

NL MI SUVs

*Adapted from MIS Standards 2013*

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## Introduction

The schedule of unit values provides users with a comprehensive list of exams/activities performed in medical imaging. Each activity is assigned a three-digit code between 100 and 900 which is preceded by two-letter acronym for the exam modality (e.g. NM for nuclear medicine). There is no requirement for an MI functional centre to change their code numbering system and add in the prefix of GR, US or other mnemonic unless it is useful to do this. Whatever codes are adopted, they are for internal purposes only. They identify specific exams and ensure that the exams, their counts and workload units are reported accurately and according to the current version of the MIS Standards.

These codes are accompanied by a brief description and the average unit value and the item for count, which are used as the basis to collect the workload and service activity statistical of the various functional centres. Each unit value incorporates all activities listed in the conceptual model for the Medical Imaging WMS for service recipient and for non-service recipient activity. This data is then reported using the chart of secondary statistical accounts (account number 1 07 \*\* - Workload Units – Service Recipient Activities – Diagnostic/Therapeutic, 1 90 \*\* - Workload Units – Service Recipient Activities and 4 57 \*\* - In-House Exams – Diagnostic/Therapeutic).

The unit values related to exams that are published in this section represent the average number of minutes required of the unit-producing service provider (e.g. medical radiation technologist, diagnostic medical sonographer) to perform all the steps needed to complete a defined exam once for the average service recipient under average circumstances. Case acuity variables are included in the average time workload unit value. The exception to the average service recipient statement are special needs service recipients for whom additional workload can be captured. Example: count extra workload using codes MI930 or MI931, and/or MI940 or MI941 and/or MI970. In order to compare productivity and provide a mechanism for planning and decision-making, exam counts have been standardized and are provided in the schedule of unit values.

This workload measurement system assesses the average output per exam for similar functions and work performed in various facilities across Canada and takes into consideration workflow, technical protocols and resource utilization. Effort has been made with this update to provide clarity with regards to exam counts and terminology in order to provide managers with a sensitive decision-support tool. Where there are differences in productivity between similar facilities, an opportunity for consultation, reflection and application of best practices arises.

Any activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable; however these codes are only listed once, in the modality for which that it is most often used.

Where the exam typically requires more than one technologist to complete it, the published unit value reflects the total workload units for all of the technologists that are expected to be involved in performing that exam. The established average values included in the schedule of unit values were developed taking into consideration various technologies, age of equipment and various types of practice and practice settings (e.g. ambulatory clinic, acute care hospital). The average unit value is inclusive for all the above except where additional unit values are specified.

If the published average time value for an exam is not reflective of the time spent in performing this activity at a particular health service organization (e.g. pediatric, special needs, geriatric, psychiatric), a standard time should be developed for the exam. A standardized timing protocol—conducting a time study has been developed to assist users when establishing the standard time.

If an exam is not listed in the schedule of unit values, users should establish a standard time using the standardized timing protocol and submit the information to CIHI using the Assignment of Unit Values Requested Form. (see 2013 MIS Standards for form)

### **TBD unit values**

Some activities show a workload unit value as TBD. This means that the average workload unit is yet “To Be Determined” as there were no time studies or expert opinions available at the time of publication. If any organization would like to assist in determining a unit value for one of these activities, they are encouraged to perform a time study and submit the data to CIHI for review by a working group as part of the next revision cycle.

For unit values related to quality control (QC) and equipment maintenance, refer to the non-service recipient activity, functional centre activities category.

### **Items for Count**

For the purpose of recording medical imaging workload, users should refer to the definitions of the items for count provided in this section. The item for count for service recipient activities is "exam" whereas; the item for count for non-service recipient activities may be occurrence, round trip, day, week or activity.

### **Exam**

A defined technical investigation using an imaging modality to study one body structure, system or anatomical area that yields one or more projections for diagnostic and/or therapeutic purposes. Exceptions include routinely ordered multiple body structures that by common practice or protocol are counted as one exam (e.g. code GR420 Pelvis and/or bilateral hips 1-5 projections), code GR230 Skeletal Survey (1-13 projections). Includes multiple projections (AP and lateral) of any site (e.g. spine, pelvis, femora, skull, shoulders, humeri, and ribs), or as another example, see code MM210 Diagnostic Mammography, bilateral up to 4 projections.

When a service recipient undergoes additional imaging by other modalities, an additional defined exam is also counted, as applicable. For example, count workload and 1 exam for a GR140 and add the workload and 1 exam for US215. Another example is when the service recipient undergoes an unenhanced CT head (CT105) and is brought to IR suite for IR310 embolization of an aneurysm; count one exam for each MI modality (one exam for CT105 plus one exam for IR310).

**Occurrence**

An event or incident that happens or takes place at an instance of point in time.

**Round Trip**

Travel from the medical imaging functional centre to a remote/distant/satellite site, and the return trip.

**Day**

The period of 24 hours from 0001 to 2400 hours.

**Week**

The period of seven consecutive days from Sunday to Saturday inclusive.

**Activity**

Performing a specific function or duty.

**General Information and Recording Instructions —Service Recipient Activities**

The general information and recording instructions below apply to all sections of the medical imaging schedule of unit values. Some modalities have additional information and recording instructions that are specific to them.

Exams that are listed by modality are grouped for ease of reference. Codes listed in a modality are not mutually exclusive from other modalities. They can be used by any modality provided the exam count and unit values are reflective of the workload associated with the particular exam and an equivalent exam is not already listed in the modality and also that it is reported in the functional centre where the work took place. There are some codes that are applicable to many modalities or even more than one section in one modality; however these codes are generally only listed once, in the modality for which it is most often used.

**Activities for Which Additional Workload Units are Recorded**

There are certain activities listed in the schedule of unit values that list workload units without exam counts. These activities when performed in conjunction with medical imaging exams/activities by unit-producing personnel (UPP) of the medical imaging functional centres require the recording of workload units in addition to the workload units for that particular exam without an exam count. These additional units are listed in various sections of the

schedule of unit values as well as in the miscellaneous section. For those activities listed in the miscellaneous section of the schedule of unit values, the workload units are recorded and reported in the functional centre where that activity is performed. These activities and corresponding workload units are recorded using the same category and type of service recipient as that of the exam.

### **Examinations Performed Outside the Department**

Under certain circumstances, the medical radiation technologist/diagnostic medical sonographer must leave the medical imaging functional centre/department to perform an exam. The following service recipient workload units are added once per service recipient for each occasion during which services are delivered:

- Portables: When exams are performed on a nursing unit (e.g. nursery, emergency, intensive care), and additional time is required to set-up the portable machine and assist the service recipient, the additional workload units are recorded using code MI900.
- Operating Rooms: When exams are performed in the operating room and additional time is required to prepare the portable machine and to don gown/mask or glove etc., set-up equipment, etc, prior to entering the operating room, the additional workload units are recorded using code MI910.
- Isolation (e.g. MRSA/VRE, Latex allergy): When exams are performed when service recipients are in isolation and additional time is required to don gown/mask or glove etc., set-up equipment, etc., the additional workload units are recorded using code MI920.

### **Failed Exams**

For an attempted failed exam record the same number of units and exam count as a successful exam using the same exam code. The published workload units are derived from average time methodology and it is anticipated that the number of failed exams are relatively few; therefore the net effect on the average time is not material and the workload units are calculated accordingly.

### **Preliminary and Delayed Images**

No extra workload units are assigned unless specified in the schedule of unit values for that modality. Delayed images are considered to be part of the original exam unless otherwise specified in the exam definition. Nuclear Medicine exams often involved delayed imaging therefore in the Nuclear Medicine modality, each exam definition specifies the exact number of delayed images, or assumes a maximum of two delayed images if unspecified in the exam definition.

### **Additional Projections**

Unless specified in the description, each exam is considered routine and includes all projections. For projections taken, in addition to the standard protocol, as specified in the exam

definition, record additional workload units and a zero exam count as indicated in the schedule of unit values.

### **Non-Adult Age Groups**

Additional workload can be counted for non-adult service recipients (e.g. pediatric, child, neonatal). See one of codes MI931, MI935, MI940, MI941, or MI970 for more detail.

- Pediatric/Child service recipients are defined as “>28 days of age to locally defined maximum age”. Generally the maximum age can range from 16-18 years.
- Neonate service recipients are defined as “from birth to 28 days of age”.

### **Conscious Sedation or General Anesthetic**

For service recipients who require extra assistance or monitoring because they have been given conscious sedation or a general anesthetic: record additional workload units. For conscious sedation (Adults): code MI930 with 10 workload units. For conscious sedation (Child): code MI931 with 20 workload units. For a general anaesthetic (Adult and Child): code MI935 with 30 workload units. These workload units are recorded for only direct service recipient care by unit-producing personnel (medical radiation technologists and diagnostic medical sonographers) and are not to be collected for waiting time.

### **Immobilization**

For time spent when unit-producing personnel provide assistance with immobilization of pediatric or special needs service recipients (e.g. pediatric, neonate, combative, psychotic, severe morbid obesity, or confused service recipients). These additional workload units are recorded using one of codes MI940 or MI941.

### **Fluoroscopy**

For exams performed by fluoroscopy, an extra workload unit value is added. This unit value may be added for each fluoroscopic adjustment required such that the total time performing fluoroscopy is consistent with the total workload units. This included fluoroscopy using a C-arm or O-arm. Note that the total workload units do NOT include any waiting time. Fluoroscopy codes can be referenced from the Miscellaneous section (MI955) of the schedule of unit values.

### **Post Processing Reconstruction**

Post processing reconstruction is addressed in several modalities of the schedule of unit values. Workload for this activity may be collected when using existing data to create retrospective projections of another anatomical part, when an additional scan is not necessary. As no new imaging is required for post processing reconstruction, no exam count is captured however workload is captured whenever this work is carried out by unit producing personnel. In Computed Tomography (e.g. CT510) and Magnetic Resonance Imaging (e.g. MR105), post processing reconstruction is captured in addition to each CT or MRI activity, if applicable, in 10 minute increments. Nuclear Medicine code NM130 captures post-processing beyond 30 minutes, counted in separate 10 minute increments and zero exam count. This workload is counted as a separate activity in these modalities due to wide variability in the workload units.

By contrast, the General Radiography schedule does not count post processing time separately since the units are more uniform and are included in the assigned unit value. If the images are reconstructed through computer automation, with no hands-on technical intervention, additional workload units for post processing reconstruction are not captured as unit producing personnel hands-on time is not involved.

**Tomography**

For exams that regularly include tomography as a component (e.g. IVP), the unit value includes this component activity. For exams that do not regularly include tomography, use actual time methodology for the workload units and add to the exam time value. These additional units should be reported under code MI960 as service recipient activity, Miscellaneous. If tomography is performed in the absence of a preliminary x-ray, use code GR925. Advanced tomography technology is captured using code GR910, an exam designating for volume radiology tomography technology.

**Counselling service recipient including guardians, parents or significant others**

For time spent when unit-producing personnel provide information, counselling or support to the service recipient, including their guardians, parents or significant others. These additional workload units are recorded using code MI970 with zero exam count and actual time. This includes pediatric, geriatric, and/or any special needs service recipients. The breast navigator (post-mammography) consultation role counts as additional workload only in the mammography modality only. This is due to higher intensity counselling required in this functional centre and can be referenced at code MM250. As always, workload can be counted only if performed by unit-producing personnel.

**IV Fluid Administration**

For exams that require IV fluid administration; includes provision of IV fluids for hydration, prevention of nephrotoxicity or other adverse effects of contrast or other radiopharmaceuticals, or for other physiologic requirements such as full bladder, maintenance of cardiac output or fluid challenges. These incremental additional units should be reported under MI980 as service recipient activity, Miscellaneous.

**General Information and Recording Instructions—Non-Service Recipient Activities****Travel Time**

In addition to each of the above, non-service recipient workload units are collected for travel with or without the portable machine to and from the service recipient. Record actual or standard time using code 2280 Travel.

### Copy-Digitizing Images

When the copying or digitizing of images is done separately from the routine exam, 10 workload units are added per exam. These additional units should be reported under code 2286 as non-service recipient activities.

### Counting Exams

All exams described in the schedule of unit values have been given an exam count. Each corresponding unit value represents the total workload units for the number of exams shown.

The following examples are provided for clarification:

1. Code CT107 in computed tomography represents the exam Head, combined non-enhanced and enhanced- includes:
  - a) Brain
  - b) Orbits
  - c) Sella turcica
  - d) IAC and/or posterior fossa
  - e) Facial bones
  - f) Sinuses
  - g) Nasopharynx

One exam includes any combination of anatomical parts listed (usually the service recipient is not repositioned). Record 1 exam and 29 workload units.

2. Code US830 in ultrasound represents the exam “Hips bilateral”. Report 1 exams and 30 workload units.
3. Code IR 565 in interventional radiology represents an activity called “Cryosurgery/Radiofrequency ablation/Thermoablation”. Report an exam count of zero and 62 workload units.

## Outline of the Schedule of Unit Values

The schedule of unit values is organized in the following manner:

Service Recipient Activities	Code Series
<b>Diagnostic/Therapeutic Intervention</b>	
General Radiography	GR100-GR999
Head	GR100-GR199
Spine	GR200-GR299
Shoulder Girdle and Upper Extremities	GR300-GR399
Pelvic Girdle and Lower Extremities	GR400-GR499
Thoracic Cage and Contents	GR500-GR599

Gastro-intestinal (G.I.) Tract	GR600-GR699
Genito-urinary (G.U.) Tract	GR700-GR799
Bone Mineral Density	GR800-GR899
Mammography	MM100-MM999
Screening Mammography	MM100-MM199
Diagnostic Mammography	MM200-MM299
Interventional Radiology	IR100-IR999
Modifier Codes for IR	IR100-IR199
Vascular Diagnostic – Arterial	IR200-IR299
Vascular Therapeutic	IR300-IR499
Non-Vascular Interventional	R500-IR699
Computed Tomography	CT100-CT999
Head	CT100-CT199
Neck and Spine	CT200-CT299
Chest, Abdomen and Pelvis	CT300-CT399
Extremities	CT400-CT499
Miscellaneous	CT500-CT599
Ultrasound	US100-US999
General	US100-US199
Abdominal Ultrasound (Includes Non-Obstetrical Pelvis)	US200-US299
Echocardiography Ultrasound (Fetal, Pediatric, Adult)	US300-US399
Obstetrical Ultrasound	US400-US499
Ophthalmic Ultrasound	US500-US599
Neurological Ultrasound	US600-US699
Vascular Ultrasound	US700-US799
Small Parts Ultrasound	US800-US899
Miscellaneous	US900-US999
Nuclear Medicine	NM100-NM999
General	NM100-NM199
Bone	NM200-NM299
Lung	NM300-NM329
Cardiovascular	NM330-NM399
Circulatory/Lymphatic	NM400-NM419
Endocrine	NM420-NM499
Central Nervous	NM500-NM549
Kidney	NM550-NM599
Soft Tissue	NM600-NM699
Gastro-Intestinal	NM700-NM799
Miscellaneous General Imaging	NM800-NM809
Therapeutic	NM810-NM899
Non-Imaging	NM900-NM999
Position Emission Tomography/Computed Tomography (PET/CT)	PT100-PT999
Cardiac Catheterization Diagnostic Services	CC100-CC999
Magnetic Resonance Imaging	MR100-MR999

Miscellaneous	MI900-MI999
<b>Non-Service Recipient Activities</b>	<b>Code Series</b>
Functional Centre Activities	2201-2300
Organizational/Professional Activities	2301-2400
Teaching/In-Service	2401-2500
Research	2501-2600

## Service Recipient Activities —Diagnostic/Therapeutic Intervention

Service recipient activities are unit-producing personnel activities that involve the delivery of services to or on behalf of a specific service recipient. These activities directly contribute to the fulfillment of the service mandate of the functional centre.

In the medical imaging WMS, the service recipient activity category is diagnostic therapeutic intervention.

The following table provides a list of the exams/activities performed within the various medical imaging functional centres.

## General Radiography

### General Information and Recording Instructions for General Radiography:

1. An activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable; however these codes are only listed once, in the modality for which that it is most often used.
2. The General Radiography schedule does not count post processing time separately since the units are more uniform and are included in the assigned unit value.
3. Please see Items for Count for the definition of “exam” in Medical Imaging.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Head</b>				
GR001	Attempted/failed exam head (NL added)	N/A	30	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR002	Attempted/failed exam body(NL added)	N/A	30	1
GR003	Attempted/failed exam extremity (NL added)	N/A	30	1
GR004	Attempted/failed radiography (NL added)	N/A	10	1
GR005	Attempted /failed exam fluoroscopy (NL added)	N/A	30	1
GR105	Skull (1-3 projections) Also count workload for GR195 for additional projections >3	15	15	1
GR110	Special skull. Includes any one of: a) Internal auditory canal, both sides b) Zygomatic arches c) Sella turcica d) Optic foramina e) Mastoids (bilateral 1-6 projections) f) Orbits for foreign body localization g) Temporo-mandibular joint (TMJ)  Count one exam for each area.  For e) mastoids (bilateral 1-6 projections)- also count workload for GR195 for additional projections >6	20	20	1
GR115	Orbit screening for MRI (1- 2 projections) Also count workload for GR195 for additional projections >2	10	10	1
GR120	Facial bones (1-5 projections) Also count workload for GR195 for additional projections >5	15	15	1
GR125	Mandible (1-5 projections) Also count workload for GR195 for additional projections >5	17	17	1
GR130	Nasal bones (1-3 projections) Also count workload for GR195 for additional projections >5	10	10	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR135	Sinuses (103 projections) Also count workload for GR195 for additional projections >5	15	15	1
GR140	Salivary gland area	20	20	1
GR145	Dental full series (with bitewings)	20	Not used in NL Dictionary	1
GR150	Teeth, panorex, single projection or panorex lateral cephalic	11	Not used in NL Dictionary	1
GR905	Arthrography – head, shoulder, girdle, upper extremities, pelvic girdle, lower includes extremities- includes any one of: Temporomandibular joint (head) Shoulder Girdle –unilateral Upper Extremities – unilateral Pelvic Girdle Lower Extremities – unilateral  Note: GR905 is also referenced in other areas of the General Radiology schedule.	45	45	1
GR155	Dacrocystography	35	35	1
GR160	Sialography (using contrast media)	40	40	1
GR195	Additional projections for any of the exams above (head)	10	additional projections will be captured through drop down menu for extra WLUs in Meditech	0
GR165	Shunt Study (includes AP, Lat Skull, AP Chest and AP abdomen)	15	15	1
<b>Spine</b>				
GR205	Cervical (1-4 projections) Also count workload for GR295 for additional projections >4	15	15	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR210	Thoracic (1-3 projections) Also count workload for GR295 for additional projections >3	13	13	1
GR215	Lumbar (1-3 projections) and Lymphangiogram follow-up Also count workload for GR295 for additional projections >3 For Lymphangiogram exam, may see also IR205, NM405 Lymphoscintigraphy [whole body], or MR450 or MR455.	13	13	1
GR220	Sacrum and/or coccyx (1-2 projections) Also count workload for GR295 for additional projections >2	13	13	1
GR225	Scoliosis series	18	18	1
GR230	Skeletal survey (1-13 projections) Includes multiple projections (AP and lateral) of multiple sites (e.g. spine, pelvis, femora, skull, shoulders and humeri, ribs) May also add MI931, MI935, MI940 or MI941 as applicable) Also count workload for GR295 for additional projections >13	30	30	1
GR235	Complete (detailed) Spine (1-8 projections) Includes projections of the cervical, thoracic and lumbar spines as well as the sacrum/coccyx Also count workload for GR295 for additional projections >8	30	30	1
GR260	See IR435 for lumbar puncture myelogram Still in use in NL fluoro dictionary. Will be reviewed with IR dictionary modality.	N/A	45	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
GR295	Additional projections for any of the exams GR205-GR235- Spine	5	additional projections will be captured through drop down menu for extra WLUs in Meditech	0
GR255	Facet injection or nerve block	45	45	1
GR265	Babygram (for post mortem exam)	12	12	1
GR270	Infant Skeletal Survey - Multiple placements (e.g. abdomen and chest)	20	20	1
Shoulder Girdle and Upper Extremities				
GR305	Unilateral Shoulder (1 to 3 projections) For imaging each shoulder separately, count GR305 workload and exam count twice) Also count workload for each shoulder – see GR395 for additional projections >3.	10	10	1
GR310	Scapula unilateral or bilateral)(1-2 projections) Also count workload for GR395 for additional projections >2 An exam is considered “bilateral” if both sides are imaged using the same exposure.	10	10	1
GR315	Acromio-clavicular joints includes weight bearing Add 5 units for bilateral imaging. An exam is considered ‘bilateral’ if both sides are imaged using the same exposure.	10 5	10 Left or right Bilateral 15	1 0

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR320	Clavicle (unilateral or bilateral) (1-2 projections)	10	10	1
	Add 5 units for bilateral exam. An exam is considered 'bilateral' if both sides are imaged using the same exposure.  Also count workload for GR395 for additional projections >2	5	Bilateral not used in NL Dictionary	0
GR325	Upper Extremity– includes any one of: a) Unilateral/Bilateral Humerus b) Unilateral/Bilateral Elbow c) Unilateral/Bilateral Forearm,- includes radius and/or ulna d) Unilateral/Bilateral Wrist e) Unilateral/Bilateral Hand f) Unilateral/Bilateral Digit(s) g) Unilateral/Bilateral Hand and Wrist combined h) Unilateral/Bilateral Scaphoid  The unit value applies to a unilateral exam. Add 5 units for bilateral exam. An exam is considered "bilateral" if both sides are imaged using the same exposure.	10         5	10         Some bilateral dictionary line items will be <b>15</b> but not all	1         Bilateral exams with 5 WLUs added will be considered <b>2</b> exams in "most" cases
GR330	Bone length scanogram for upper extremities An exam is considered "bilateral" if both sides are imaged using the same exposure.  If imaging each extremity separately, count GR330 workload and exam count twice.	10	Not used in NL Dictionary	1
GR335	Bone age (1 projection)	8	Not used in NL Dictionary	1
GR336	Bone age ( 2 projections)  Also count workload for GR395 for additional projections >2	13	Not used in NL Dictionary	1
GR390	Additional units when performing exams above with stress projections for Shoulder Girdle and Upper Extremities	6	Not used in NL Dictionary	0

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR395	Additional projections for any of the exams above- Shoulder Girdle and Upper Extremities  Do not count if GR390 is also captured.	5	Not used in NL Dictionary	0
	See GR905 for Arthrography- Head, Shoulder Girdle, Upper Extremities, Pelvic Girdle, Lower Extremities			
<b>Pelvic Girdle and Lower Extremities</b>				
GR405	Pelvis only (1 projection)  Also count workload for GR495 for additional projections >1	8	8	1
GR410	Unilateral hip (2 projections)  Also count workload for GR495 for additional projections >2	10	10	1
GR412	Pelvis and unilateral hip (1-3 projections)  An exam is considered “bilateral” if both sides are imaged using the same exposure. Also count workload for GR495 for additional projections >5	17	17	1
GR415	Pelvis and unilateral hip (1-3 projections)  so count workload for GR495 for additional projections >3	10	10	1
GR420	Pelvis and/or bilateral hip (1-5 projections)  An exam is considered “bilateral” if both sides are imaged using the same exposure. Also count workload for GR495 for additional projections >5	20	20	1
GR425	Sacro-iliac joints (1-3 projections)  Also count workload for GR495 for additional projections >3	12	12	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
GR430	<p>Lower Extremity– includes any one of:</p> <ul style="list-style-type: none"> <li>a) Unilateral/Bilateral Toe(s)</li> <li>b) Unilateral/Bilateral Foot any part</li> <li>c) Unilateral/Bilateral Ankle</li> <li>d) Unilateral/Bilateral Tibia and Fibula</li> <li>e) Unilateral/Bilateral Knee</li> <li>f) Unilateral/Bilateral Patella</li> <li>g) Unilateral/Bilateral Calcaneus</li> <li>h) Unilateral/Bilateral Heel</li> </ul> <p>Count once per each area imaged. An exam is considered ‘bilateral’ if both sides are imaged using the same exposure.</p> <p>The unit value applies to a unilateral exam. Add 5 units for a bilateral exam.</p>	<p>10</p> <p>5</p>	<p>10</p> <p>Some bilateral dictionary line items will be <b>15</b> but not all</p>	<p>1</p> <p>Bilateral exams with 5 WLUs added will be considered <b>2</b> exams in “most” cases.</p>
GR490	Additional units when performing exams above with stress projections for Pelvic Girdle and Lower Extremities	6	6	0
GR440	<p>Unilateral femur, including hip and knee (1-4 projections)</p> <p>Also count workload for GR495 for additional projections &gt;4</p>	11	11	1
GR445	Bone length, scanogram, lower extremity	18	18	1
GR450	<p>Hip fixation in operating room including hip projections</p> <p>Also count code MI910 for the workload required to prepare the portable machine and to gown/glove/mask prior to entering the operating room.</p>	45	45	1
GR455	<p>Hip fixation in operating room including intermedullary nailing</p> <p>Also count code MI910 for the workload required to prepare the portable machine and to gown/glove/mask prior to entering the operating room.</p>	100	Not used in NL Dictionary	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
GR495	Additional projections for any of the exams above- Pelvic Girdle and Lower Extremities  Do not count if GR490 is also captured.	5	WL for additional projections will be captured through dropdown menu for extra WLUs by	0
GR497	Renal Osteodystrophy Series- for ESRD.  For special needs service recipients, if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941 and/or MI970.	35	Not used in NL Dictionary	1
	See GR905 for Arthrography- Head, Shoulder Girdle, Upper Extremities, Pelvic Girdle, Lower Extremities			
Thoracic Cage and Contents				
GR505	Chest (1-2 projections) (*Note when used in NL dictionary in combination with “abdominal series” use 5 WLUs)  Also count workload for GR506 for additional projections >2	10	10 see note*	1
GR506	Additional projections for any Thoracic Cage and Contents exams	5	5	0
GR510	Ribs, unilateral (1-3 projections)  Also count workload for GR506 for additional projections >3	10	10	1
GR511	Ribs, bilateral (1-4 projections)  An exam is considered “bilateral” if both sides are imaged using the same exposure.  Also count workload for GR506 for additional projections >4	15	15	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
GR515	Chest and ribs (1-4 projections) Also count workload for GR506 for additional projections >4	15	Not used in NL Dictionary	1
GR520	Thoracic inlet/outlet	10	10	1
GR525	Sternum	12	12	1
GR530	Sterno-clavicular joints, bilateral	12	12	1
GR535	Nasopharynx, Neck Soft Tissue (1-2 projections) Also count workload for GR506 for additional projections >2	10	10	1
GR920	Pacemaker insertion, temporary or permanent See IR920 or for pacemaker implants occurring in the Cardiac Catheterization functional centre, see codes CC920 (temporary) or codes CC335, CC340, CC345 or CC350 (permanent) Still in use in NL fluoro dictionary. Will be reviewed with IR dictionary modality.	N/A	60	1
GR540	Bronchography	30	30	1
<b>Gastro-Intestinal (G.I.) Tract</b>				
GR605	Dynamic Speech study using contrast media, with/without speech language pathology (modified barium swallow)	30	30	1
GR606	Pediatric Dynamic Speech Study, with contrast	45	Not used in NL Dictionary	1
GR610	Abdomen (1 projection)	8	8	1
GR611	Abdomen (2-3 projections) Includes AP, upright, or decubitus Note: count chest as a separate exam – see code GR505. Also count workload for GR695 for additional projections >3	16	16	1
GR615	Esophagram, (video)	15	15	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR616	Feeding Studies	45	45	1
GR620	Upper G-I tract, single or double contrast	15	15	1
GR625	Small bowel series only	30	30	1
GR630	Upper G-I and Small Bowel Follow-Through  For special needs service recipients, if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970  NL has kept separate code for pediatric service	45	45	1
GR631	Upper G-I and Small Bowel Follow-Through Pediatric	N/A	55	1
GR635	Small bowel enema	60	60	1
GR640	Hypotonic duodenography	35	35	1
GR645	Colon, single contrast	30	30	1
GR646	Colon, double contrast	45	45	1
GR650	Pouchogram and/or Proctogram	30	30	1
GR655	Intravenous cholangiogram	45	Not used in NL Dictionary	1
GR660	T-tube Cholangiogram Includes all delayed films	25	25	1
GR915	ERCP (Endoscopic Retrograde Cholangiopancreatography)	50	50	1
GR665	Glucagon study,- additional per examination	10	Not used in NL Dictionary	0
GR670	Oro-gastic/Nasogastric (OG/NG) tube insertion	20	20	1
GR675	Sinogram Fistulogram	30	30	1
GR680	Small bowel biopsy Do not also count IR427, IR428, or MR410.	30	30	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
GR685	Lithotripsy - biliary	45	Not used in NL Dictionary	1
GR690	Colonoscopy	30	Not used in NL Dictionary	1
GR695	Additional projections for any Gastro-Intestinal (G-I) tract exams	5	Not used in NL Dictionary	1
<b>Genito-Urinary (G.U.) Tract</b>				
GR705	Kidneys, ureters, bladder (KUB)	8	8	1
GR710	Intravenous pyelography (IVP), including rapid sequence, drip infusion with or without tomography	40	40	1
GR715	Retrograde pyelogram, unilateral or bilateral  An exam is considered 'bilateral' if both sides are imaged using the same exposure.	30	30	1
GR720	Cystography, static or voiding/retrograde  For special needs service recipients, if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.  NL has kept separate code for pediatric service	25	25	1
GR721	Cystography, static or voiding/retrograde Pediatric	N/A	30	1
GR725	Urodynamics cystogram  For special needs service recipients, if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970	60	Not used in NL Dictionary	1
GR730	Ileo-loopogram (Kochogram)	30	30	1
GR735	Retrograde urethrogram	25	25	1
GR740	Antegrade pyelogram (alone)	30	30	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
GR745	Nephrostogram, unilateral	30	30	1
GR750	Vasogram, bilateral	40	40	1
GR755	Lithotripsy – kidney, unilateral For lithotripsy, bilateral: count GR755 twice	45	45	1
GR760	Hysterosalpingography	30	30	1
GR765	Male genitalia (E.g. penis)	30	Not used in NL Dictionary	1
GR910	Volume radiology (E.g. sternum, SC joint, glenoid fossa) Includes use of advanced tomography technology with all manual or automated post processing. Only count workload if performed by unit-producing personnel.  Do not collect additional workload for tomography (code GR925)	16	16	1
GR925	Tomography  Count workload if tomography is performed in the absence of a preliminary x-ray. Do not also count workload for GR910.  For exams that do not regularly include tomography, use actual time methodology for the workload units and add to the exam time value using code MI960. Refer to General Information and Recording Instructions – Service Recipient Activities for miscellaneous exams.	Actual/ Standard Time	Not used in NL Dictionary	1
<b>Bone Mineral Density</b>				
GR805	Bone density, one site	15	15	1
GR806	Bone density, two sites	25	25	1
GR807	Bone density, more than two sites	5	5	1
GR810	Bone density, whole body	25	25	1

## Mammography

### General Information and Recording Instructions for Mammography:

1. Screening programs for mammography are set up to perform quality examinations within a minimal time frame. Service recipients:
  - Are usually self-referred;
  - Meet published criteria; and
  - Are breast-symptom free.
 (Service recipients are not eligible to be screened if they have an identified clinical problem such as lump in the breast)
2. Diagnostic mammograms are performed to investigate symptoms of suspected breast disease. As a result of differences in the protocols, screening mammography requires fewer workload units than that of diagnostic mammography.
3. When service recipient education related to breast self-examinations is provided, the value should be derived using standard time. Note: Additional workload is assigned to the unique role “Breast Navigator” for complex counselling duties in the Mammography functional centre only – see MM250. (NL added: and provided by MRT UPP staff.)
4. Any activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable; however, these codes are only listed once, in the modality for which it is most often used.
5. Please see Items for Count for the definition of “exam” in Medical Imaging.

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MM001	Attempted/failed mammography exam	N/A	16	1
MM002	Attempted/failed biopsy exam	N/A	30	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MM105	Screening Mammography, bilateral, up to 4 projections  Also count workload for MM115 for each additional projection >4	15	15	1
MM110	Screening Mammography, unilateral, up to 2 Projections  Also count workload for MM115for each additional projection >2	10	10	1
MM115	Units for each additional projection	5	Not used in NL Dictionary	0
MM205	Diagnostic Mammography, unilateral, up to 4 projections  Also count workload for MM206 for each additional unilateral projection >4.  If breast implant is present, count 10 additional workload units	16  10	16  Implants will be captured through dropdown menu for extra WLUs by RHA	1  0
MM206	Units for each additional projection-unilateral	7	7	0
MM210	Diagnostic Mammography, bilateral up to 4 projections.  Also count workload for MM211 for each additional bilateral projection>4  If breast implants are present, count 15 additional workload units	21  15	16 Implants will be captured through dropdown menu for extra WLUs by RHA	1  0
MM211	Units for each additional projection-bilateral	9	Not used in NL Dictionary	0
MM215	Fine wire localization (FWL), unilateral  Also count workload for MM216 for each additional FWL site on same side	45	45	1
MM216	Each additional fine wire localization, same side	24	24	0

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MM220	Galactography or mammoductography, including unilateral mammography	43	43	1
MM225	Core Biopsy - core of breast, single lesion For all other biopsies of anatomical sites, see one of: GR680, IR427, IR428, MR410	66	66	1
MM230	Core Biopsy- core of breast, multiple lesions For all other biopsies of anatomical sites, see one of: GR680, IR427, IR428, MR410	82	82	1
MM235	Surgical specimen	10	10	1
MM240	Breast Digital Tomosynthesis	20	Not used in NL Dictionary	1
MM250	Breast Navigator Role -counselling-complex.  Count once for additional workload associated with post-imaging in-depth consultation with MRT.  Count for unit producing personnel only. Do not also count MI970 if collecting workload for MM250.	Actual or standard time	Not used in NL Dictionary	0

## Interventional Radiology

Please note 2013 Revisions have not been reviewed or implemented in NL as of December 2015. Items in schedule with a NL value assigned have been reviewed because the code/exam was reviewed and applied in another modality.

### General Information and Recording Instructions for Interventional Radiology

- The interventional radiology schedule of unit values is constructed to provide three separate and distinct interventional radiology exam activities sections:
  - Vascular Diagnostic,
  - Vascular Therapeutic and:
  - Non-Vascular Interventional Activities
- Where the exam typically requires more than one technologist to complete it, the published unit value reflects the total workload units for all of the technologists that are expected to be involved in performing that exam. Each component activity that is

included in the exam is performed only once per exam by of the two technologists, and not by both (E. g. injecting the contrast media is not usually performed twice for one service recipient). For this reason, the workload units are not doubled when two technologists are performing the exam

3. If the work is done by one technologist and one nurse, the unit values listed should be reported separately, according to the workload measurement system used respectively by the medical radiation technologist and the nurse. Only the portion of time that is applicable to the technologist should be reported under the medical imaging workload measurement system. As a reminder, you will see the notation “Count only if workload is performed by unit-producing personnel” included in certain exam definitions where MI nurses might also perform some of the hands on work. Organizations that use a “nurse/technologist” staffing model should audit the proportion of the component activities performed by the technologist for specific exams, and count a percentage of the unit value accordingly, reported under the applicable Medical Imaging functional centre. The medical radiation technologist should also report the exam count that is specified in.
4. Interventional Radiology workload might occasionally be elsewhere represented in the schedule of unit values for Medical Imaging. For example, if the Interventional Radiology functional centre performs exams such as Bronchogram, unilateral and/or bilateral, this code (GR540) can be referenced in the General Radiography section as it is commonly also performed in that functional centre. The Medical Imaging schedule of unit values is categorized by modalities to increase the ease of referencing the codes by Users, therefore these codes, or any codes in other modalities, are available for use by all modalities provided the unit value/exam count is accurate and representative, and the workload is recorded in the functional centre where the exam was performed.
5. When multiple activities are performed together, the unit values should be aggregated. See example below.  
**Aggregated activities example:** Service Recipient with right renal artery thrombosis attends IR suite for right saphenous vein mechanical thrombolysis and angioplasties of left iliac artery and a minor left iliac branch artery. Note: diagnostic angiography had occurred at a previous encounter.

Code	Exam Name/Description	CIHI Unit Values	Exam Count
IR305	Angioplasty to main branch left iliac artery	100	1
IR306	Angioplasty to minor branch of left iliac artery (subsequent lesion).	20	0
IR341	Thrombolysis- mechanical- non-neurological	78	1
<b>TOTAL</b>		198 Workload	2 Exam Count

6. Do not count workload for post-processing for interventional radiology activities unless post-processing time exceeds 30 minutes (see code IR600).
7. The component activities within the conceptual model for medical imaging include exam preparation activities, amongst other activities including room preparation, initial handling/set-up, cleanup, service recipient assessment (pre & post exam monitoring), consent and instructions, IV insertion, administration of radiopharmaceuticals, contrast media and/or medications etc. Where applicable, additional workload for component activities is incorporated including scrub/circulation tasks, arterial/venous catheter insertion/removal, all imaging and post processing (30 minutes or less), use of closure devices for homeostasis etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities. Note: this workload applies only to medical radiation technologist unit producing personnel in the medical imaging functional centre. To count additional workload for the administration of IV fluids, see code MI980.
8. Angiography workload and exam count are grouped into two categories: diagnostic or therapeutic. Workload for a diagnostic angiography should not be counted during a therapeutic interventional procedure such as angioplasty, stent placement; thrombolysis or other therapeutic procedure which is planned or expected. This is because the vascular approach is necessary in order to complete the therapeutic interventional radiology procedure. If only a diagnostic angiogram (IR205) was scheduled, but circumstances of the case required an unplanned therapeutic procedure, then the workload for these two (or other multiple combinations) procedures are aggregated. Example: a planned diagnostic angiogram IR205 progresses to unplanned embolization of a neurological vessel (IR310) = aggregated workload for IR205 + IR310 = 28 workload units, 1 exam + 120 workload units, 1 exam = 148 workload units, 2 exams.
9. Some activities in the interventional radiology schedule can also be found in other sections of the medical imaging schedule of unit values. An example is cardiac pacemaker, which is also found in the cardiac catheterization section of the schedule of unit values; codes CC335, CC340, CC345, CC350 (permanent), and CC920 (temporary).
10. Any activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable; however these codes are only listed once, in the modality for which it is most often used.
11. Please see Items for Count for the definition of “exam” in Medical Imaging WMS.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Vascular Diagnostic – Arterial</b>  Note: The component activities within the conceptual model for medical imaging include routine exam preparation activities, including room preparation, initial handling/set-up, cleanup, service recipient assessment (pre & post exam monitoring), consent and instructions, IV insertion, administration of radiopharmaceuticals, contrast media and medications, scrub/circulation tasks, arterial/venous catheter insertion/removal, all imaging and post processing (30 minutes or less), use of closure devices for homeostasis etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities.  May also see IR600 for additional workload associated with post processing reconstruction in excess of first 30 minutes of hands-on time.				
IR205	Diagnostic angiogram only  Count once per exam  Do not count when an angioplasty, stent or thrombolysis or other therapeutic procedure is planned or expected. If IR205 escalates to an unplanned therapeutic procedure, then the workload for the two exams (And/or other multiple combinations of exams) are aggregated.	88	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access.	16		0
	Does not include pacemaker.			
IR206	Diagnostic angiogram only-subsequent vessels Count once per subsequent vessel in addition to the workload and exam count for code IR205	12	TBD	0
IR210	Venography, unilateral (upper/lower extremity)	40	40	1
IR211	Venography, bilateral (upper/lower extremity)	55	55	1
IR215	Venography, selective- Other  Includes superior vena cava, inferior vena cava, orbital, thoracic etc.	53	TBD	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
IR220	Guided biopsy, transjugular liver - Focal Count once per exam.  Excludes all other biopsies of anatomical sites-see one of: GR680, IR427, IR428, MR410	146	TBD	1
IR221	Guided biopsy, transjugular liver- Non-focal Count once per exam.  Excludes all other biopsies of anatomical sites-see one of: GR680, IR427, IR428, MR410	120	TBD	1
IR225	AV fistulogram	TBD	TBD	1
IR230	Corpus Cavernosogram Count once per exam.	105	TBD	1
<b>Vascular Therapeutic</b> Note: The component activities within the conceptual model for medical imaging include routine exam preparation activities, including room preparation, initial handling/set-up, cleanup, service recipient assessment (pre & post exam monitoring), consent and instructions, IV insertion, administration of radiopharmaceuticals, contrast media and medications, scrub/circulation tasks, arterial/venous catheter insertion/removal, all imaging and post processing (30 minutes or less), use of closure devices for homeostasis etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities.  May also see IR600 for additional workload associated with post processing reconstruction in excess of first 30 minutes of hands-on time.				
IR305	Angioplasty			
	Includes all inflations done in order to dilate a single lesion and all associated imaging used in pre/post dilatations.	100		1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access.	16	TBD	0
	Count once per lesion.			

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR306	<p>Angioplasty, subsequent lesions.</p> <p>Includes all inflations done in order to dilate a single lesion and all associated imaging used in pre and post dilatations.</p> <p>Count once for each subsequent lesion in addition to workload and exam count of code IR305.</p>	20	TBD	0
IR310	<p>Embolization of a neurological vessel - non-coil</p> <p>(E.g. cranial, spinal vessels)</p> <p>Count once for each embolization performed</p> <p>May also count workload for separate simultaneous catheterization; count once for each additional arterial access.</p>	<p>180</p> <p>16</p>	TBD	<p>1</p> <p>0</p>
IR311	<p>Embolization of a neurological vessel - coil</p> <p>(E.g. cranial, spinal vessels)</p> <p>Count once for each embolization performed</p> <p>May also count workload for separate simultaneous catheterization; count once for each additional arterial access.</p>	<p>240</p> <p>16</p>	TBD	<p>1</p> <p>0</p>
IR312	<p>Embolization of a non-neurological vessel - coil or non-coil.</p> <p>Count once per vessel.</p> <p>May also count workload for separate simultaneous catheterization; count once for each additional arterial access.</p>	<p>150</p> <p>16</p>	TBD	<p>1</p> <p>0</p>
IR315	Therasphere infusion therapy (E.g. neoadjuvant therapy for neoplasm)	TBD	TBD	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR320	Stent Insertion – neurological Count once per lesion.	150	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access.	16		0
IR321	Stent Insertion - non-neurological Count once per lesion.	110	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access.	16		0
IR330	Endografts	240	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access	16		0
IR920	Pacemaker, temporary or permanent, all inclusive  Note: For pacemaker implants occurring in the Cardiac Catheterization functional centre, see codes CC920 (temporary) or codes CC335, CC340, CC345 or CC350 (permanent). Do not count IR920 in addition to cardiac catheterization pacemaker codes.	60	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access.	16		0
IR340	Thrombolysis- mechanical- neurological	165	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access	16		0
IR341	Thrombolysis- mechanical- non-neurological	78	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access	16		0

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR345	Thrombolysis- pharmacological- neurological	100	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access	16		0
IR346	Thrombolysis- pharmacological- non-neurological	70	TBD	1
	May also count workload for separate simultaneous catheterization; count once for each additional arterial access	16		0
IR350	Thrombolytic recheck.	60	TBD	1
IR355	Retrieval intravascular foreign body	40	TBD	1
IR360	TIPS (transjugular intrahepatic portal systemic) stent insertion	240	TBD	1
IR365	Venous sampling	73	TBD	1
IR370	Placement of venous catheter – temporary. May include hemodialysis line or other temporary catheter.  Count only if workload is performed by unit-producing personnel.	42	TBD	1
IR371	Placement of venous catheter – permanent or tunnelled. May include hemodialysis line or other venous catheter.  Count only if workload is performed by unit-producing personnel.	75	75	1
IR375	Placement - PICC line  Count only if workload is performed by unit-producing personnel.	45	45	1
IR380	Placement - Port-a-cath (insertion)  Count only if workload is performed by unit-producing personnel.	70	TBD	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR385	Removal of venous catheter (E.g. Hickman, Port-a-cath, PICC, hemodialysis line etc)  Excludes peripheral temporary intravenous lines, other than PICC catheters.  Count only if workload is performed by unit-producing personnel	25	TBD	1
IR386	Exchange of venous catheter (E.g. Hickman, Port-a-cath, PICC, hemodialysis line etc)  Excludes peripheral temporary intravenous lines, other than PICC catheters.  Count only if workload is performed by unit-producing personnel.  Do not count code IR385.	30	TBD	1
IR387	Manipulation of central venous catheter line  Includes venous catheter stripping  (E.g. Hickman, Port-a-cath, PICC, hemodialysis line etc).  Do not also count IR390.  Excludes peripheral temporary intravenous lines, other than PICC catheters.  Count only if workload is performed by unit-producing personnel.	45	TBD	1
IR390	A-V graft declotting	85	TBD	1
IR395	IVC filter insertion (inferior vena cavagram)	65	TBD	1
IR396	Removal of temporary inferior vena cava filter	65	TBD	1
IR399	Wada Exam  May also count workload for separate simultaneous catheterization; count once for each additional arterial access	180  16	TBD	1  0

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Non-Vascular Interventional</b>  Note: The component activities within the conceptual model for medical imaging include routine exam preparation activities, including room preparation, initial handling/set-up, cleanup, service recipient assessment (pre & post exam monitoring), consent and instructions, IV insertion, administration of radiopharmaceuticals, contrast media and medications, scrub/circulation tasks, non-vascular catheter insertion/removal, imaging for guidance and post processing (30 minutes or less), etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities.  May also see IR600 for additional workload associated with post processing reconstruction in excess of first 30 minutes of hands-on time.				
IR405	Shuntogram	30	TBD	1
IR410	Thoracentesis– diagnostic	45	45	1
IR411	Thoracentesis – therapeutic	55	55	1
IR415	Cholangiogram, percutaneous transhepatic Count once per exam	120	TBD	1
IR420	Paracentesis, diagnostic	50	50	1
IR421	Paracentesis, therapeutic	80	80	1
IR425	Guided biopsy or aspiration of mass or organ. Application of this code will be further reviewed with the IR dictionary standard when available	N/A	55	1
IR426	Guided biopsy or aspiration of bone or spine Application of this code will be further reviewed with the IR dictionary standard when available	N/A	55	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
IR427	<p>Guided biopsy or aspiration of cyst, mass, organ, or bone – one site</p> <p>(E.g. liver biopsy [non-transjugular approach], thyroid, muscle, or spine etc.)</p> <p>Excludes GR680 (small bowel biopsy), paracentesis (IR420, IR421) and thoracentesis (IR410, IR411), breast biopsy (MM225 and/or MM230). Also excludes guided biopsy, transjugular liver (see codes IR220 (focal) or IR221 (non-focal) and biopsy with MRI technology (MR410).</p>	61	61	1
IR428	<p>Guided biopsy or aspiration of cyst, mass, organ, or bone – each additional site &gt; 1.</p> <p>(E.g. liver biopsy [non-transjugular approach], thyroid, muscle, or spine etc.)</p> <p>Count once for each additional site in addition to workload and exam count of code IR427.</p> <p>Excludes GR680 (small bowel biopsy), paracentesis (IR420, IR421) and thoracentesis (IR410, IR411), breast biopsy (MM225 and/or MM230). Also excludes guided biopsy, transjugular liver (see codes IR220 (focal) or IR221 (non-focal) and biopsy with MRI technology (MR410).</p>	12	TBD	0
IR430	Image-guided chest tube insertion	60	60	1
IR435	Lumbar puncture myelogram	45	45	1
IR440	Cisternal puncture myelogram	55	TBD	1
IR445	<p>Injection, facet/S.I. joint</p> <p>Do not collect workload/exam counts for codes CT575 and IR445 together.</p> <p>Count only if workload is performed by unit-producing personnel.</p>	48	TBD	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR446	Injection, additional facet/S.I. joint  Do not collect workload/exam counts for codes CT575 and IR446 together.  Count only if workload is performed by unit-producing personnel.	20	TBD	1
IR450	Joint/spine/intrathecal injection/aspiration  Includes administration of chemotherapy and other therapeutic agents  Do not collect workload/exam counts for codes CT575 and IR 450 or IR455 together.  Count only if workload is performed by unit-producing personnel.	30	30	1
IR455	Extensive joint injections  Do not collect workload/exam counts for codes CT575 and IR 450 or IR455 together.  For special needs service recipients (E.g. pediatric etc.), if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	180	TBD	1
IR460	Nerve block, injection  Count once for each injection.  Count only if workload is performed by unit-producing personnel.	36	TBD	1
IR465	Basket extraction of stone, G.U. tract Count once per exam.	132	90	1
IR470	Stent insertion, urinary tract- unilateral Count once per exam	142	100	1
IR471	Stent insertion, urinary tract- bilateral	182	140	1
IR475	Nephrostomy, percutaneous - unilateral	122	80	1
IR476	Nephrostomy, percutaneous – bilateral	152	110	1
IR480	Nephrostomy, tube exchange - unilateral	97	55	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR481	Nephrostomy, tube exchange - bilateral	123	81	1
IR485	Drainage tube removal, G.U. tract Count once for each tube removed	35	TBD	1
IR490	Dilatation G.U. tract	107	TBD	1
IR491	Dilatation, G.I. tract	110	110	1
IR495	Stent insertion, G.I. tract	110	110	1
IR500	Stent insertion, Respiratory tract E.g. Bronchial (unilateral and bilateral), or tracheal etc.	TBD	TBD	1
IR503	Dilation: respiratory tract E.g. Bronchial (unilateral and bilateral), or trachea etc.	54	TBD	1
IR505	Basket extraction of stone, G.I. tract	140	140	1
IR510	Drainage, biliary, one branch	120	TBD	1
IR511	Drainage biliary, two branches	140	TBD	1
IR915	ERCP	50	TBD	1
IR515	Gastrostomy, percutaneous	60	TBD	1
IR520	Gastrojejunostomy	80	TBD	1
IR525	Catheter exchange, biliary	50	TBD	1
IR526	Catheter exchange, gastrostomy	35	TBD	1
IR530	Drainage tube removal, G.I. tract	30	TBD	1
IR535	Catheter exchange, abscess	45	TBD	1
IR540	Guidance for catheter placement including for fluid/abscess drainage, single catheter Do not count for therapeutic paracentesis (see IR421) or therapeutic thoracentesis (see IR411).	90	TBD	1
IR545	Guidance for percutaneous catheter placement including for fluid or abscess drainage, multiple catheters Do not count for therapeutic paracentesis (see IR421) or therapeutic thoracentesis (see IR411).	130	TBD	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
IR550	Kyphoplasty – One Level	110	110	1
IR551	Kyphoplasty – two or more levels	150	TBD	1
IR555	Vertebroplasty	100	TBD	1
IR560	Cryosurgery/Radiofrequency ablation/ Thermoablation Count once for first lesion.	115	TBD	1
IR565	Cryosurgery/Radiofrequency ablation/ Thermoablation Count once for each additional lesion >1.	62	TBD	0
IR 570	Percutaneous Caecostomy	60	TBD	1
IR600	Post processing reconstruction in excess of first 30 minutes of hands-on time Count in increments of 10 minutes. Note: IR600 is additional workload to be counted for interventional radiology activities only.	10	TBD	0

## Computed Tomography

### General Information and Recording Instructions for Computed Tomography:

- Exams are counted separately if imaging of non-contiguous anatomical parts/regions (non-clustered body structures) is performed (e.g. brain and ankle). Imaging of non-contiguous anatomical parts/regions generally requires service recipient repositioning. If contiguous anatomical parts/regions (clustered body structures) are imaged (e.g. chest/abdomen), usually the service recipient is not repositioned: therefore one exam is counted as defined in the applicable exam code section. Contiguous anatomical parts/regions imaging generally does not require service recipient repositioning. When repositioning is required an additional exam is counted.
- CT post processing reconstruction is captured in addition to each CT activity if applicable, in 10 minute increments. Workload may be collected when using existing data to create retrospective projections of another anatomical part, when an additional scan is not necessary. As no new imaging is required for post processing reconstruction, no exam count is counted. In Computed Tomography (i.e. CT510), post processing reconstruction is captured in addition to each CT activity if applicable, in 10 minute

increments whenever it is carried out by unit producing personnel. There is no extra exam count but hands-on workload is counted. This workload is counted as a separate activity in CT due to wide variability in the workload units.

3. When a request is received to perform an enhanced and a non-enhanced image, use the combined code with 1 exam count. However, if a request is received to perform a non-enhanced image, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested, count both the non-enhanced and enhanced separately to total 2 exam counts.
4. The workload unit for enhanced exams includes accessing the service recipient's vein or injecting contrast or medication. The component activities within the conceptual model for medical imaging include exam preparation activities, amongst other activities including initial handling/set-up, service recipient preparation/instructions, assessment (pre & post exam monitoring), administration of radiopharmaceuticals, contrast media and medications, etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities. See code MI980 for additional workload associated with provision of IV fluids.
5. Any activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable; however these codes are only listed once, in the modality for which it is most often used.
6. The unit values listed here are averages of regular and routine medical imaging activities. When infrequent activities occur, use actual or standard time methodology to capture workload.
7. Please see Items for Count for the definition of "exam" in Medical Imaging WMS.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Head</b> Note: One exam includes any combination of anatomical parts listed in each CT activity, (E.g. Usually, the service recipient is not repositioned). Count separate workload and exams as applicable, if imaging of non-contiguous anatomical parts/regions (non-clustered body structures) is performed (e.g. brain and ankle). When repositioning is required an additional exam is counted.				

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CT001	Attempted/Failed CT Head (plus CT attempted/failed in dictionary with no body part) and Head Scout	N/A	15	1
CT002	Attempted/Failed CT Body and Body Scout	N/A	17	1
CT003	Attempted/Failed CT Extremity and Extremity Scout	N/A	18	1
CT004	Attempted/Failed CT Biopsy	N/A	59	1
CT105	<p>Head, non-enhanced – includes:</p> <ul style="list-style-type: none"> <li>a) Brain</li> <li>b) Orbits</li> <li>c) Sella turcica</li> <li>d) IAC and/or posterior fossa</li> <li>e) Facial bones</li> <li>f) Sinuses</li> <li>g) Nasopharynx</li> </ul> <p>Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested.</p>	15	15	1
CT106	<p>Head, enhanced – includes:</p> <ul style="list-style-type: none"> <li>a) Brain</li> <li>b) Orbits</li> <li>c) Sella turcica</li> <li>d) IAC and/or posterior fossa</li> <li>e) Facial bones</li> <li>f) Sinuses</li> <li>g) nasopharynx</li> </ul>	22	22	1
CT107	<p>Head, combined non-enhanced and enhanced – includes:</p> <ul style="list-style-type: none"> <li>a) Brain</li> <li>b) Orbits</li> <li>c) Sella turcica</li> <li>d) IAC and/or posterior fossa</li> <li>e) Facial bones</li> <li>f) Sinuses</li> <li>g) nasopharynx</li> </ul>	29	29	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
CT110	Head, stereotactic non-enhanced (e.g. 3D wand)  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested.	22	Not used in NL Dictionary	1
CT111	Head, stereotactic enhanced (e.g. 3D wand)	26	Not used in NL Dictionary	1
CT112	Head, stereotactic combined, non-enhanced and enhanced (e.g. 3D wand)	35	Not used in NL Dictionary	1
CT120	TMJ/implant study, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested.	15	15	1
CT121	TMJ/implant study, enhanced	21	21	1
CT122	TMJ/implant study, combined non-enhanced and enhanced	30	30	1
CT130	Angio, Head, enhanced	37	37	1
CT131	CT Brain, enhanced	N/A	49	1
<b>Neck and Spine</b>				
CT205	Soft Tissue Neck, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested	15	15	1
CT206	Soft Tissue Neck, enhanced	22	22	1
CT207	Soft Tissue Neck, combined non-enhanced and enhanced	30	30	1
CT210	Angiography, Soft Tissue Neck, enhanced Includes imaging of vasculature.	36	36	1
CT215	Angio, Spine, enhanced	37	Not used in NL Dictionary	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CT220	<p>Spine, non-enhanced – includes:</p> <ul style="list-style-type: none"> <li>a) Cervical</li> <li>b) Thoracic</li> <li>c) Lumbar</li> <li>d) Sacrum and/or coccyx</li> <li>e) cervical, thoracic and lumbar may also contain subarachnoid contrast.</li> </ul> <p>Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested</p> <p>One exam and number of workload units do not vary regardless of combination of listed anatomical parts imaged.</p> <p>Note: The unit values listed here are averages of regular and routine medical imaging activities. When infrequent activities occur, use actual or standard time methodology to capture workload.</p>	18	18	1
CT221	<p>Spine, enhanced with IV contrast - includes cervical, thoracic, lumbar, sacrum and/or coccyx</p> <ul style="list-style-type: none"> <li>a) cervical,</li> <li>b) thoracic,</li> <li>c) lumbar,</li> <li>d) sacrum and/or coccyx.</li> </ul> <p>One exam and number of workload units do not vary regardless of combination of listed anatomical parts imaged.</p> <p>Note: The unit values listed here are averages of regular and routine medical imaging activities. When infrequent activities occur, use actual or standard time methodology to capture workload.</p>	25	25	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
CT222	<p>Spine, combined non-enhanced and enhanced - includes cervical, thoracic, lumbar, sacrum and/or coccyx</p> <p>a) Cervical b) Thoracic c) Lumbar d) Sacrum and/or coccyx</p> <p>One exam and number of workload units do not vary regardless of combination of listed anatomical parts imaged.</p> <p>Note: The unit values listed here are averages of regular and routine medical imaging activities. When infrequent activities occur, use actual or standard time methodology to capture workload.</p>	33	33	1
<b>Chest, Abdomen and Pelvis</b>				
CT305	Sternoclavicular joints	17	Not used in NL Dictionary	1
CT310	<p>Cardiac, non-enhanced (e.g. calcium scoring)</p> <p>Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested</p>	21	Not used in NL Dictionary	1
CT311	Cardiac, enhanced	40	40	1
CT312	Cardiac, combined non-enhanced and enhanced	60	Not used in NL Dictionary	1
CT320	<p>Thorax (chest), non-enhanced</p> <p>Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested</p>	18	18	1
CT321	Thorax (chest), enhanced	26	26	1
CT322	Thorax (chest), combined non-enhanced and enhanced	32	32	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CT330	Chest and abdomen, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested	20	20	1
CT331	Chest and abdomen, enhanced	30	30	1
CT332	Chest and abdomen, combined non-enhanced and enhanced	35	35	1
CT340	Angio, Chest, enhanced  (E.g. for pulmonary embolus, aortic dissection)	31	31	1
CT345	CT Scout Only (E.g. for purposes of service recipient positioning or detection of contrast)  Use this code only when a scout is performed and it does not progress to another exam.	8	See CT001/002/003 for NL value	1
CT350	Abdomen, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested,	17	17	1
CT351	Abdomen, enhanced	25	25	1
CT352	Abdomen, combined non-enhanced and enhanced	31	31	1
CT355	Angio, Abdomen, enhanced (No runoff)	30	30	1
CT360	CT Enterography (small intestine)	33	33	1
CT362	CT Colonography- virtual colonoscopy (large intestine)	TBD	Not used in NL Dictionary	1
CT365	Angio, abdomen and pelvis, enhanced	34	34	1
CT366	Angio, chest, abdomen and pelvis enhanced	N/A	41	1
CT370	Angio with Runoff, enhanced  (includes abdomen and pelvis and legs)	45	45	1
CT375	Angio, pelvis, enhanced	31	31	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CT380	Pelvis, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested	17	17	1
CT381	Pelvis, enhanced	25	25	1
CT382	Pelvis, combined non-enhanced and enhanced	31	31	1
CT390	Abdomen and pelvis, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested	19	19	1
CT391	Abdomen and pelvis, enhanced	26	26	1
CT392	Abdomen and pelvis, combined non-enhanced and enhanced	33	33	1
CT395	Chest, abdomen and pelvis, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested,	23	23	1
CT396	Chest, abdomen and pelvis, enhanced	29	29	1
CT397	Chest, abdomen and pelvis, combined non-enhanced and enhanced	39	39	1
<b>Extremities</b>				
CT405	Angio, extremity, enhanced	45	45	1
CT410	Extremity, unilateral or bilateral if done simultaneously, non-enhanced  Count separate workload and exams if, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested	18	18	1
CT411	Extremity, unilateral or bilateral if done simultaneously, enhanced	25	25	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
CT412	Extremity, unilateral or bilateral if done simultaneously, combined non-enhanced and enhanced	32	32	1
CT415	Extremity, dynamic non-enhanced	N/A	25	1
<b>Miscellaneous</b>				
CT505	CT Planning for radiation oncology	25	Not used in NL Dictionary	1
CT510	CT Post processing reconstruction Per 10 minute periods.  This activity may be collected when using existing data to create retrospective views of another anatomical part, when an additional scan is not necessary.	10	Not used in NL Dictionary	0
CT515	CT Scanned Plane - additional projections - must involve repositioning of service recipient	15	Not used in NL Dictionary	0
CT520	CT Delayed Scanning  (E.g. IV contrast administered and then service recipient leaves the examination room, waits and later returns to the suite for completion of CT scan imaging. This does not include waiting time).	12	12	0
CT525	Guided biopsy/aspiration of mass or organ.  Code deprecated in CIHI but still in use in NL. See code IR427 for CIHI equivalent.	N/A	59	1
CT530	Guided biopsy of bone or spine.  Code deprecated in CIHI but still in use in NL. See code IR427 for CIHI equivalent.  Also excludes biopsy with MRI technology (MR410).	N/A	69	1
CT531	CT-guided percutaneous microcoil placement for intra operative procedure	N/A	60	1

CT535	Guidance for catheter placement/fluid drainage, single catheter.  Code deprecated in CIHI but still in use in NL. See code IR540 for CIHI equivalent. Do not count for therapeutic paracentesis (see IR421) or therapeutic thoracentesis (see IR411).	N/A	56	1
CT536	Guidance for catheter placement/fluid drainage, multiple catheters.  Code deprecated in CIHI but still in use in NL. See code IR540 for CIHI equivalent. Do not count for therapeutic paracentesis (see IR421) or therapeutic thoracentesis (see IR411).	N/A	71	1
CT540	Scanogram	10	10	
CT545	CT for Virtual Colonoscopy, supine or prone	42	42	
CT550	CT for Virtual Colonoscopy, supine and prone	56	56	
CT560	CT Guided Cryoablation/Thermoablation Count once per lesion	120	120	
CT561	CT Guided Cryoablation/Thermoablation Count once for each additional lesion	62	Not used in NL Dictionary	
	IV hydration for pre and/or post imaging- See MI980 to count incremental workload unit values.		Not used in NL Dictionary will collect WL via drop down box	
CT575	CT for guidance for injection of pharmacotherapy (E.g. in joints)  Includes the preliminary aspiration.  Do not collect codes CT575 and/or IR450 and/or IR455 together.	23	Not used in NL Dictionary	0

## Ultrasound

### General Information and Recording Instruction for Ultrasound

1. The workload units assigned may include 3D and/or 4D qualitative Doppler (colour), however, they do not include quantitative Doppler (measurements) unless specifically

indicated. If quantitative Doppler is performed in addition to the described exam, add the appropriate unit value as described in activity US110.

2. Workload includes all component activities integral to the MI conceptual model for the MI workload measurement system. The published US workload unit value includes administration of a radiopharmaceutical or medication (i.e. Lasix, Persantine, Dobutamine, etc) with dosage calculations, documentation, MRSA/VRE/latex activities, catheterization, and image acquisition etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities. Contrast media specific to ultrasound, is defined in code US105. See code MI980 for additional workload associated with the provision of IV fluids.
3. Any activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable, however these codes are only listed once, in the modality for which it is most often used
4. Please see Items for Count for the definition of “exam” in Medical Imaging WMS.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>General</b>				
US001	Attempted/Failed US exams includes all procedures	N/A	30	1
US105	Contrast - additional units for the use of contrast media including microbubbles (agitated saline) or manufactured contrast media.	30	30	0
US110	Quantitative Doppler, abdominal/pelvic, obstetrical, one anatomical group of venous or arterial blood vessels (e.g. hepatic, renal, uterine & ovarian, etc.)	30	30	0
<b>Abdominal Ultrasound (Includes Non-obstetrical Pelvis)</b>				
US205	Abdomen, detailed	35	35	1
US210	Abdomen, limited (may include a follow-up, single quadrant or a limited number of organs)	25	25	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
US211	Renal unilateral or bilateral and bladder with colour Doppler (Code added by NL to reflect the procedure dictionary with correct WLUs)	N/A	30	1
US213	Abdomen and pelvis, limited or preliminary transverse and sagittal imaging- no service recipient preparation (e.g. full bladder etc) required	15	Not used in NL Dictionary	1
US215	Abdomen and pelvis , detailed	50	50	1
US220	Transabdominal pelvis	30	30	1
US225	Pelvis, translabial, female	25	25	
US230	Pelvis, or endovaginal or transrectal, or translabial female For obstetrical scan with fetal biophysical profile, aggregate exams US230 and one of either: US440 or US441	30	30	1
US235	Pelvis, transabdominal and endovaginal, female or Pelvis, transabdominal and transrectal, female.	45	45	1
US240	Sonohysterography Includes contrast	60	60	1
US245	Prostate/transrectal	30	30	1
US250	Renal Artery Quantitative Doppler (may be used for post-stents or for renal transplants)	35	35	1
US251	Renal Transplant Work-up Includes aorta, iliac arteries and veins for diameter and patency.	30	Not used in NL Dictionary	1
US255	Transplant Ultrasound, non-hepatic Includes quantitative Doppler When performing abdominal ultrasound with quantitative Doppler for non-transplant purposes, refer to code US110	80	80	1
US260	Liver transplant with quantitative Doppler, For special needs service recipients (E.g. pediatrics), if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	60	60	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Echocardiography (Fetal, Neonate, Pediatric/Special Needs, Adult)</b>				
US305	Cardiac, Detailed	55	55	1
US310	Cardiac, Limited	30	30	1
US315	Cardiac, Fetal	50	50	1
US320	Cardiac, Transesophageal	60	60	1
US325	Stress echo (exercise)	60	60	1
US330	Stress echo (pharmacological with Persantine)	60	Not used in NL Dictionary	1
US335	Stress echo (pharmacological with Dobutamine)	80	80	1
<b>Obstetrical Ultrasound</b>				
US405	First trimester; may include endovaginal/translabial. Count once for single fetus. For multiple gestation, also count US445 once for each additional fetus (>1).	45	45	1
US410	Nuchal Translucency	35	35	1
US415	Second/third trimester- routine scan; may include Doppler; may include endovaginal/translabial.  For maternal kidney scan, use code US210. For multiple gestation also count US450 once for each additional fetus.	55	55	1
US425	Amniocentesis	45	45	1
US431	Chorionic villi sampling- ultrasound guidance	50	Not used in NL Dictionary	1
US435	High risk pregnancy (to be used for highly suspicious or known abnormalities); may include biophysical profile.  Includes all imaging in routine scan US405 and US415 plus further detailed measurements and cardiac imaging.	55	55	1
US440	Biophysical profile only (scoring only e.g. basic or limited scanning. See US441 for more detailed US exam); count once per fetus	30	30	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
US441	Biophysical profile and measurements-detailed  Includes detailed scanning and fetal measurements (E.g. head, abdomen, femur) resistive index and fetal heartbeat)	50	50	1
US445	First Trimester - multiple gestation, additional units per fetus	25	25	0
US450	Second/Third Trimester – multiple gestation, additional units per fetus	35	35	0
US455	Limited Obstetric ultrasound for monitoring of fetal position	15	15	1
US460	U/S Intrauterine fetal transfusion Includes cordocentesis	70	Not used in NL Dictionary	1
<b>Ophthalmic Ultrasound</b>				
US505	Ophthalmic, imaging study, unilateral	30	30	1
US506	Ophthalmic, imaging study, bilateral	35	35	1
US510	Globe B-scan and Standardized A-scan unilateral	30	Not used in NL Dictionary	1
US511	Orbital B-scan and Standardized A-scan bilateral	60	Not used in NL Dictionary	1
US515	Globe immersion B-scan and Standardized A-scan unilateral	30	Not used in NL Dictionary	1
US520	2D High Frequency biomicroscopy immersion anterior segment examination unilateral	30	Not used in NL Dictionary	1
<b>Neurological Ultrasound, includes 2D, Doppler (Pulsed and/or Colour and/or Power)</b>				
US605	Carotid Arteries Bilateral -Includes subclavian and vertebral circulation and occasionally ophthalmic arteries	50	50	1
US610	Carotid artery, limited	30	30	1
US615	Intraoperative U/S- for ultrasonography that occurs during a surgical operation	90	Not used in NL Dictionary	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
US620	Transcranial; May include MCA and/or vertebra-basilar circulation.  For Pediatric (>28 days of age to locally defined maximum age) and other special needs service recipients, if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	35	Not used in NL Dictionary	1
US630	Neonatal Brain	30	30	1
US635	Pediatric Brain <b>Note:</b> (Pediatric: >28 days of age to locally defined maximum age)  For other special needs service recipients, if applicable, may also consider adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970. Do not also count US630	TBD	Not used in NL Dictionary	1
<b>Vascular Ultrasound, includes 2D, Doppler (Pulsed and/or Colour and/or Power)</b>				
US715	Extremities arteries; count once per limb	40	40	1
US720	Extremities veins; count once per limb	30	30	1
US721	Bilateral extremities veins	N/A	50	2
US725	Any other blood vessel (E.g. grafts, arm vein etc)	30	30	1
US730	Superior vena cava and neck vessels (E.g. includes jugular veins)	35	35	1
<b>Small Parts Ultrasound (Includes musculoskeletal)</b>				
US805	Neck (thyroid, parathyroid, lymph nodes)	30	30	1
US810	Shoulders, unilateral	25	25	1
US811	Shoulders, bilateral	40	40	1
US820	Other Joints, unilateral	25	25	1
US821	Other Joints, bilateral	35	35	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
US830	Hips, bilateral For Pediatric (>28 days of age to locally defined maximum age) and other special needs service recipients, if applicable, consider also adding workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	30	30	1
US840	Breast, unilateral May include 3D	25	25	1
US841	Breast, bilateral May include 3D	40	40	1
US850	Ultrasound guided fine wire localization	45	45	1
US851	Ultrasound guided fine wire localization (breast)- units for second site	20	15	0
US855	Soft tissue or other small part May include superficial mass, hernia, tendon and/or ligament	25	25	1
US856	Soft tissue or other small part bilateral May include superficial mass, hernia, tendon and/or ligament	N/A	40	1
US860	Scrotum/testes with Doppler, quantitative See code NM585 for non-ultrasound testicular imaging.	30	30	1
US865	Local area/penile frequency analysis with Doppler, quantitative	30	30	1
<b>Miscellaneous</b>				
US870	Chest	25		1
US875	Spine	25		1
	Ultrasound guided catheter or central line placement. See Interventional Radiology schedule of unit values to select one of codes IR370, IR371, IR375 or IR380, as applicable. <b>In NL see US886 or US 887</b>			
US885	Surgical specimen	20	Not used in NL Dictionary	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
US886	Ultrasound guided <b>exam</b> : needle biopsy, paracentesis, aspiration/drainage of fluid, pericardiocentesis, central catheter placement, <b>insertion of catheter, insertion of drainage tube</b> or injection/needles in musculoskeletal anatomy.	N/A	45	1
US887	Ultrasound guided needle biopsy, paracentesis, aspiration/drainage of fluid cyst, pericardiocentesis or central catheter placement multiple sites	N/A	15	1
US888	Ultrasound guided aspiration/removal of calcium deposits musculoskeletal sites	N/A	60	1

## Nuclear Medicine

### General Information and Recording Instructions for Nuclear Medicine:

1. The nuclear medicine section has been developed to be consistent with all other imaging modalities so the total unit value for each exam includes all components needed to complete it. Workload includes all component activities integral to the MI conceptual model for the MI workload measurement system. The published NM workload unit value includes insertion of the IV catheter, IV pump set-up, administration of a pharmaceutical (i.e. Lasix, Captopril, and Octreotide etc), the inherent dosage calculations, documentation, MRSA/VRE/latex activities, post processing and image acquisition etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities.
2. The established unit values take into consideration various technologies and age of equipment. Unit values represent the average time to perform the exam for the average service recipient by the average UPP service provider under average circumstances. Where the exam typically requires more than one technologist to complete it, the published unit value reflects the total workload units for all of the technologists that are expected to be involved in performing that exam. If an exam is not listed in the schedule of unit values, users should establish a standard time using the standardized timing protocol and submit the information to CIHI at [mis@cihi.ca](mailto:mis@cihi.ca).

3. Exam counts are based on the definition of an exam; a defined technical investigation using an imaging modality to study one body structure, system or anatomical area that yields one or more projections for diagnostic and/or therapeutic purposes. The following scenarios demonstrate when more than one exam is counted: When a service recipient undergoes additional imaging by other modalities, an additional defined exam is also counted, as applicable. (See #6 below).
4. SPECT is defined as one completed camera rotation in any format that results in an image of a specific anatomical area. These units are used for any complete rotation that is in addition to the initial SPECT rotation. Where SPECT is identified in the description, workload for the SPECT component is included in the unit value/exam count. Code NM100 would therefore not be added in this scenario. For exams where initial SPECT imaging is not included in the description, or where SPECT imaging is performed additional to the initial SPECT, also count NM100 if applicable. For example: NM350 + NM100 for 70 workload units and no extra exam count.
5. Attenuation correction is not a component activity. Code NM105 for additional workload due to attenuation activities, however if you find this average time unit value is not representative of the workload within a nuclear medicine functional centre, it may be more appropriate to use Standard time methodology instead.
6. For exams/procedures that are done in conjunction with the NM procedure, aggregate the workload unit values and exam counts from any applicable modality in the Medical Imaging schedule of unit values. For example, in nuclear medicine, CT, GI or US exams are often performed along with an Interventional procedure. These additional exams are aggregated similar to the examples of the Interventional Radiology introduction section.
7. Any activity in the schedule of unit values can be utilized by any medical imaging functional centre if the unit value is accurate and reflective of the realistic average time required to perform a specified activity. Therefore, workload listed in various medical imaging modalities can be captured in any other medical imaging functional centre, if applicable; however these codes are only listed once, in the modality for which it is most often used.
8. Workload for post processing activities is included in the unit value for each Nuclear Medicine exam (30 minutes or less). Additional units can be counted in 10 minute increments for post processing workload in excess of the initial 30 minutes- see code NM130.
9. Each exam in the Nuclear Medicine modality assumes delayed imaging either to a maximum of two images if unspecified in the exam definition or whatever exact number is specified in the exam definition. For additional delayed images, also capture workload

for code NM110 for each delayed image exam, however no additional exams are counted.

10. See code MI980 for additional workload associated with provision of IV fluids.

11. Please see Items for Count for the definition of "exam" in Medical Imaging WMS.

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
NM001	Attempted failed cardiac exam	N/A	30	1
NM002	Attempted failed body/therapeutic	N/A	20	1
NM003	Attempted failed nuclear medicine	N/A	25	1
NM100	<p>Chest SPECT- Add this unit value to the workload for an exam listed below where SPECT imaging is performed but not specified in the exam definition or when SPECT imaging is performed additional to the initial SPECT imaging.</p> <p>Count NM100 once only when aggregated with other NM exams.</p> <p>(E.g. NM305 + NM320 + NM100 [count once only] = 30 + 40 +30= 100 workload units)</p>	30	30	0
NM105	<p>SPECT/CT when using CT for attenuation, correction, localization only- add this unit value to the appropriate exam listed below when using SPECT.</p> <p>If the CT image is also used for diagnostic purposes, do not count extra workload units.</p> <p>Count NM105 once only when aggregated with other NM exams.</p> <p>(E.g. NM305 + NM320 + NM100 [count once only] = 30 + 40 +30= 100 workload units)</p>	40	40	0

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
NM110	Delayed image Count once per delayed image exam beyond the number stated in the specific exam definition.	30	30	0
NM115	If performing a diagnostic CT only (e.g. not using the SPECT component) with the SPECT/CT instrument, capture units from the CT scan schedule.	See SUVs for CT	Not used in NL Dictionary	
NM120	Electrocardiogram (e.g. 12-Lead ECG) when associated with cardiac imaging (e.g. with gated wall motion procedures) Includes lead placement, recording, and documentation. Count only if performed by Medical Imaging unit producing personnel.	11	Not used in NL Dictionary	0
NM130	Post processing in excess of initial 30 minutes- count workload once per increment of 10 minutes.	10	Not used in NL Dictionary	0
NM135	Additional Pulse Sequence Count workload once per sequence in excess of the first sequence of any NM exam.	5	Not used in NL Dictionary	0
<b>Bone</b>				
NM205	Bone specific site	50	50	1
NM210	Bone specific site with pinhole projection-first pinhole projection.	60	Not used in NL Dictionary	1
	Used when doing a pinhole projection in conjunction with a regular exam. Count 10 workload units for each pinhole projection >1.	10		0
NM215	Bone specific site with pinhole projection, bone flow and/or blood pool image	70	Not used in NL Dictionary	2
NM220	Bone specific site bone flow and/or blood pool image Includes NM205	60	60	2

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
NM225	Bone - whole body	50	50	1
NM230	Bone - whole body bone and flow and/or blood pool image Includes NM225	60	60	2
NM235	Bone - whole body and spot with additional joint projections Includes NM225	70	70	1
NM240	Bone - whole body including joints with bone flow and/or blood pool image	80	80	2
NM245	SI joint ratios (Count for workload associated with calculations only)	10	Not used in NL Dictionary	0
NM250	NM radionuclide arthrogram	25	Not used in NL Dictionary	1
NM255	Bone marrow	75	75	1
NM260	Orbital – unilateral or bilateral	TBD	Not used in NL Dictionary	1
<b>Lung</b> Also count workload for NM100 or NM105 once only per combined NM exams, if SPECT and SPECT/CT CT is also performed but not mentioned in the following Cardiovascular NM exam definitions (E.g. NM305+ NM320 + NM100 [count once only]= 30 + 40 +30= 100 workload units)				
NM305	Lung perfusion	30	30	1
NM310	Lung perfusion with flow	40	Not used in NL Dictionary	1
NM315	Lung perfusion with quantification	40	40	1
NM320	Lung ventilation May include gas or aerosol	40	40	1
NM325	Lung ventilation and perfusion May include gas or aerosol	70	70	1
NM330	Lung quantitative ventilation and perfusion	80	Not used in NL Dictionary	1
<b>Cardiovascular</b> Also count workload for NM100 or NM105 once only per combined NM exams, if SPECT and SPECT/CT is also performed but not mentioned in the following Cardiovascular NM exam definitions. (E.g. NM355 + NM365 + NM100 [count once only]= 40 + 65 +30= 135 workload units)				

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
NM350	Stress test service recipient monitoring. Includes monitoring of ECG during exercise/pharmaceutical stressing for optimal timing of injection of radiopharmaceutical	40	Not used in NL Dictionary	0
NM355	Rest myocardial viability (E.g. rest and redistribution)	70	Not used in NL Dictionary	2
NM360	Rest myocardial perfusion May include gating	50	50	1
NM365	Stress (exercise or pharmacological) myocardial perfusion.  May include gating  Includes the imaging and analysis of the data.	65	65	1
NM370	Wall motion rest (E.g. cardiac output) (Includes MUGA scan) Includes in-vitro RBC labelling and all additional acquisitions.  Add workload units for in-vivo RBC labelling	89  TBD	74 in-vivo labelling 89 in-vitro labelling	1
NM375	Wall motion stress (cardiac output) (E.g. exercise or pharmacological)	120	Not used in NL Dictionary	1
NM380	Myocardial Infarct Imaging	55	55	1
NM385	Superior Vena Cava (SVC)	40	Not used in NL Dictionary	1
NM386	Inferior Vena Cava (IVC)	TBD	Not used in NL Dictionary	1
NM390	Venogram flow - unilateral	35	Not used in NL Dictionary	1
NM391	Venogram flow - bilateral	60	Not used in NL Dictionary	1
NM393	Venogram RBC  Includes in-vitro RBC labelling and all additional acquisitions.  Add workload units for in-vivo RBC labelling.	70  TBD	70 in-vivo labelling 85 in-vitro labelling	1
NM395	Ventricular Shunt - Right to Left	40	40	1
NM396	Ventricular Shunt - Left to Right	40	40	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Circulatory/Lymphatic</b>				
NM405	Lymphoscintigraphy (whole body) For angiogram exams, refer to one of: IR205, MR450 or MR455.	115	115	1
NM406	Lymphoscintigraphy - sentinel node - breast	60	95	1
NM407	Lymphoscintigraphy - sentinel node melanoma	80	115	1
<b>Endocrine</b>				
NM425	Parathyroid. Includes the injection and first two sets of delayed images, if applicable. Use delayed image code (NM110) for each additional set of delayed images >2.	90	90	1
NM430	Thyroid scan	30	30	1
NM435	Thyroid uptake (includes 2 uptakes). Includes first two sets of delayed images, if applicable. Use delayed image code (NM110) for each additional set of delayed images >2.	30	30	1
NM440	Adrenal Cortex. Includes injection and first three sets of delayed images, if applicable. Use delayed image code (NM110) for each additional set of delayed images >3.	140	140	1
NM445	Iodine whole body	60	60	1
NM450	I131 specific site. Includes injection and first 4 sets of delayed images, if applicable. Use delayed image code (NM110) for each additional set of delayed images >4	50	Not used in NL Dictionary	1
NM451	MIBG (I123) specific site (may include adrenal medulla). Includes injection and first two sets of delayed images, if applicable. Use delayed image code (NM110) for each additional set of delayed images >2	80	Not used in NL Dictionary	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
NM452	MIBG (I131) specific site (may include adrenal medulla). Includes injection and first two sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >2.	85	85	1
NM453	Octreotide specific site. May include adrenal medulla. Includes injection and first two sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >2.  Do not count code PT105 in addition to this exam.	85	Not used in NL Dictionary	1
NM455	MIBG (I123) whole body; Includes the injection and first two sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >2.	95	Not used in NL Dictionary	1
NM456	MIBG (I131) whole body Includes the injection and first two sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >2.	100	Not used in NL Dictionary	1
NM457	Octreotide whole body. Includes injection and first two sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >2.  Do not count PT105 in addition to this exam.	110	110	1
<b>Central Nervous System</b>				
NM475	Brain (CNS) with flow. Includes first two sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >2.	40	Not used in NL Dictionary	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
NM480	Brain SPECT (cerebral perfusion) Do not count code NM100.	85	85	1
NM481	Brain SPECT CT (cerebral perfusion) Do not count code NM105.	95	95	1
NM485	Brain death study	35	35	1
NM490	Cisternography. Includes injection and first four sets of delayed images, if applicable >4.	175	175	1
NM495	CSF Shunt, unilateral or bilateral	60	60	1
NM496	CSF leak. Includes injection and first three sets of delayed images, if applicable. Use delayed image code (NM110) for each additional set of delayed images >3.	170	Not used in NL Dictionary	1
NM497	CSF leak with pledget counting. Includes injection and first five sets of delayed images (4-5 visits), if applicable. Use delayed image code (NM110) for each additional set of delayed images >5.	230	Not used in NL Dictionary	1
<b>Kidney</b>				
NM505	Renal Morphological Imaging - static	50	50	1
NM506	Renal Morphological Imaging – with flow	60	Not used in NL Dictionary	2
NM510	Cystogram Direct	65	65	1
NM511	Cystogram Indirect	40	Not used in NL Dictionary	1
NM515	Renal Dynamic study (flow and function)	60	60	1
NM520	Captopril Administration and Monitoring For use only if performed by unit-producing personnel. Includes only the administration and monitoring of Captopril.  Also count workload for code NM515 for the exam.	60	30	0

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
NM525	Diuretic Administration  For use only if performed by unit-producing personnel. Includes only the administration and monitoring of diuretic.  Also count workload for code NM515 for the exam.	10	10	0
NM530	Renal Transplant	60	Not used in NL Dictionary	1
NM535	GFR Gamma camera method. Includes a renal dynamic study.  Do not count NM515 separately.	80	Not used in NL Dictionary	1
NM536	GFR Blood test method	75	75	1
NM540	ERPF Blood Sample Method. Note: includes all component activities (E.g. IV insertion, IV pump set-up etc.)	75	Not used in NL Dictionary	1
<b>Soft Tissue</b>				
NM550	Gallium specific site. Includes first four sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >4.	55	55	1
NM551	Gallium whole body Includes first four sets of delayed images, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >4.	60	60	1
NM555	Dacrosintigraphy (lacrimal duct) without quantitative analysis	55	55	1
NM556	Dacrosintigraphy (lacrimal duct) with quantitative analysis	70	Not used in NL Dictionary	1
NM560	Scintimammography	65	Not used in NL Dictionary	1
NM565	WBC Indium specific site (does not include labelling). Includes first set of delayed imaging, if applicable.  Use delayed image code (NM110) for each additional set of delayed images >1.	70	Not used in NL Dictionary	1

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
NM566	WBC Indium whole body (does not include labelling) Includes all delayed imaging, if applicable.	85	Not used in NL Dictionary	1
NM570	WBC Technetium specific site (does not include labelling). Does Includes first set of delayed imaging, if applicable. Use delayed imaging code (NM110) for each additional set of delayed images >1	65	65	1
NM571	WBC Technetium whole body. Does not include labelling- see code NM575. Includes first set of delayed imaging, if applicable. Use delayed imaging code (NM110) for each additional set of delayed images>1	85	85	1
NM575	WBC labelling (includes labelling with any radionuclide)	120	120	0
NM580	Peritoneal Scan (abdominal shunt patency)	65	Not used in NL Dictionary	1
NM585	NM Testicular Scan For Sonography, see US246	40	40	1
<b>Gastro-Intestinal</b>				
NM605	Liver / spleen	35	35	1
NM606	Liver / Spleen with flow	45	Not used in NL Dictionary	1
NM610	RBC liver with flow. Includes in-vitro RBC labelling Add units for in-vivo RBC labelling	89	74 in-vivo labelling 89 in-vitro labelling	1
NM611	RBC spleen with flow. Includes heat damage in-vitro RBC labelling.	150	Not used in NL Dictionary	1
NM615	Esophageal motility	45	45	1
NM620	Gastroesophageal reflux	75	75	1
NM625	Lung Aspiration	65	65	1
NM630	Solid Gastric Emptying	130	130	1
NM631	Liquid Gastric Emptying	120	120	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
NM635	Port-a-cath patency	15	Not used in NL Dictionary	1
NM640	RBC Labelling for GI Bleed – in vitro (e.g. Ultra Tag®)	35	Not used in NL Dictionary	0
NM641	RBC Labelling for GI Bleed – Modified in vivo/in vitro	45	45	0
NM645	RBC GI Bleed Imaging and flow	120	120	1
NM650	Pharmacologic Intervention for GI Bleed (Count ONLY if performed by unit-producing personnel).	15	Not used in NL Dictionary	0
NM655	Colloid GI Bleed	55	Not used in NL Dictionary	1
NM660	Gastrointestinal mucosa (Meckels)	70	70	1
NM661	Gastrointestinal mucosa (Meckels) with Pharmacologic Intervention (Count ONLY if performed by unit-producing personnel).	85	Not used in NL Dictionary	1
NM665	Hepatobiliary Scan	85	85	1
NM666	Hepatobiliary Scan with Pharmacologic Intervention	115	115	1
NM670	Gallbladder Ejection fraction. Includes the Hepatobiliary Scan. Do not count NM665 separately.	110	Not used in NL Dictionary	1
NM675	G.I. Transit Time	50	Not used in NL Dictionary	1
NM680	Salivary gland	60	60	1
<b>Miscellaneous General Nuclear Medicine Imaging</b>				
NM690	Mobile Examination for Nuclear Medicine Do not also count workload for code MI900.	35	Not used in NL Dictionary	0
<b>Therapeutic</b>				
NM705	Treatment with I131 (E.g. for malignancy). Includes room preparation, service recipient assessment and/or counselling.	195	195	1
NM710	Treatment with I131 hyperthyroid	25	25	1
NM715	Treatment with Strontium-89 (SR89)	60	60	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
NM720	Treatment with Phosphorous-32 (P32)	30	Not used in NL Dictionary	1
NM725	Synovectomy treatment with colloid (Y90 or P32)	60	Not used in NL Dictionary	1
NM730	Treatment with monoclonal antibody – Y90 Chloride	95	95	1
NM735	Treatment with monoclonal antibody – I131	100	Not used in NL Dictionary	1
NM740	Treatment with Octreotide	195	Not used in NL Dictionary	1
NM745	Treatment with MIBG I131	195	195	1
NM750	Miscellaneous Therapy (For esoteric or new therapies).	Standard or actual time	60	1
<b>Non-Imaging</b>				
NM805	Protein losing enteropathy	160	160	1
NM810	Red cell mass	95	Not used in NL Dictionary	
NM815	Plasma volume	100	Not used in NL Dictionary	
NM820	RBC and plasma volume	140	140	
NM825	Red cell/platelet sequestration	190	190	
NM830	Carbon 14 Breath Test	50	50	
NM840	Blood procurement for testing other than for nuclear medicine purposes	10	Not used in NL Dictionary	

## Positron Emission Tomography/Computed Tomography (PET/CT)

1. Please see Items for Count for the definition of “exam” in Medical Imaging WMS.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
The following are additional units that may be added to the exams listed below:				
PT100	Additional frames (fields of view) with or without attenuation	15	N/A	0
PT105	Preparation of service recipient for radiation treatment	25	N/A	0
PT110	Lasix Administration  Does not include additional pre- and post-image. Use additional frames (see above) if required.  Count ONLY if performed by unit-producing personnel.	10	N/A	0
PT115	Oral Contrast Administration  Count ONLY if performed by unit-producing personnel	10	N/A	0
PT120	Retrospective reconstruction (e.g. using different filters)	15	N/A	0
PT125	Gating (cardiac or respiratory)	25	N/A	0
PT130	Dynamic (includes the extra time required for the immediate real time images)	Actual or Standard Time	N/A	0
PT135	Extra paperwork required for Clinical Trial Protocol  To be categorized as non-service recipient activity	20	N/A	0
The four exams below include any glucose testing required:				
PT200	Brain only	85	N/A	1
PT205	Cardiac only	90	N/A	1
PT210	Whole Body	150	N/A	1
PT215	Near Whole Body (eyes to thighs)	115	N/A	1
PT901	Delayed PET CT	N/A	45	1
PT902	Limited site not listed above	N/A	85	1
PT903	Detailed limited head and neck (completed in conjunction with NL whole body PET procedures)	N/A	15	1

## Cardiac Catheterization Diagnostic Services

The CC section of this schedule of unit values has not been implemented in NL through medical imaging services. Items noted with a NL value have been reviewed as a result of CC MIS codes being used in other modalities.

### General Information and Recording Instructions

1. In the majority of cases, most cardiac catheterization exams require two people to complete all activities. Where the exam typically requires more than one technologist, the published unit value reflects the total workload units for all of the technologists that are expected to be involved in performing that exam.
2. If the work is done by one medical radiation technologist and one nurse, only the portion of time that is applicable to the medical radiation technologist is reported under the medical imaging workload measurement system. The medical radiation technologist also reports the exam count that is specified in the schedule of unit values. Workload and service activity statistics for the nurses involved in the exam is collected using their nursing workload measurement system.
3. Multiple exams/activities are to be aggregated when performed in sequence such as a percutaneous coronary intervention with thrombus aspiration, stent(s) insertion and intravascular ultrasound (IVUS).
4. The cardiac catheterization diagnostic services section has been developed to be consistent with all other imaging modalities so the total unit value for each exam includes all components needed to complete it. Workload includes all component activities integral to the MI conceptual model for the MI workload measurement system. The published CC workload unit value includes insertion of the IV catheter, IV pump set-up, administration of a pharmaceutical, the inherent dosage calculations, documentation, MRSA/VRE/latex activities, post processing and image acquisition etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities.
5. See code MI980 for additional workload associated with provision of IV fluids.
6. The established unit values take into consideration various technologies and age of equipment. Unit values represent the average time to perform the exam for the average service recipient by the average UPP service provider under average circumstances. Where the exam typically requires more than one technologist to complete it, the published unit value reflects the total workload units for all of the technologists that are expected to be involved in performing that exam. If an exam is not listed in the schedule of unit values, users should establish a standard time using the standardized timing protocol and submit the information to CIHI at [dimis@cihi.ca](mailto:dimis@cihi.ca).
7. Please see Items for Count for the definition of “exam” in Medical Imaging WMS.

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CC101	Fractional flow reserve (FFR) and/or intravascular ultrasound (IVUS)- Add-on  Aggregate with other workload when FFR/IVUS is performed but is not included in a specific exam description	15	N/A	0
CC105	Biopsy- myocardial Do not also count IR227, IR428 or MR410.	15	N/A	1
CC110	Transplant Evaluation	40	N/A	1
CC115	Diagnostic cardiac catheterization (angiography) - Coronary arteries	35	N/A	1
CC120	Diagnostic cardiac catheterization (angiography) - Left heart and coronary arteries	40	N/A	1
CC125	Diagnostic cardiac catheterization (angiography) - Right heart	30	N/A	1
CC130	Diagnostic cardiac catheterization (angiography) - Left and right heart and coronary arteries	70	N/A	1
CC135	Diagnostic cardiac catheterization (angiography) - Left heart and coronary arteries and grafts	70	N/A	1
CC140	Diagnostic cardiac catheterization (angiography) - Left and right heart and coronary arteries with grafts	85	N/A	1
CC145	Diagnostic cardiac catheterization (angiography) - Intra-aortic, left heart and coronary arteries	65	N/A	1
CC147	Diagnostic cardiac catheterization (angiography) –Left heart, aortic root and coronary arteries	70	N/A	1
CC150	Diagnostic cardiac catheterization (angiography) - Congenital anomalies  Pediatric and/or Special Needs Service Recipients- also add workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	Actual or Standard Time	N/A	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CC155	Percutaneous coronary intervention (PCI) (angioplasty) Use this code only when PCI is performed alone.	65	N/A	1
CC160	Percutaneous coronary intervention (PCI) (angioplasty) - with Doppler	Actual or Standard Time	N/A	1
CC165	Percutaneous coronary intervention (PCI) (angioplasty) - with thrombolytics	65	N/A	1
CC171	Percutaneous coronary intervention (PCI) (angioplasty) - with IVUS	85	N/A	1
CC172	Percutaneous coronary intervention (PCI) (angioplasty) – with ICE	85	N/A	1
CC173	Percutaneous coronary intervention (PCI) (angioplasty) - with IVUS and ICE	100	N/A	1
CC175	Percutaneous coronary intervention (PCI) (angioplasty) – with thrombus aspiration	65	N/A	1
CC180	Percutaneous coronary intervention (PCI) (angioplasty) – with fractional flow reserve (FFR)	75	N/A	1
CC185	Percutaneous coronary intervention (PCI) (angioplasty) – with atherectomy	75	N/A	1
CC190	Percutaneous coronary intervention (PCI) (angioplasty) – with intra-aortic balloon pump (IABP)	70	N/A	1
CC195	Percutaneous coronary intervention (PCI) (angioplasty) – with one stent deployment	80	N/A	1
CC196	Percutaneous coronary intervention (PCI) (angioplasty) – Count once for each additional stent deployed >1	20	N/A	0
CC200	Percutaneous coronary intervention (PCI) with diagnostic catheterization only	80	N/A	1
CC205	Percutaneous coronary intervention (PCI) with diagnostic catheterization - with atherectomy	80	N/A	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CC206	Percutaneous coronary intervention with diagnostic catheterization - with thrombus aspiration	70	N/A	1
CC210	Percutaneous coronary intervention (PCI) with diagnostic catheterization - with intracardiac ultrasound (ICE)	90	N/A	1
CC215	Percutaneous coronary intervention (PCI) with diagnostic catheterization - with intravascular ultrasound (IVUS)	90	N/A	1
CC220	Intracardiac ultrasound (ICE) Use this code only when performed alone.	30	N/A	1
CC225	Intravascular ultrasound (IVUS) Use this code only when performed alone.	30	N/A	1
CC230	Optical coherence tomography	30	N/A	0
CC235	Atherectomy Use this code only when performed alone.	30	N/A	1
CC240	Atrial septal defect (ASD) closure  Pediatric and/or Special Needs Service Recipients- also add workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	110	N/A	1
CC245	Patent foramen ovale (PFO) closure  Pediatric and/or Special Needs Service Recipients- also add workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	110	N/A	1
CC250	Septal ablations	90	N/A	1
CC255	Valvuloplasty	115	N/A	1
CC260	Ventricular assist devices	50	N/A	1
CC265	Percutaneous valve replacement	150	N/A	1
	Fluoroscopy only- see code MI955	10	N/A	0
	When fluoroscopy is performed in the absence of any other exam, count workload for code MI955 plus 1 exam.	10		1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CC280	Percutaneous coronary intervention (PCI) with additional component - select only once per procedure (use for right heart add-on, IABP, temporary pacemaker, etc.)	25	N/A	0
CC290	Catheterization, right and left ventricle -Aortogram, coronary angiography with grafts	95	N/A	1
CC295	Swan Ganz Insertion	30	N/A	0
CC305	Septostomy (E.g. Tetrology of Fallot)  Pediatric and/or Special Needs Service Recipients- also add workload for any of codes MI931, MI935, MI940 or MI941, and/or MI970.	Actual or Standard Time	N/A	1
CC310	Mitral Valve Clip	150	N/A	1
CC315	Heads Up Tilt Table Test (HUTT)	75	75	1
CC320	Electrophysiology Study (EPS)	50	N/A	1
CC325	Ablation - without complex 3D mapping Includes cardioversion, when required.	80	N/A	1
CC330	Ablation - with complex 3D mapping (e.g. Carto, Navex, Ablation Frontier) Includes cardioversion, when required.	Actual or Standard Time	N/A	1
CC335	Permanent Pacemaker Implant– implant of single or dual chamber device Note: the workload for this activity is captured in Cardiac Catheterization Lab functional centres only  Do not count workload for IR920 in addition to CC335.	60	N/A	1
CC340	Permanent Pacemaker Implant– implant of biventricular device Note: the workload for this activity is captured in Cardiac Catheterization Lab functional centres only Do not count workload for IR920 in addition to CC340.	110	N/A	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CC345	Permanent Pacemaker Implant – replacement single or dual chamber device with/without lead(s) Note: the workload for this activity is captured in Cardiac Catheterization Lab functional centres only Do not count workload for IR920 in addition to CC345.	50	N/A	1
CC350	Permanent Pacemaker Implant – replacement of biventricular device with/without lead(s) Note: the workload for this activity is captured in Cardiac Catheterization Lab functional centres only Do not count workload for IR920 in addition to CC350.	90	N/A	1
CC355	Implantable Loop Recorder - implant	45	N/A	1
CC360	Implantable Loop Recorder – explant	45	N/A	1
CC370	Replacement of Permanent Pacemaker lead(s)	50	N/A	1
CC375	Revision of Permanent Pacemaker lead(s)	60	N/A	1
CC380	Cardioversion – electrical stimulation Capture this activity only if performed by unit-producing personnel (E.g. MRT).	45	N/A	1
CC385	Defibrillation Threshold Testing - (E.g. post-ICD implantation)	25	N/A	1
CC390	Implantable Cardioverter Defibrillator (ICD) - implant of single or dual chamber device	120	N/A	1
CC395	Implantable Cardioverter Defibrillator (ICD) – implant of CRT device	200	N/A	1
CC400	Implantable Cardioverter Defibrillator (ICD) - replacement of single or dual chamber device with/without leads	120	N/A	1
CC405	Implantable Cardioverter Defibrillator (ICD) – replacement of CRT device with/without leads	150	N/A	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
CC410	Replacement of ICD lead(s) only	120	N/A	1
CC420	Revision of ICD lead(s) only	120	N/A	1
CC425	Laser vascularisation transmyocardial	120	N/A	1
	Fractured (broken) catheter or catheter fragment extraction See code IR355		N/A	
CC435	Pericardial puncture with or without drain	45	N/A	1
CC440	Insertion of ventricular assist device (E.g. ECMO, Impella) Note: activity is performed in Cardiac Catheterization Lab only	150	N/A	1
CC445	Removal of ventricular assist device (E.g. ECMO, Impella) Note: activity is performed in Cardiac Catheterization Lab only	150	N/A	1
CC450	Angiogenesis	115	N/A	1
CC455	Thoracotomy, with laser Note: activity is performed in EPS or Cardiac Catheterization Lab only	150	N/A	1
CC460	Drainage of an abscess or haematoma during a pacemaker or a defibrillator procedure  Note: activity is performed in Cardiac Catheterization Lab only	50	N/A	1
CC465	Flutter correction (Overdrive)	45	N/A	1
	Cryotherapy/Radiofrequency ablation/Thermoablation- See codes IR560 or IR565		N/A	
CC920	Temporary pacemaker  Note: the workload for this activity is captured in Cardiac Catheterization Lab functional centres only	35	N/A	1

## Magnetic Resonance Imaging

### General Information and Recording Instructions for Magnetic Resonance Imaging

1. When a request is received to perform an enhanced and a non-enhanced image, count the combined code as 1 exam. However, if a request is received to perform a non-enhanced image, and as a result of the evaluation of the non-enhanced image, an enhanced image is requested, count the non-enhanced and enhanced separately as 2 exams.
2. Where applicable, both accessing the vein and injection of contrast media or radiopharmaceuticals is included in the appropriate exam. Workload includes all component activities integral to the MI conceptual model for the MI workload measurement system. The published MRI workload unit value includes insertion of the IV catheter, IV pump set-up, administration of a pharmaceutical (i.e. Lasix, Captopril, and Octreotide etc.), the inherent dosage calculations, documentation, MRSA/VRE/latex activities, post processing and image acquisition etc. Please refer to the Medical Imaging Conceptual Model for a list of component activities.
3. See code MI980 for additional workload associated with provision of IV fluids.
4. When performing an enhanced cardiac image pre and post stress, capture workload as follows:
  - Pre stress image: MR311 Cardiac, gated, enhanced – 1 exam, 60 workload
  - Stressing: MR320 Cardiac, stress – 0 exam, 20 workload units
  - Post stress image: MR311 – 1 exam, 60 workload units
  - Total exams = 2
  - Total workload = 60 + 20 + 20
5. When performing an arthrogram, capture MR370 for the injection of the contrast media in the joint and MR361 or MR362 for the scan:
  - MR370 0 exams, 15 workload units
  - MR361 1 exam, 45 workload units
  - Total exams = 1
  - Total workload = 15 + 45
6. Please see Items for Count for the definition of “exam” in Medical Imaging WMS.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
MR001	Attempted Head and General MRI	N/A	60	1
MR002	Attempted Body	N/A	65	1
MR003	Attempted Extremity	N/A	60	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR004	Attempted biopsy	N/A	30	1
MR105	MRI post processing reconstruction, when performed by UPP Count once per increment of 10 minute periods.	10	Not used in dictionary	0
MR200	Head without contrast	N/A	50	1
MR202	Head with and without contrast	N/A	60	1
MR203	Pituitary fossa with and without contrast	N/A	60	
MR205	Brain orbits, posterior fossa, IAC, sella turcica, non-enhanced. May include OR planning activity.	30	45	1
MR206	Brain orbits, posterior fossa, IAC, sella turcica, enhanced. May include OR planning activity.	35	Not used in dictionary	1
MR207	Brain orbits, posterior fossa, IAC, sella turcica, non-enhanced & enhanced combined. May include OR planning activity.	40	80	1
MR208	Sinus(es) - maxillary, frontal, ethmoid, sphenoid	30	Not used in dictionary	1
MR209	Head	TBD	Not used in dictionary see MR 200 and MR202	1
MR210	Cranial Nerves, non-enhanced and enhanced thin slices- Includes the first 6 sequences. Performed in addition to Brain.	30	Not used in dictionary	1
MR215	Functional MRI	60	Not used in dictionary	1
MR220	Temporomandibular joints (TMJ), non-enhanced	30	50	1
MR221	Temporomandibular joints (TMJ), enhanced	35	Not used in dictionary	0
MR222	Temporomandibular joints (TMJ), non-enhanced & enhanced combined	40	75	1
MR230	Neck, soft tissue, nasopharynx non-enhanced	30	60	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR231	Neck, soft tissue, nasopharynx enhanced	35	Not used in dictionary	1
MR232	Neck, soft tissue, nasopharynx non-enhanced & enhanced combined	40	90	1
MR240	MR Spectroscopy	20	Not used in dictionary	1
MR250	Brachial Plexus, non-enhanced	40	60	1
MR251	Brachial Plexus, enhanced	45	Not used in dictionary	1
MR252	Brachial Plexus, non-enhanced & enhanced combined	50	80	1
MR260	Cervical spine, non-enhanced	30	40	1
MR261	Cervical spine, enhanced	35	Not used in dictionary	1
MR262	Cervical spine, non-enhanced & enhanced combined	40	60	1
MR270	Thoracic spine, non-enhanced	30	40	1
MR271	Thoracic spine, enhanced	35	Not used in dictionary	1
MR272	Thoracic spine, non-enhanced & enhanced combined	40	60	1
MR280	Lumbar spine, non-enhanced	30	40	1
MR281	Lumbar spine, enhanced	35	Not used in dictionary	1
MR282	Lumbar spine, non enhanced & enhanced combined	40	60	1
MR285	Two areas of the Spine, non-enhanced	45	60	1
MR286	Two areas of the Spine, enhanced	50	Not used in dictionary	1
MR287	Two areas of the Spine, non-enhanced & enhanced combined	55	90	1
MR290	Three areas of the Spine, non-enhanced	60	80	1
MR291	Three areas of the Spine, enhanced	65	Not used in dictionary	1
MR292	Three areas of the Spine, non-enhanced & enhanced combined	70	120	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR300	Breast non-enhanced (unilateral or bilateral)	40	50	1
MR301	Breast enhanced (unilateral or bilateral)	45	Not used in dictionary	1
MR302	Breast, non-enhanced and enhanced combined (unilateral or bilateral)	50	70	1
MR310	Cardiac, gated, non enhanced	35	60	
MR311	Cardiac, gated, enhanced	60	100	1
MR312	Cardiac, gated, non enhanced & enhanced combined	80	100	1
MR320	Cardiac, stress  Includes only the time required by the MRT to prepare the service recipient, administration of the medication (if applicable) and the application of additional pulses required. Use MR310-MR312 for the actual scanning. See special instruction #3.	20	Not used in dictionary	1
MR329	Abdomen magnetic resonance cholangiopancreatography	N/A	60	1
MR330	Abdomen, non-enhanced  Includes intra-abdominal organs (e.g. MR Enterography)	35	50	1
MR331	Abdomen, enhanced  Includes intra-abdominal organs (e.g. MR Enterography)	40	55	1
MR332	Abdomen, non-enhanced & enhanced combined  Includes intra-abdominal organs (e.g. MR Enterography)	45	65	1
MR340	Pelvis, non-enhanced	35	50	1
MR341	Pelvis, enhanced	40	Not used in dictionary	1
MR342	Pelvis, non-enhanced and enhanced combined	45	70	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR350	Endorectal or endovaginal technique	15	Not used in dictionary	0
MR365	Proton spectroscopy, includes analysis	25	25	1
MR360	Any joint or extremity, right or left, non-enhanced. Count a separate exam/unit value if the coil must be changed. For example: a) Digit/Hand, unilateral b) Hand/Wrist, unilateral c) Elbow, unilateral d) Wrist, unilateral e) Forearm, unilateral f) Shoulder/Humerus, unilateral g) Humerus, unilateral h) Knee, unilateral i) Ankle/Foot, unilateral j) Femur, unilateral (and bilateral in NL as coil is not changed) k) Tibia/Fibula, unilateral l) Foot, unilateral m) Hip, unilateral n) Hip, bilateral o) Soft tissue mass of the torso p) Toes	40	50	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR361	<p>Any joint or extremity, right or left, enhanced. Includes any one of:</p> <p>Count a separate exam/unit value if the coil must be changed. For example:</p> <ul style="list-style-type: none"> <li>a) Digit/Hand, unilateral</li> <li>b) Hand/Wrist, unilateral</li> <li>c) Elbow, unilateral</li> <li>d) Wrist, unilateral</li> <li>e) Forearm, unilateral</li> <li>f) Shoulder/Humerus, unilateral</li> <li>g) Humerus, unilateral</li> <li>h) Knee, unilateral</li> <li>i) Ankle/Foot, unilateral</li> <li>j) Femur, unilateral</li> <li>k) Tibia/Fibula, unilateral</li> <li>l) Foot, unilateral</li> <li>m) Hip, unilateral</li> <li>n) Hip, bilateral</li> <li>o) Soft tissue mass of the torso</li> <li>p) Toes</li> </ul>	45	Not used in dictionary	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR362	<p>Any joint or extremity, right or left , non-enhanced &amp; enhanced combined. Includes any one of: Count a separate exam/unit value if the coil must be changed. For example:</p> <ul style="list-style-type: none"> <li>a) Digit/Hand, unilateral</li> <li>b) hand/Wrist, unilateral</li> <li>c) Elbow, unilateral</li> <li>d) Wrist, unilateral</li> <li>e) Forearm, unilateral</li> <li>f) Shoulder/Humerus, unilateral</li> <li>g) Humerus, unilateral</li> <li>h) knee, unilateral</li> <li>i) Ankle/Foot, unilateral</li> <li>j) Femur, unilateral</li> <li>k) Tibia/Fibula, unilateral</li> <li>l) Foot, unilateral</li> <li>m) Hip, unilateral</li> <li>n) Hip, bilateral</li> <li>o) Soft tissue mass of the torso</li> <li>p) Toes</li> </ul>	60	90	1
MR 370	<p>MR Arthrogram (any joint), when performed by MRT Unit Producing Personnel</p> <p>Includes only the injection of contrast into a joint.</p> <p>Count the scanning of the joint separately (e.g. MR361 or MR362).</p>	15	Not used in dictionary	1
MR380	Chest/thorax, non-enhanced	50	65	1
MR381	Chest/thorax, enhanced	55	Not used in dictionary	1
MR382	Chest/thorax, non-enhanced and enhanced combined	60	90	1
MR400	Fetal MRI, non-enhanced	50	65	1
MR405	Specimen MRI (e.g. fetal demise)	30	Not used in dictionary	1

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MR410	MR guided biopsy including guided imaging Includes anatomic imaging. Do not also collect workload for codes GR680, MM225, MM230, IR427, or IR428.	90	130	1
MR420	Intraoperative exam  This activity is used when performing a MRI exam in the OR.  Do not also count MI910.	25	Not used in dictionary	0
MR429	Head Venogram (NL added code)	N/A	60	1
MR430	MR Angiogram Neurological (Brain) - enhanced (NL Definition also includes non-enhanced and enhancement through sequencing and not contrast.)	25	70	1
MR432	Neck angiogram (NL added code)	N/A	70	1
MR435	MR Angiogram Chest/Thorax - enhanced	50	100	1
MR440	MR Angiogram Abdomen - enhanced	25	70	1
MR445	MR Angiogram Pelvis - enhanced	25	N/A	1
MR450	MR Angiogram Peripheral Upper - enhanced	25	100	1
MR455	MR Angiogram Peripheral Lower - enhanced	30	100	1
MR460	Magnetoencephalography	75	Not used in dictionary	1
MR465	MR Skeletal Survey- non enhanced Includes whole body	46	46	1
MR467	MR Skeletal Survey- enhanced Includes whole body	65	N/A	1
MR470	MR Skeletal Survey- , non-enhanced and enhanced combined Includes whole body	118	118	1

## Miscellaneous

### General Information and Recording Instructions for Miscellaneous

1. Please see Items for Count for the definition of “exam” in Medical Imaging WMS.

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MI900	Portable (use for x-ray, ultrasound and CT)	15	15	0
MI910	Operating Room (excludes MR420)	15	15	0
MI920	Isolation	30	Not used in dictionary; captured through dropdown menu for extra WLUs by RHA	0
MI930	Conscious Sedation (Adult) This includes recovery post anaesthesia and respiratory anaesthesiologist set up.	10	Not used in dictionary; captured through dropdown menu for extra WLUs by RHA	0
MI931	Conscious Sedation (Child)	20	Not used in dictionary; captured through dropdown menu for extra WLUs by RHA	0
MI935	General Anesthetic (Adult and Child)	30	Not used in dictionary; captured through dropdown menu for extra WLUs by RHA	0

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
MI940	Immobilization- no specialized equipment required. Excludes MI941.	5	Not used in dictionary; captured through dropdown menu for extra WLUs by RHA	0
MI941	Pediatric immobilization- using specialized equipment (E.g. Pigg-O-Stat® Immobilizer/Positioner). Excludes MI940.	15	Not used in dictionary; captured through dropdown menu for extra WLUs by RHA	0
MI950	Fluoroscopy remains in NL schedule in increments of 10 minutes. Application in dictionary may be X2 or 3 (this applies to WLUs only).	NA	10	1
MI955	Fluoroscopy (added to CIHI schedule in 2013 as MI950 was deprecated). Count once per 10 minute period, in increments	10	N/A see MI950	0
	When performed in the absence of any other exam, count 1 exam.	10		1
MI960	Tomography.	Actual Time	TBD	0
	When performed in the absence of any other exam, count 1 exam count			1
MI970	Counselling See code MM250 for complex counselling associated with Breast Navigator role in Mammography Functional Centre only.  Do not count code MM250 if collecting workload for MI970.	15	15	0

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
MI980	IV fluid administration. Includes provision of IV fluids for hydration, prevention of nephrotoxicity or other adverse effects of contrast or other radiopharmaceuticals, or for other physiologic requirements such as full bladder, maintenance of cardiac output or fluid challenges.  Count once per 15 minute period, in increments	15	TBD	0

### Non-Service Recipient Activities

The NSR activities section of this schedule of unit values has not been reviewed to date by the Provincial MI MIS Committee. NSR activity discussion will take place when all MI dictionaries are implemented in the RHAs.

Non-service recipient activities are unit-producing personnel activities that are integral to the functional centre's operations, but do not involve the delivery of services to service recipients. There are four non-service recipient activity workload categories—functional centre activities, organizational/professional activities, teaching/in-service and research. The following table lists the types of activities that are typically considered non-service recipient activities.

Code	Exam Name/Description	CIHI Unit Values	NL Unit Values	Exam Count
<b>Functional Centre Activities</b>				
2205	Functional Centre Management: Includes housekeeping/clerical activities; organizing; orienting personnel; recording and calculating workload and other statistical data; non-clinical documentation; compiling data for reports and management purposes; management activities related to discipline specific activity; development of discipline specific service programs, and participation in quality improvement activities	Actual or Standard Time	TBD	Each Occurrence

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
2210	Employee Meetings: Includes formal and informal meetings of functional centre staff for the purpose of disseminating and receiving information pertaining to the operation of the functional centre and the organization.	Actual or Standard Time	TBD	Each Occurrence
2215	Caseload Management: Includes prioritization and assignment of service recipients within a caseload.	Actual or Standard Time	TBD	Each Occurrence
2220	Maintenance: Includes, but not limited to, activities such as maintaining a safe, tidy environment and activities related to inventory control.	Actual or Standard Time	TBD	Each Occurrence
2225	Maintenance of Equipment: Includes preventative maintenance and repair of processing equipment; preventative maintenance and repair of imaging equipment; routine safety checks, maintenance and cleaning of equipment (e.g. cassettes).	Actual or Standard Time	TBD	Each Activity
2230	Radiopharmaceutical preparation for Generator elution including QC to evaluate, including aluminum ion checks and molybdenum breakthrough.	11	TBD	Each Occurrence
2232	Radiopharmaceutical preparation for "Add and shake" kits, colloid without boiling.	4	TBD	Each Occurrence
2234	Radiopharmaceutical preparation for "Add and shake" kits, colloid without boiling with particle sizing of macro-aggregates.	7	TBD	Each Occurrence
2236	Radiopharmaceutical preparation for a cardiolite kit.	22	TBD	Each Occurrence
2238	Radiopharmaceutical preparation for colloid requiring boiling.	10	TBD	Each Occurrence
2240	Radiopharmaceutical preparation for chromatography.	3	TBD	Each Occurrence

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
2250	Quality Management: Includes time spent attending quality management meetings; performing and documenting activities that improve the quality of services delivered commensurate with functional centre policy and industry standards.	Actual or Standard Time	TBD	Each Occurrence
2260	QC activities related to the management of image quality.	Actual or Standard Time	TBD	Per Activity
2262	QC activities related to the management of an occupationally safe environment.	Actual or Standard Time	TBD	Per Activity
2264	QC activities related to the management of a radiation safe environment for service recipients and non-occupationally exposed individuals.	Actual or Standard Time	TBD	Per Activity
2266	QC activities related to equipment testing (i.e. HARP, Acceptance).	Actual or Standard Time	TBD	Per Activity
2268	QC activities related to the management of maintaining an image quality in an electronic environment (i.e. PACS).	Actual or Standard Time	TBD	Per Activity
2270	QC related to Radiation Protection Officer (RPO) and Radiation Safety Officer (RSO) activities.	Actual or Standard Time	TBD	Per Activity
2272	QC of gamma counter.	Actual or Standard Time Per Camera	TBD	Per Day
2274	QC of radiopharmaceuticals.	Actual or Standard Time	TBD	Per Day
2276	QC activities related to lab monitoring.	Actual or Standard Time	TBD	Per Week
2278	QC activities pertaining to collimator changes.	Actual or Standard Time Per Camera	TBD	Per Day

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
2280	Travel: Includes internal and external travel associated with the functional centre activities listed above as well as travel associated with the provision of services to specific service recipients within the organization or in their home.  Also includes portering of service recipients when performed by functional centre staff.	Actual or Standard Time	TBD	Each Round Trip
2286	Copy/Digitizing Images	10	TBD	Per Exam
<b>Organizational/Professional Activities</b>				
2305	Board/Committee Functions  Activities performed during worked hours relating to the preparation, attendance and follow-up of health service organization board/committee functions.	Actual or Standard Time	TBD	Each Occurrence
2310	Program Management activities related to multidisciplinary program(s) and program management activities related to the organization as a whole.	Actual or Standard Time	TBD	Each Occurrence
2315	Public Relations  Activities directly associated with the public relations function of the health service organization.  Includes, but not limited to, planning, meetings and participation in the event, e.g. Media interviews, information programs, preparing articles.	Actual or Standard Time	TBD	Each Occurrence
2320	Advocacy-Professional Activities  Includes services provided to the professional, scientific and local communities, agencies and service groups during worked hours.	Actual or Standard Time	TBD	Each Occurrence
2325	Travel  Includes any travel associated with organizational/professional activities.	Actual or Standard Time	TBD	Each Round Trip

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
<b>Teaching/In-Service</b>				
2405	<p>Teaching of students</p> <p>Activities associated with the preparation, orientation, instruction, supervision and/or evaluation of students either prior to, during, or immediately following their clinical placements.</p> <p>Excluded are service recipient related activities performed during the course of teaching. This type of activity is recorded under the appropriate service recipient activity category.</p>	Actual or Standard Time	TBD	Each Occurrence
2410	<p>Teaching of professionals</p> <p>Activities involved in the preparation, orientation, presentation and/or instruction of health service organization personnel.</p>	Actual or Standard Time	TBD	Each Occurrence
2415	<p>Academic teaching</p> <p>Activities involved in the preparation and presentation of course/lecture material to students, evaluation of students as part of their academic curriculum.</p>	Actual or Standard Time	TBD	Each Occurrence
2420	<p>In-service education</p> <p>Includes receiving brief, usually in-house educational information presented by health service organization staff, orientation to new procedures or equipment, grand rounds, and reading of professional articles, journals and books.</p>	Actual or Standard Time	TBD	Each Occurrence
2425	<p>Travel</p> <p>Includes any travel associated with teaching/in-service activities.</p>	Actual or Standard Time	TBD	Each Round Trip

<b>Code</b>	<b>Exam Name/Description</b>	<b>CIHI Unit Values</b>	<b>NL Unit Values</b>	<b>Exam Count</b>
<b>Research</b>				
2505	<p>Research Project</p> <p>Formally designed and approved clinical investigations directed toward advancing knowledge in the field of health, and delivery of health services using recognized methodologies and procedures. All activities performed during worked hours such as reviewing previous research, writing research proposals, compiling and analyzing data and report writing are included.</p> <p>Excluded are service recipient activities, which are provided as part of the research program. These activities are recorded in the appropriate category under service recipient activities.</p>	Actual or Standard Time	TBD	Each Occurrence
2510	<p>Travel</p> <p>Includes any internal or external travel associated with research activities.</p>	Actual or Standard Time	TBD	Each Round Trip

