is not found in the manufacturer table	Value not found in database	Severe	Record rejected
	47-3	For each sticker present, if manufacturer is missing	Missing value		
Tibial Insert—Manufacturer (Other) (K)	48-1	Field contains invalid value	Invalid value	Severe	Record rejected
	48-2	Length of field exceeded	Out of range		
	48-3	If option OTH is selected and details are missing	Manufacturer is Other and details are missing		
	48-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Tibial Insert—Product (K)	49-1	Length of field exceeded	Out of range	Severe	Record rejected
	49-2	Field contains invalid value	Invalid value		
	49-3	For each sticker present, if product number is missing	Missing value		
Tibial Insert—Lot (K)	50-1	Length of field exceeded	Out of range	Severe	Record rejected
	50-2	Field contains invalid value	Invalid value		
	50-3	For each sticker present, if lot number is missing	Missing value		

(cont'd on next page)

Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Patellar component sticker information					
	H	If stickers are not completed in sequential order	Patellar component stickers must be completed in sequential order	Severe	Record rejected
Patellar Component—Manufacturer (K)	59-1	Manufacturer not found in database	Value not found in database	Severe	Record rejected
	59-2	For each sticker present, if manufacturer is missing	Missing value		
Patellar Component—Manufacturer (Other) (K)	60-1	Field contains invalid value	Invalid value	Severe	Record rejected
	60-2	Length of field exceeded	Out of range		
	60-3	If option OTH is selected and details are missing	Manufacturer is Other and details are missing		
	60-4	Manufacturer not OTH, but manufacturer (Other) populated	Manufacturer (Other) must be blank if Other is not selected		
Patellar Component—Product (K)	61-1	Field contains invalid value	Invalid value	Severe	Record rejected
	61-2	Length of field exceeded	Out of range		
	61-3	For each sticker present, if product number is missing	Missing value		
Patellar Component—Lot (K)	62-1	Field contains invalid value	Invalid value	Severe	Record rejected
	62-2	Length of field exceeded	Out of range		
	62-3	For each sticker present, if lot number is missing	Missing value		
Cement sticker information					
	I	If stickers are not completed in sequential order	Cement stickers must be completed in sequential order	Severe	Record rejected
Cement Details—Name (H and K)	71-1	Cement code does not exist in the cement table	Value not found in database	Severe	Record rejected
	71-2	For each sticker present, if name is missing	Missing value		

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Data Element Name	Error Number	Error Condition	Error Message	Error Type	System Action
Cement Details—Name (Other) (H and K)	72-1	Field contains invalid value	Invalid value	Severe	Record rejected
	72-2	Length of field exceeded	Out of range		
	72-3	If option OTH is selected and details are missing	Cement name is Other and details are missing		
	72-4	Cement not OTH, but cement (Other) populated	Cement name (Other) must be blank if Other is not selected		
Cement Details—Product (H and K)	73-1	Field contains invalid value	Invalid value	Severe	Record rejected
	73-2	Length of field exceeded	Out of range		
	73-3	For each sticker present, if product number is missing	Missing value		
Cement Details—Lot (H and K)	74-1	Field contains invalid value	Invalid value	Severe	Record rejected
	74-2	Length of field exceeded	Out of range		
	74-3	For each sticker present, if lot number is missing	Missing value		

Appendix F—MOD 10 Calculation

MOD 10 Calculation

Add together these values:

- ☐ Rightmost digit of HCN (excluding the check digit) times 2
- ☐ Next rightmost digit of HCN (excluding the check digit) times 1
- ☐ Next rightmost digit of HCN (excluding the check digit) times 2
- ☐ Next rightmost digit of HCN (excluding the check digit) times 1
- ☐ Next rightmost digit of HCN (excluding the check digit) times 2
- ☐ Next rightmost digit of HCN (excluding the check digit) times 1
- ☐ Next rightmost digit of HCN (excluding the check digit) times 2
- ☐ Next rightmost digit of HCN (excluding the check digit) times 1
- ☐ Next rightmost digit of HCN (excluding the check digit) times 2
- ☐ And so on until all digits are accounted for.
- ☐ Where the result of the multiplication is more than 1 digit, add the digits together.
- ☐ Add the results of each multiplication together.
- ☐ Divide the total by 10, giving a remainder.

The check digit of the HCN must = 10 − the remainder.

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