OVERVIEW

Discrete data fields are output from 4DM in XML format, facilitating a range of integration options with our partners and health system customers. Beginning with the v2023 release of 4DM, much of the XML strings were updated, to facilitate understanding and improve readability.

Changes in both Elements and Type occurred. The table below, organized by report section, equates the v2018 and prior XML with the updated ones, and indicates where no change has been made. Our partners will have to update their API's to become compatible with 4DM's new XML export schema for reporting data.

10. 4DM-CVIS REPORTING Difference between Corridor4DM v2018 to 2023

Differences highlighted in Yellow

10.1.1. Injection Parameters

`nm_base_findings = { NM_STRESS_FINDINGS, NM_REST_FINDINGS, NM_FDG_FINDINGS, NM_DELAY_FUNCTIONS }`

ELEMENTS	v2018	v2023
Radiopharmaceutical	`/PATIENT_DATA/{nm_base_findings}/INJECTION_DATA/@radioPharm`	`/PATIENT_DATA/{nm_base_findings}/INJECTION_DATA/@radiopharmaceutical`
Injected Radiotracer Activity	`/PATIENT_DATA/{nm_base_findings}/INJECTION_DATA/@injectionDose`	`/PATIENT_DATA/{nm_base_findings}/INJECTION_DATA/@injectedActivity`

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
Radiopharmaceutical	`xs:string`	`pharmaTypes`	`[+] use="required"`
Injected Radiotracer Activity	`c4dm:floatORstring`	`NonNegativeDoubleOrEmpty`	`[+] use="required"`

10.1.2. Imaging Elements

```
nm_findings = { NM_STRESS_FINDINGS, NM_REST_FINDINGS, NM_FDG_FINDINGS, NM_DELAY_FUNCTIONS, NM_ISCHEMIA_FINDINGS,
NM_VIABILITY_FINDINGS }
type = { FUNCTION, PERFUSION, FLOW }
```

ELEMENTS	v2018	v2023
Patient Position	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@imagingPosition`	**No Change**
Reconstruction Algorithm	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@corrRecon`	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@reconAlgorithm`
Scatter Correction Type	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@corrSc`	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@scatterCorrectionType`
Attenuation Correction Type	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@corrAc`	`/PATIENT_DATA/{nm_findings}/{type}/DATASET_INFO/@attenuationCorrectionType`

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
Patient Position	`xs:string`	`positionTypes`	`[+] use=“required”`
Reconstruction Algorithm	`xs:string`	`reconAlgorithmTypes`	`[+] use=“required”`
Scatter Correction Type	`xs:string`	`scatterCorrectionTypes`	`[+] use=“required”`
Attenuation Correction Type	`xs:string`	`attenuationCorrectionTypes`	`[+] use=“required”`

10.1.3. LV Function – Systolic, TID and Diastolic

```
nm_base_findings = { NM_STRESS_FINDINGS, NM_REST_FINDINGS, NM_FDG_FINDINGS, NM_DELAY_FUNCTIONS }
nm_dataset = { STRESS_DATASET, REST_DATASET, FDG_DATASET, DELAY_DATASET }
```

ELEMENTS	v2018	v2023
EF	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@ef	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@ef
ESV	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@esv	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@esv
EDV	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@edv	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@edv
TID	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@dilation	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@dilation
PFR	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@peakFillingRate	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@peakFillingRate
PER	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@peakEmptyingRate	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@peakEmptyingRate
TPFR	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@timePeakFilling	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@timePeakFilling
TPER	/PATIENT_DATA/{nm_base_findings}/FUNCTION/LV_FUNCTION_DATA/@timePeakEmptying	/PATIENT_DATA/{nm_base_findings}/{nm_dataset}/FUNCTION/LV_FUNCTION_DATA/@timePeakEmptying

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
EF	`c4dm:integerORstring`	`NonNegativeIntegerOrEmpty`	`[+] use="required"`
ESV	`c4dm:integerORstring`	`NonNegativeIntegerOrEmpty`	`[+] use="required"`
EDV	`c4dm:integerORstring`	`NonNegativeIntegerOrEmpty`	`[+] use="required"`
TID	`c4dm:integerORstring`	`NonNegativeDoubleOrEmpty`	`[+] use="optional"`
PFR	`c4dm:floatORstring`	`NonNegativeDoubleOrEmpty`	`[+] use="optional"`
PER	`c4dm:floatORstring`	`NonNegativeDoubleOrEmpty`	`[+] use="optional"`
TPFR	`c4dm:floatORstring`	`NonNegativeDoubleOrEmpty`	`[+] use="optional"`
TPER	`c4dm:floatORstring`	`NonNegativeDoubleOrEmpty`	`[+] use="optional"`

10.1.4. LV Perfusion – Polarmap Quantification

ELEMENTS	v2018	v2023
Stress Quantification (defect extent)	/PATIENT_DATA/NM_STRESS_FINDINGS/PERFUSION/LV_PERFUSION_DATA	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/PERFUSION/LV_PERFUSION_DATA
Rest Quantification (defect extent)	/PATIENT_DATA/NM_REST_FINDINGS/PERFUSION/LV_PERFUSION_DATA	/PATIENT_DATA/NM_REST_FINDINGS/REST_DATASET/PERFUSION/LV_PERFUSION_DATA
Reversibility (Ischemia) Quantification (extent)	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/PERFUSION/LV_PERFUSION_DATA	**No Change**

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
Stress Quantification (defect extent)	c4dm:vascular_integer_data	vascular_extent_data	
Rest Quantification (defect extent)	c4dm:vascular_integer_data	vascular_extent_data	
Reversibility (Ischemia) Quantification (extent)	c4dm:vascular_integer_data	vascular_extent_data	

Notes:

- [ALL] Type changed from a sequence of c4dm:region_integer_data called “REGION” [0, 4] to sequence of four distinct vascular_extent_type called {LAD, LCX, RCA, GLOBAL}
- [ALL] Type removed Attribute “<attribute name=”overlay type=“xs:string”/>”

Example

v2018

```
<LV_PERFUSION_DATA segmentation="vascular">
  <PERF_REGION segment="lad" extent="46.3"  />
  <PERF_REGION segment="lcx" extent="0.0"  />
  <PERF_REGION segment="rca" extent="5.6" />
  <PERF_REGION segment="tot" extent="24.6" />
</LV_PERFUSION_DATA>
```

v2023

```
<LV_PERFUSION_DATA>
  <LAD value="46" />
  <LCX value="0" />
  <RCA value="6" />
  <GLOBAL value="25" />
</LV_PERFUSION_DATA
```

10.1.5. LV Perfusion – Segmental Scoring

ELEMENTS	v2018	v2023
Stress Regional Scores	/PATIENT_DATA/NM_STRESS_FINDINGS/PERFUSION/REGIONAL_PERFUSION_SCORES	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/PERFUSION/REGIONAL_PERFUSION_SCORES
Stress Summed Score	/PATIENT_DATA/NM_STRESS_FINDINGS/PERFUSION/REGIONAL_PERFUSION_SCORES/@summedScore	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/PERFUSION/REGIONAL_PERFUSION_SCORES/@summedScore
Rest Regional Scores	/PATIENT_DATA/NM_REST_FINDINGS/PERFUSION/REGIONAL_PERFUSION_SCORES	/PATIENT_DATA/NM_REST_FINDINGS/REST_DATASET/PERFUSION/REGIONAL_PERFUSION_SCORES
Rest Summed Score	/PATIENT_DATA/NM_REST_FINDINGS/PERFUSION/REGIONAL_PERFUSION_SCORES/@summedScore	/PATIENT_DATA/NM_REST_FINDINGS/REST_DATASET/PERFUSION/REGIONAL_PERFUSION_SCORES/@summedScore
Reversibility Regional Scores	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/PERFUSION/REGIONAL_REVERSIBILITY_SCORES	**No Change**
Reversibility Summed Score	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/PERFUSION/REGIONAL_REVERSIBILITY_SCORES/@summedScore	**No Change**

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
Stress Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Stress Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use="required"
Rest Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Rest Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use="required"
Reversibility Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Reversibility Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use="required"

Notes:

- [ALL REGIONAL] Type changed from a sequence of c4dm:region_integer_data called “REGION” [0, 17] to sequence of seventeen distinct region_score_data called {ProximalAnterior, ProximalAnteroseptal, ProximalInferoseptal, ProximalInferior, ProximalInferolateral, ProximalAnterolateral, MidAnterior, MidAnteroseptal, MidInferoseptal, MidInferior, MidInferolateral, MidAnterolateral, DistalAnterior, DistalSeptal, DistalInferior, DistalLateral, Apical}
- [ALL REGIONAL] Type added attribute “<xs:attribute name="segments" type="segmentTypes" use="required"/>”
- [ALL REGIONAL] Type added attribute “<xs:attribute name="summedScore" type="NonNegativeIntegerOrEmpty" use="required"/>”
- [ALL REGIONAL] Type removed attribute “<xs:attribute name="overlay" type="xs:string"/>”
- [ALL REGIONAL] Type removed attribute “<xs:attribute name="summedScore" type="c4dm:integerORstring"/>”

Example

v2018

```
<REGIONAL_PERFUSION_SCORES summedScore="5" overlay="Zones17">
  <REGION segment="ProximalAnterior" value="0" />
  <REGION segment="ProximalAnteroseptal" value="0" />
  <REGION segment="ProximalInferoseptal" value="0" />
  <REGION segment="ProximalInferior" value="0" />
  <REGION segment="ProximalInferolateral" value="2" />
  <REGION segment="ProximalAnterolateral" value="0" />
  <REGION segment="MidAnterior" value="0" />
  <REGION segment="MidAnteroseptal" value="0" />
  <REGION segment="MidInferoseptal" value="0" />
  <REGION segment="MidInferior" value="0" />
  <REGION segment="MidInferolateral" value="1" />
  <REGION segment="MidAnterolateral" value="2" />
  <REGION segment="DistalAnterior" value="0" />
  <REGION segment="DistalSeptal" value="0" />
  <REGION segment="DistalInferior" value="0" />
  <REGION segment="DistalLateral" value="0" />
  <REGION segment="Apical" value="0" />
</REGIONAL_PERFUSION_SCORES>
```

v2023

```
<REGIONAL_PERFUSION_SCORES summedScore="5" segments="17">
  <ProximalAnterior value="0" />
  <ProximalAnteroseptal value="0" />
  <ProximalInferoseptal value="0" />
  <ProximalInferior value="0" />
  <ProximalInferolateral value="2" />
  <ProximalAnterolateral value="0" />
  <MidAnterior value="0" />
  <MidAnteroseptal value="0" />
  <MidInferoseptal value="0" />
  <MidInferior value="0" />
  <MidInferolateral value="1" />
  <MidAnterolateral value="2" />
  <DistalAnterior value="0" />
  <DistalSeptal value="0" />
  <DistalInferior value="0" />
  <DistalLateral value="0" />
  <Apical value="0" />
</REGIONAL_PERFUSION_SCORES>
```

10.1.6. LV Regional Function – Segmental Scoring

Complete the Xpath for Stress

ELEMENTS	v2018	v2023
Wall Motion Regional Scores	/PATIENT_DATA/NM_STRESS_FINDINGS/FUNCTION/ REGIONAL_MOTION_SCORES	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/FUNCTION/REGIONAL_MOTION_SCORES
Wall Motion Summed Score	/PATIENT_DATA/NM_STRESS_FINDINGS/FUNCTION/ REGIONAL_MOTION_SCORES/@summedScore	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/FUNCTION/REGIONAL_MOTION_SCORES/@summedScore
Wall Thickening Regional Scores	/PATIENT_DATA/NM_STRESS_FINDINGS/FUNCTION/ REGIONAL_THICKENING_SCORES	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/FUNCTION/REGIONAL_THICKENING_SCORES
Wall Thickening Summed Score	/PATIENT_DATA/NM_STRESS_FINDINGS/FUNCTION/ REGIONAL_THICKENING_SCORES/@summedScore	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/FUNCTION/REGIONAL_THICKENING_SCORES/@summedScore
Reversibility Regional Scores	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/PERFUSION/ REGIONAL_REVERSIBILITY_SCORES	**No Change**
Reversibility Summed Score	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/PERFUSION/ REGIONAL_REVERSIBILITY_SCORES/@summedScore	**No Change**

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
Wall Motion Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Wall Motion Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use=“required”
Wall Thickening Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Wall Thickening Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use=“required”
Reversibility Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Reversibility Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use=“required”

Notes:

- [ALL REGIONAL] Type changed from a sequence of c4dm:region_integer_data called “REGION” [0, 17] to sequence of seventeen distinct region_score_data called {ProximalAnterior, ProximalAnteroseptal, ProximalInferoseptal, ProximalInferior, ProximalInferolateral, ProximalAnterolateral, MidAnterior, MidAnteroseptal, MidInferoseptal, MidInferior, MidInferolateral, MidAnterolateral, DistalAnterior, DistalSeptal, DistalInferior, DistalLateral, Apical}
- [ALL REGIONAL] Type added attribute “<xs:attribute name="segments" type="segmentTypes" use="required"/>”
- [ALL REGIONAL] Type added attribute “<xs:attribute name="summedScore" type="NonNegativeIntegerOrEmpty" use="required"/>”
- [ALL REGIONAL] Type removed attribute “<xs:attribute name="overlay" type="xs:string"/>”
- [ALL REGIONAL] Type removed attribute “<xs:attribute name="summedScore" type="c4dm:integerORstring"/>”

Example:

v2018

```
<REGIONAL_MOTION_SCORES summedScore="14" overlay="Zones17">
  <REGION segment="ProximalAnterior" value="0" />
  <REGION segment="ProximalAnteroseptal" value="0"/>
  <REGION segment="ProximalInferoseptal" value="0"/>
  <REGION segment="ProximalInferior" value="0" />
  <REGION segment="ProximalInferolateral" value="3" />
  <REGION segment="ProximalAnterolateral" value="3" />
  <REGION segment="MidAnterior" value="0" />
  <REGION segment="MidAnteroseptal" value="0" />
  <REGION segment="MidInferoseptal" value="0" />
  <REGION segment="MidInferior" value="0" />
  <REGION segment="MidInferolateral" value="3" />
  <REGION segment="MidAnterolateral" value="3" />
  <REGION segment="DistalAnterior" value="0" />
  <REGION segment="DistalSeptal" value="0" />
  <REGION segment="DistalInferior" value="0" />
  <REGION segment="DistalLateral" value="2" />
  <REGION segment="Apical" value="0" />
</REGIONAL_MOTION_SCORES>
```

v2023

```
<REGIONAL_MOTION_SCORES summedScore="14" segments="17">
    <ProximalAnterior value="0" />
    <ProximalAnteroseptal value="0" />
    <ProximalInferoseptal value="0" />
    <ProximalInferior value="0" />
    <ProximalInferolateral value="3" />
    <ProximalAnterolateral value="3" />
    <MidAnterior value="0" />
    <MidAnteroseptal value="0" />
    <MidInferoseptal value="0" />
    <MidInferior value="0" />
    <MidInferolateral value="3" />
    <MidAnterolateral value="3" />
    <DistalAnterior value="0" />
    <DistalSeptal value="0" />
    <DistalInferior value="0" />
    <DistalLateral value="2" />
    <Apical value="0" />
</REGIONAL_MOTION_SCORES>
```

10.1.7. LV Blood Flow

ELEMENTS	v2018	v2023
Stress Blood Flow	/PATIENT_DATA/NM_STRESS_FINDINGS/FLOW/MBF_DATA	/PATIENT_DATA/NM_STRESS_FINDINGS/STRESS_DATASET/FLOW/MBF_DATA
Rest Blood Flow	/PATIENT_DATA/NM_REST_FINDINGS/FLOW/MBF_DATA	/PATIENT_DATA/NM_REST_FINDINGS/REST_DATASET/FLOW/MBF_DATA
Coronary Flow Reserve	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/FLOW/CFR_DATA	**No Change**

ELEMENTS	v2018 TYPE	v2022 TYPE	ATTRIBUTE CHANGES
Stress Blood Flow	c4dm:vascular_float_data	vascular_flow_data	
Rest Blood Flow	c4dm:vascular_float_data	vascular_flow_data	
Coronary Flow Reserve	c4dm:vascular_float_data	vascular_flow_data	

Notes:

- [ALL] Type changed from a sequence of c4dm:region_float_data called “REGION” [0, 4] to sequence of four distinct vascular_flow_type called {LAD, LCX, RCA, GLOBAL}
- [ALL] Type removed attribute “<xs:attribute name="overlay" type="xs:string"/>”

Example:

v2018

```
<MBF_DATA overlay="Vascular">
  <REGION segment="LAD" value="1.14" />
  <REGION segment="LCX" value="0.88" />
  <REGION segment="RCA" value="1.05" />
  <REGION segment="Global" value="1.02" />
</MBF_DATA>
```

v2023

```
<MBF_DATA>
  <LAD value="1.14" />
  <LCX value="0.88" />
  <RCA value="1.05" />
  <GLOBAL value="1.02" />
</MBF_DATA>
```

10.1.8. LV Metabolism Quantification (FDG for assessment of Hibernating, Scar)

ELEMENTS	v2018	v2023
FDG Quantification (defect extent)	/PATIENT_DATA/NM_FDG_FINDINGS/PERFUSION/LV_PERFUSION_DATA	/PATIENT_DATA/NM_FDG_FINDINGS/FDG_DATASET/PERFUSION/LV_PERFUSION_DATA
Hibernating/Viability Quantification (extent)	/PATIENT_DATA/NM_VIABILITY_FINDINGS/PERFUSION/LV_VIABILITY_DATA	**No Change**
Scar Quantification (extent)	/PATIENT_DATA/NM_VIABILITY_FINDINGS/PERFUSION/LV_SCAR_DATA	**No Change**

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
FDG Quantification (defect extent)	c4dm:vascular_integer_data	vascular_extent_data	
Hibernating/Viability Quantification (extent)	c4dm:vascular_integer_data	vascular_extent_double_data	
Scar Quantification (extent)	c4dm:vascular_integer_data	vascular_extent_double_data	

Notes:

- [ALL] Type changed from a sequence of c4dm:region_integer_data called “REGION” [0, 4] to sequence of four distinct vascular_extent_type or vascular_extent_double_type called {LAD, LCX, RCA, GLOBAL}
- [ALL] Type removed Attribute “<attribute name=”overlay type=“xs:string”/>”

Example:

v2018

```
<LV_PERFUSION_DATA overlay="Vascular">
  <REGION segment="LAD" value="3" />
  <REGION segment="LCX" value="100" />
  <REGION segment="RCA" value="1" />
  <REGION segment="Global" value="28" />
</LV_PERFUSION_DATA>
```

v2023

```
<LV_PERFUSION_DATA>
  <LAD value="3" />
  <LCX value="100" />
  <RCA value="1" />
  <GLOBAL value="28" />
</LV_PERFUSION_DATA>
```

10.1.9. LV Metabolism Scoring (FDG for assessment of Hibernating, Scar)

ELEMENTS	v2018	v2023
FDG Regional Scores	/PATIENT_DATA/NM_FDG_FINDINGS/PERFUSION/REGIONAL_PERFUSION_SCORES	/PATIENT_DATA/NM_FDG_FINDINGS/FDG_DATASET/PERFUSION/REGIONAL_PERFUSION_SCORES
FDG Summed Score	/PATIENT_DATA/NM_FDG_FINDINGS/PERFUSION/REGIONAL_PERFUSION_SCORES/@summedScore	/PATIENT_DATA/NM_FDG_FINDINGS/FDG_DATASET/PERFUSION/REGIONAL_PERFUSION_SCORES/@summedScore
Hibernating Regional Scores	/PATIENT_DATA/NM_VIABILITY_FINDINGS/PERFUSION/REGIONAL_VIABILITY_SCORES	**No Change**
Hibernating Summed Score	/PATIENT_DATA/NM_VIABILITY_FINDINGS/PERFUSION/REGIONAL_VIABILITY_SCORES/@summedScore	**No Change**
Scar Regional Scores	/PATIENT_DATA/NM_VIABILITY_FINDINGS/PERFUSION/REGIONAL_SCAR_SCORES	**No Change**
Scar Summed Score	/PATIENT_DATA/NM_VIABILITY_FINDINGS/PERFUSION/REGIONAL_SCAR_SCORES/@summedScore	**No Change**

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
FDG Regional Scores	c4dm:regional_integer_data	regional_integer_data	
FDG Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use=“required”
Hibernating Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Hibernating Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use=“required”
Scar Regional Scores	c4dm:regional_integer_data	regional_integer_data	
Scar Summed Score	c4dm:integerORstring	NonNegativeIntegerOrEmpty	[+] use=“required”

Notes:

- [ALL REGIONAL] Type changed from a sequence of c4dm:region_integer_data called “REGION” [0, 17] to sequence of seventeen distinct region_score_data called {ProximalAnterior, ProximalAnteroseptal, ProximalInferoseptal, ProximalInferior, ProximalInferolateral, ProximalAnterolateral, MidAnterior, MidAnteroseptal, MidInferoseptal, MidInferior, MidInferolateral, MidAnterolateral, DistalAnterior, DistalSeptal, DistalInferior, DistalLateral, Apical}
- [ALL REGIONAL] Type added attribute “<xs:attribute name="segments" type="segmentTypes" use="required"/>”
- [ALL REGIONAL] Type added attribute “<xs:attribute name="summedScore" type="NonNegativeIntegerOrEmpty" use="required"/>”
- [ALL REGIONAL] Type removed attribute “<xs:attribute name="overlay" type="xs:string"/>”
- [ALL REGIONAL] Type removed attribute “<xs:attribute name="summedScore" type="c4dm:integerORstring"/>”

Example:

v2018

```
<REGIONAL_PERFUSION_SCORES summedScore="14" overlay="Zones17”>
  <REGION segment="ProximalAnterior" value="0" />
  <REGION segment="ProximalAnteroseptal" value="0" />
  <REGION segment="ProximalInferoseptal" value="0" />
  <REGION segment="ProximalInferior" value="0" />
  <REGION segment="ProximalInferolateral" value="3" />
  <REGION segment="ProximalAnterolateral" value="3" />
  <REGION segment="MidAnterior" value="0" />
  <REGION segment="MidAnteroseptal" value="0" />
  <REGION segment="MidInferoseptal" value="0" />
  <REGION segment="MidInferior" value="0" />
  <REGION segment="MidInferolateral" value="3" />
  <REGION segment="MidAnterolateral" value="3" />
  <REGION segment="DistalAnterior" value="0" />
  <REGION segment="DistalSeptal" value="0" />
  <REGION segment="DistalInferior" value="0" />
  <REGION segment="DistalLateral" value="2" />
  <REGION segment="Apical" value="0" />
</REGIONAL_PERFUSION_SCORES>
```

v2023

```
<REGIONAL_PERFUSION_SCORES summedScore="14" segments="17">
  <ProximalAnterior value="0" />
  <ProximalAnteroseptal value="0" />
  <ProximalInferoseptal value="0" />
  <ProximalInferior value="0" />
  <ProximalInferolateral value="3" />
  <ProximalAnterolateral value="3" />
  <MidAnterior value="0" />
  <MidAnteroseptal value="0" />
  <MidInferoseptal value="0" />
  <MidInferior value="0" />
  <MidInferolateral value="3" />
  <MidAnterolateral value="3" />
  <DistalAnterior value="0" />
  <DistalSeptal value="0" />
  <DistalInferior value="0" />
  <DistalLateral value="2" />
  <Apical value="0" />
</REGIONAL_PERFUSION_SCORES>
```

10.1.10. CT Calcium Scoring

ELEMENTS	v2018	v2023
Agatston Calcium Score		`/PATIENT_DATA/CASC_FINDINGS/CASC_TOT/@score`

ELEMENTS	v2018 TYPE	v2023 TYPE	ATTRIBUTE CHANGES
Agatston Calcium Score		`casc_region_and_percentiles`	

10.2 Changes from Corridor4DM v2023 to v2024

10.2.1 Calcium Scoring updates

Additional lesions scored for calcium in new elements

ELEMENTS	v2023	v2024
Calcium Score	/PATIENT_DATA/CASC_FINDINGS/CASC_DATASET/	/PATIENT_DATA/CASC_FINDINGS/CASC_DATASET/

New Elements	Type
CASC_AAO	c4dm: casc_region
CASC_DAO	c4dm: casc_region
CASC_AV	c4dm: casc_region
CASC_MV	c4dm: casc_region
CASC_TV	c4dm: casc_region
CASC_PV	c4dm: casc_region

Example:

v2023	v2024
<CASC_DATASET> … <CASC_LM score="0" volume="0.0" lesions="0"/> <CASC_LAD score="482" volume="367.0" lesions="4"/> <CASC_LCX score="0" volume="0.0" lesions="0"/> <CASC_RCA score="200" volume="185.0" lesions="5"/> <CASC_TOT score="682" volume="553.0" lesions="9”/> </CASC_DATASET>	<CASC_DATASET> … <CASC_LM score="0" volume="0.0" lesions="0"/> <CASC_LAD score="482" volume="367.0" lesions="4"/> <CASC_LCX score="0" volume="0.0" lesions="0"/> <CASC_RCA score="200" volume="185.0" lesions="5"/> <CASC_TOT score="682" volume="553.0" lesions="9”/> <CASC_AAO score="563154" volume="422365.0" lesions="1" /> <CASC_DAO score="0" volume="0.0" lesions="0" /> <CASC_AV score="0" volume="0.0" lesions="0" /> <CASC_MV score="52353" volume="39265.0" lesions="1" /> <CASC_TV score="0" volume="0.0" lesions="0" /> <CASC_PV score="9762" volume="7321.0" lesions="1" /> </CASC_DATASET>

10.2.2 iMFR data

ELEMENTS	v2023	v2024
CFR_DATA	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/FLOW/CFR_DATA	/PATIENT_DATA/NM_ISCHEMIA_FINDINGS/FLOW/CFR_DATA

10.2.2 iMFR data continued…

New Attributes	Type	Attribute Changes
iMfrNormalExtent	NonNegativeDoubleOrEmpty	use="required"
iMfrNormalMean	NonNegativeDoubleOrEmpty	use="required"
iMfrDiffuseExtent	NonNegativeDoubleOrEmpty	use="required"
iMfrDiffuseMean	NonNegativeDoubleOrEmpty	use="required"
iMfrFocalExtent	NonNegativeDoubleOrEmpty	use="required"
iMfrFocalMean	NonNegativeDoubleOrEmpty	use="required"
iMfrMismatchExtent	NonNegativeDoubleOrEmpty	use="required"
iMfrMismatchMean	NonNegativeDoubleOrEmpty	use="required"

Example:

v2023

```
<CFR_DATA overlay="Vascular">
   <LAD value="1.25" extent="83.75" />
   <LCX value="0.75" extent="100.00" />
   <RCA value="1.53" extent="68.89" />
   <GLOBAL value="1.17" extent="81.96" />
</CFR_DATA>
```

v2024

```
<CFR_DATA overlay="Vascular">
  <LAD value="1.25" extent="83.75" iMfrNormalExtent="0.48" iMfrNormalMean="2.027"
iMfrDiffuseExtent="89.90" iMfrDiffuseMean="1.309" iMfrFocalExtent="9.62"
iMfrFocalMean="0.840" iMfrMismatchExtent="0.00" iMfrMismatchMean="" />
   <LCX value="0.75" extent="100.00" iMfrNormalExtent="0.00" iMfrNormalMean=""
iMfrDiffuseExtent="10.83" iMfrDiffuseMean="0.998" iMfrFocalExtent="89.17"
iMfrFocalMean="0.736" iMfrMismatchExtent="0.00" iMfrMismatchMean="" />
   <RCA value="1.53" extent="68.89" iMfrNormalExtent="7.58" iMfrNormalMean="2.049"
iMfrDiffuseExtent="90.91" iMfrDiffuseMean="1.490" iMfrFocalExtent="1.52"
iMfrFocalMean="1.094" iMfrMismatchExtent="0.00" iMfrMismatchMean="" />
   <GLOBAL value="1.17" extent="81.96" iMfrNormalExtent="2.39" iMfrNormalMean="2.047"
iMfrDiffuseExtent="69.57" iMfrDiffuseMean="1.364" iMfrFocalExtent="28.04"
iMfrFocalMean="0.757" iMfrMismatchExtent="0.00" iMfrMismatchMean="" />
</CFR_DATA>
```