**LOI Test Data Specification**

**Cardinalities (do not include in html, I added cardinalities just for clarification):**

[1..1] : element will always be present, does not repeat

[0..1] : element may not be present (no data) – do not display in that case. Does not repeat.

[1..\*] : element is always present and does repeat

[0..\*] : element may not be present (no data) – do not display in that case. Element can repeat.

**3 different message structures :**

* OML\_O21
* ORL\_O22
* ACK

**OML\_O21 Specification**

7 tabs : FULL, Patient, Next of kin, Visit, Insurance, Guarantor, Order[\*]

* Do not include tab if there is no data to display
* Patient tab
  + Patient information table [1..1]
* Next of kin tab : Next of kin can repeat (similar to “Observations[\*]” in the syndromic tool)
  + Next of kin information [0..5]
* Visit tab
  + Visit information table [1..1]
* Insurance tab
  + Insurance information [0..1]
* Guarantor tab
  + Guarantor information [0..1]
* Order tab : Order can repeat (similar to “Observations[\*]” in the syndromic tool)
  + One Order contain the following :
    - Ordering Provider table [1..1]
    - General order information [1..1]
    - Timing/Quantity Information [0..1]
    - Order details [1..1]
    - Notes & Comments [0..\*]
    - Result Copies To [0..5]
    - Diagnosis Information [1..\*]
    - Observation (not a table, this a group of table) [0..\*]
      * Observation result table [1..1]
      * Specimen details table [0..\*]

1. Patient information [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Patient Name | PID-5.2 PID-5.3 PID-5.1.1 PID-5.4 |
| Mother’s maiden name | PID-6.2 PID-6.3 PID-6.1.1 PID-6.4 |
| Administrative Sex | PID-8 |
| Date/Time of Birth | PID-7.1 |
| Death date/time | PID-29.1 |
| Patient Address | PID-11.1.1 |
| PID-11.2 |
| PID-11.3 PID-11.4 PID-11.5 |
| PID-11.6 |
| Home phone number | [when PID-13.3 = ‘PH’] PID-13.6 PID-13.7 PID-13.8 |
| Email address | [when PID-13.3 = ‘X.400’ or ‘Internet’] PID-13.4 |
| Business phone number | [when PID-14.3 = ‘PH’] PID-14.6 PID-14.7 PID-14.8 |
| Business email address | [when PID-14.3 = ‘X.400’ or ‘Internet’] PID-14.4 |
| Race | PID-10.9 or PID-10.2 or PID-10.1 |
| Ethnic group | PID-22.9 or PID-22.2 or PID-22.1 |

1. Next of kin information [0..5]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Relationship | NK1-3.9 or NK1-3.2 or NK1-3.1 |
| Name | NK1-2.2 NK1-2.3 NK1-2.1.1 NK1-2.4 |
| Organization Name | NK1-13.1 |
| Organization Identifier | NK1-13.10 |
| Contact Person's Name | NK1-30.2 NK1-30.3 NK1-30.1.1 NK1-30.4 |
| Contact Person's Address | NK1-32.1.1 |
| NK1-32.2 |
| NK1-32.3 NK1-32.4 NK1-32.5 |
| NK1-32.6 |
| Address | NK1-4.1.1 |
| NK1-4.2 |
| NK1-4.3 NK1-4.4 NK1-4.5 |
| NK1-4.6 |
| Phone Number | [when NK1-5.3 = ‘PH’] NK1-5.6 NK1-5.7 NK1-5.8 |
| Email address | [when NK1-5.3 = ‘X.400’ or ‘Internet’] NK1-5.4 |
| Contact Role | NK1-7.9 or NK1-7.2 or NK1-7.1 |
| Next of Kin / Associated Parties Job Code/Class | NK1-11.3 |

1. Visit information [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Patient Class | PV1-2 |
| Financial Class | PV1-20.1 |
| Courtesy Code | PV1-22.9 or PV1-22.2 or PV1-22.1 |

1. Insurance information [0..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Insurance Plan ID | IN1-2.9 or IN1-2.2 or IN1-2.1 |
| Insurance Company ID | IN1-3.1 |
| Insurance Company Name | IN1-4.1 |
| Insurance Company Address | IN1-5.1.1 |
| IN1-5.2 |
| IN1-5.3 IN1-5.4 IN1-5.5 |
| IN1-5.6 |
| Group Number | IN1-8 |
| Insured’s Group Employer Name | IN1-11.1 |
| Insured’s Group Employer Identifier | IN1-11.10 |
| Plan Expiration Date | IN1-13 |
| Name Of Insured | IN1-16.2 IN1-16.3 IN1-16.1.1 IN1-16.4 |
| Insured’s Relationship To Patient | IN1-17.9 or IN1-17.2 or IN1-17.1 |
| Insured’s Date Of Birth | IN1-18.1 |
| Insured’s Address | IN1-19.1.1 |
| IN1-19.2 |
| IN1-19.3 IN1-19.4 IN1-19.5 |
| IN1-19.6 |
| Type Of Agreement Code | IN1-31 |
| Policy Number | IN1-36 |

1. Guarantor information [0..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Guarantor Name | GT1-3.2 GT1-3.3 GT1-3.1.1 GT1-3.4 |
| Guarantor Address | GT1-5.1.1 |
| GT1-5.2 |
| GT1-5.3 GT1-5.4 GT1-5.5 |
| GT1-5.6 |
| Guarantor Relationship | GT1-11.9 or GT1-11.2 or GT1-11.1 |
| Guarantor Organization Name | GT1-21.1 |

1. Order [1..\*]
   1. Ordering Provider [1..1]

|  |  |
| --- | --- |
| Element | Data |
| Provider Name | ORC-12.3 ORC-12.2.1 |
| Provider NPI identifier | ORC-12.1 |
| Call Back Phone Number | [when ORC-14.3 = ‘PH’] ORC-14.6 ORC-14.7 ORC-14.8 |
| Email address | [when ORC-14.3 = ‘X.400’ or ‘Internet’] ORC-14.4 |
| Ordering Facility Name | ORC-21.1 |
| Ordering Facility Address | ORC-22.1.1 |
| ORC-22.2 |
| ORC-22.3 ORC-22.4 ORC-22.5 |
| ORC-22.6 |
| Ordering Facility Phone Number | [when ORC-23.3 = ‘PH’] ORC-23.6 ORC-23.7 ORC-23.8 |
| Ordering Facility email address | [when ORC-23.3 = ‘X.400’ or ‘Internet’] ORC-23.4 |

* 1. General order information [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Placer Order Number | ORC-2.1 |
| Placer Order Number | ORC-3.1 |
| Filler Order Number | ORC-4.1 |
| Order Control | ORC-1 |
| Advanced Beneficiary Notice Code | ORC-20.9 or ORC-20.2 or ORC-20.1 |
| Date/Time of Transaction | ORC-9.1 |

* 1. Timing/Quantity Information [0..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Start date and time | TQ1-7.1 |
| End date/time | TQ1-8.1 |
| Priority | TQ1-9.9 or TQ1-9.2 or TQ1-9.1 |

* 1. Order details [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Universal service identifier (LOINC) | [when OBR-4.3=’LN’] OBR-4.1 or [when OBR-4.6=’LN’] OBR-4.4 |
| Alternate universal service identifier | [when OBR-4.3 != ’LN’] OBR-4.1 or [when OBR-4.6 !=’LN’] OBR-4.4 |
| Observation Date/Time | OBR-7.1 |
| Observation End Date/Time | OBR-8.1 |
| Relevant Clinical Information | OBR-13.9 or OBR-13.2 or OBR-13.1 |

* 1. Notes & Comments [0..1]

|  |  |  |
| --- | --- | --- |
| **Element** | **Data** |  |
| Comments | NTE-3 |  |

* 1. Result Copies To [0..5]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Instance ID | PRT-1.1 |
| NPI identifier | PRT-5.1 |
| Name | PRT-5.3 PRT-5.2 |
| Address | PRT-14.1.1 |
| PRT-14.2 |
| PRT-14.3 PRT-14.4 PRT-14.5 |
| PRT-14.6 |
| Phone Number | [when PRT-15.3 = ‘PH’] PRT-15.6 PRT-15.7 PRT-15.8 |
| Email address | [when PRT-15.3 = ‘X.400’ or ‘Internet’] PRT-15.4 |
| Action code | PRT-2 |
| Participation | PRT-4.9 or PRT-4.2 or PRT-4.1 |

* 1. Diagnosis Information [1..\*]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Priority | DG1-15 |
| Diagnosis ICD-9CM Code | [when DG1-3.3=’I9’] DG1-3.1 |
| Diagnosis ICD-10CM Code | [when DG1-3.3=’I10C’] DG1-3.1 |
| Diagnosis Type | DG1-6 |

* 1. Observation result [0..\*]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Observation LOINC Identifier | [when OBX-3.3=’LN’] OBX-3.1 or [when OBX-3.6=’LN’] OBX-3.4 |
| Observation Alternate Identifier | [when OBX-3.3 != ’LN’] OBX-3.1 or [when OBX-3.6 != ’LN’] OBX-3.4 |
| Observation Value | [when OBX-2 = ‘CWE’]OBX-5.9 or OBX-5.2 or OBX-5.1 |
| Observation Value | [when OBX-2 = ‘NM’] OBX-5 |
| Observation Value | [when OBX-2 = ‘DT’] OBX-5 |
| Units | OBX-6.9 or OBX-6.2 or OBX-6.1 |
| Observation Result Status | OBX-11 |
| Date/Time of the Observation | OBX-14.1 |
| Observation Type | OBX-29 |

* 1. Specimen details [0..\*]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Type | SPM-4.9 or SPM-4.2 or SPM-4.1 |
| Type Modifier | SPM-5.9 or SPM-5.2 or SPM-5.1 |
| Additives | SPM-6.9 or SPM-6.2 or SPM-6.1 |
| Collection Method | SPM-7.9 or SPM-7.2 or SPM-7.1 |
| Source Site | SPM-8.9 or SPM-8.2 or SPM-8.1 |
| Source Site Modifier | SPM-9.9 or SPM-9.2 or SPM-9.1 |
| Collection Start Date/Time | SPM-17.1.1 |
| Collection End Date/Time | SPM-17.2.1 |

**ORL\_O22 specification**

5 tabs : FULL, Acknowledgment, Error[\*], Patient, Order[\*]

* Do not include tab if there is no data to display
* Acknowledgement tab
  + Acknowledgment table [1..1]
* Error tab : Error car repeat (similar to “Observations[\*]” in the syndromic tool)
* Patient tab
  + Patient information table [1..1]
* Order tab : Order can repeat (similar to “Observations[\*]” in the syndromic tool)
  + One Order contain the following :
    - Ordering Provider table [1..1]
    - General order information [1..1]
    - Timing/Quantity Information [0..1]
    - Order details [1..1]

1. Acknowledgment [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Acknowledgment code | MSA-1 |

1. Error details [0..\*]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Error Location | |
| Segment ID | ERR-2.1 |
| Segment Sequence | ERR-2.2 |
| Field Position | ERR-2.3 |
| Field Repetition | ERR-2.4 |
| Component Number | ERR-2.5 |
| Sub-Component Number | ERR-2.6 |
| HL7 Error Code | ERR-3.9 or ERR-3.2 or ERR-3.1 |
| Severity | ERR-4 |
| Application Error Code | ERR-5.9 or ERR-5.2 or ERR-5.1 |
| Diagnostic Information | ERR-7 |
| User Message | ERR-8 |

1. Patient Information [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Patient Name | PID-5.2 PID-5.3 PID-5.1.1 PID-5.4 |
| Mother’s maiden name | PID-6.2 PID-6.3 PID-6.1.1 PID-6.4 |
| Administrative Sex | PID-8 |
| Date/Time of Birth | PID-7.1 |
| Death date/time | PID-29.1 |
| Patient Address | PID-11.1.1 |
| PID-11.2 |
| PID-11.3 PID-11.4 PID-11.5 |
| PID-11.6 |
| Home phone number | [when PID-13.3 = ‘PH’] PID-13.6 PID-13.7 PID-13.8 |
| Email address | [when PID-13.3 = ‘X.400’ or ‘Internet’] PID-13.4 |
| Business phone number | [when PID-14.3 = ‘PH’] PID-14.6 PID-14.7 PID-14.8 |
| Business email address | [when PID-14.3 = ‘X.400’ or ‘Internet’] PID-14.4 |
| Race | PID-10.9 or PID-10.2 or PID-10.1 |
| Ethnic group | PID-22.9 or PID-22.2 or PID-22.1 |

1. Order [1..\*]
   1. Ordering Provider [1..1]

|  |  |
| --- | --- |
| Element | Data |
| Provider Name | ORC-12.3 ORC-12.2 |
| Provider NPI identifier | ORC-12.1 |
| Call Back Phone Number | [when ORC-14.3 = ‘PH’] ORC-14.6 ORC-14.7 ORC-14.8 |
| Email address | [when ORC-14.3 = ‘X.400’ or ‘Internet’] ORC-14.4 |
| Ordering Facility Name | ORC-21.1 |
| Ordering Facility Address | ORC-22.1.1 |
| ORC-22.2 |
| ORC-22.3 ORC-22.4 ORC-22.5 |
| ORC-22.6 |
| Ordering Facility Phone Number | [when ORC-23.3 = ‘PH’] ORC-23.6 ORC-23.7 ORC-23.8 |
| Ordering Facility email address | [when ORC-23.3 = ‘X.400’ or ‘Internet’] ORC-23.4 |

* 1. General order information [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Placer Order Number | ORC-2.1 |
| Placer Order Number | ORC-3.1 |
| Filler Order Number | ORC-4.1 |
| Order Control | ORC-1 |
| Advanced Beneficiary Notice Code | ORC-20.9 or ORC-20.2 or ORC-20.1 |
| Date/Time of Transaction | ORC-9.1 |

* 1. Order details [1..1]

|  |  |
| --- | --- |
| **Element** | **Data** |
| Universal service identifier (LOINC) | [when OBR-4.3=’LN’] OBR-4.1 or [when OBR-4.6=’LN’] OBR-4.4 |
| Alternate universal service identifier | [when OBR-4.3 != ’LN’] OBR-4.1 or [when OBR-4.6 !=’LN’] OBR-4.4 |
| Observation Date/Time | OBR-7.1 |
| Observation End Date/Time | OBR-8.1 |
| Relevant Clinical Information | OBR-13.9 or OBR-13.2 or OBR-13.1 |

**ACK Specification**

3 tabs : FULL, Acknowledgment, Error[\*]

* Do not include tab if there is no data to display
* Acknowledgement tab
  + Acknowledgment table [1..1]
* Error tab : Error car repeat (similar to “Observations[\*]” in the syndromic tool)

1. Acknowledgment

|  |  |
| --- | --- |
| **Element** | **Data** |
| Acknowledgment code | MSA-1 |

1. Error details

|  |  |
| --- | --- |
| **Element** | **Data** |
| Error Location | |
| Segment ID | ERR-2.1 |
| Segment Sequence | ERR-2.2 |
| Field Position | ERR-2.3 |
| Field Repetition | ERR-2.4 |
| Component Number | ERR-2.5 |
| Sub-Component Number | ERR-2.6 |
| HL7 Error Code | ERR-3.9 or ERR-3.2 or ERR-3.1 |
| Severity | ERR-4 |
| Application Error Code | ERR-5.9 or ERR-5.2 or ERR-5.1 |
| Diagnostic Information | ERR-7 |
| User Message | ERR-8 |