NTDS XSD Change Log

11/30/2010 – v2010.1.5 (Validator channel 102) – This XSD is now generated from a higher level modeling language:

1. XSD no longer requires tags to be in order.
2. Every tag is no longer required. XSD is less restrictive and it will allow a missing tag. However, Validator will enforce that a tag must exist. The only mandatory XSD tags are LastModifiedDateTime, FacilityId, and PatientId.
3. An empty list (e.g. ProtectiveDevices) does not produce an error any longer.

11/8/2010 – v2010.1.5 (Validator channel 102)

1. minOccurs
   a. Remove minOccurs on NtdsRecord
      i. Change minOccurs from 1 to 0
         `<xs:element name="NtdsRecord" minOccurs="0" maxOccurs="unbounded">`

2. Updated the NtdsVersion to v2010.1.5 (to match Sdk version channel 102)
3. Removed ICD10 pattern support as it will reappear in a new version of the XSD specifically designed to support ICD10.
   a. Injury Diagnosis
      `<xs:pattern value="((([vV]|[0-9])\d{2}(\.\d{1,2})?))|((([a-t]|[A-T])\d{2,4}))"/>`
      Changed to
      `<xs:pattern value="((([vV]|[0-9])\d{2}(\.\d{1,2})?))"/>`
   b. HospitalProcedure
      i. `<xs:restriction base="xs:string">`
         `<xs:minLength value="4"/>`
         `<xs:maxLength value="7"/>`
         `<xs:pattern value="(\d{2}\.\d{1,2})|(\d{7})"/>`
         `</xs:restriction>`
      ii. Changed to
         `<xs:restriction base="xs:string">`
         `<xs:minLength value="4"/>`
         `<xs:maxLength value="5"/>`
         `<xs:pattern value="(\d{2}\.\d{1,2})"/>`
         `</xs:restriction>`

   c. PrimaryECode

      `<xs:pattern value="((\d{3}(\.\d{1})?))|(([vVwWxXyY]\d{2,4}))"/>`
      Changed to
      `<xs:pattern value="((\d{3}(\.\d{1})?))"/>`

4. EmsRespiratoryRate – Changed max from 99 to 120
5. RespiratoryRate – Changed max from 99 to 120

6/4/2010 – v2010.1.4

1. Updated the following menu descriptions which were out of sync with the Data Dictionary

XSD tagname	MENU_DESCRIPTION	MENU_VALUE
AlcoholUseIndicators	No (not tested)	1
DeathInEd	DOA: Declared dead on arrival with minimal or no resuscitation attempt (no invasive procedures attempted)	1
HospitalDischargeDisposition	Discharged/Transferred to a short-term general hospital for inpatient care	1
HospitalDischargeDisposition	Discharged/Transferred to an Intermediate Care Facility (ICF)	2
HospitalDischargeDisposition	Discharge/Transferred to home under care of organized home health service	3
HospitalDischargeDisposition	Left against medical advice or discontinued care	4
DrugUseIndicator	No (not tested)	1

03/19/09 – v2010.1.3

1. Enumerated lists for GcsMotor and GcsVerbal
2. In the annotation of some elements, the word "patient's" had a single quote mark instead of an apostrophe. All instances of the single quote mark were replaced with an apostrophe.

11/23/09 – v2010.1.2

2. Updated the NtdsVersion to v2010.1.2 (to match Sdk version channel 102)
3. TotalIcuLos: Change the minimum constraint from 0 to 1, as 0 is not valid.
4. TotalVentDays: Change the minimum constraint from 0 to 1, as 0 is not valid.

11/23/09 – v2009.1.1

1. Updated the NtdsVersion to v2009.1.1 (to match Sdk version channel 101)

11/1/08 – v1.2.5

1. Updated the NtdsVersion to v1.2.5 (to match Sdk version)
2. EmsRespiratoryRate and RespiratoryRate – changed the max from 59 to 99.
3. EmsSbp and Sbp – changed the max from 299 to 300.
4. Changed the maxOccurs for Complications from 10 to 25.
5. Changed the maxOccurs for Comorbidities from 5 to 23.
6. HospitalProcedure – corrected minLength from 1 to 4. Changed maxLength from 5 to 7 to allow icd10 codes.
7. Changed text for BIU 2 from "Not Known" to "Not Known/Not Recorded"
8. Commented out BIU 3 as it is no longer applicable.
9. Added format checks (Pattern value) for both ICD9 and ICD10 for InjuryDiagnosis, HospitalProcedure, PrimaryEcode, and AdditionalEcode.

Example:
```
simpleType name="InjuryDiagnosis">
<xs:union memberTypes="Blank">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:minLength value="3"/>
        <xs:maxLength value="6"/>
        <xs:pattern value="((([vV]|[0-9])\d{2}(\.\d{1,2})?))|((([a-t]|[A-T])\d{2,4}))"/>
```

```
            </xs:restriction>
        </xs:simpleType>
    </xs:union>
```

4/3/08 - v1.2.4

5. Updated the NtdsVersion to v1.2.4 (to match Sdk version)
6. Temperature – changed from integer to decimal and enforce one decimal place. Updated min to 0.0 and max to 45.0.

2/29/08 – v1.2.3

2. Updated the NtdsVersion to v1.2.3 (to match Sdk version)
3. AlcoholUseIndicators – changed enumerated value 1 from 'No (not suspected)' to 'No (not suspected, not tested)'
4. DrugUseIndicator – changed enumerated value 1 from 'No (not suspected)' to 'No (not suspected, not tested)'
5. HospitalComplication
    a. Changed enumerated value 14 from 'Deep Vein Thrombosis DVT / thrombophlebitis' to 'Deep Vein Thrombosis (DVT) / thrombophlebitis'.
    b. Changed enumerated value 17 from 'Intracranial pressure elevation' to 'Intracranial pressure'.
6. Temperature – changed the range from 0 to 120 to 0 to 45.
7. AisSeverity – Added enumerated value 9 'Not Possible to Assign'
8. Various spelling corrections.

1/23/08 – v1.2.1

1. AisCodes, AisVersion, IssLocal – added minOccurs = 0
2. Updated the NtdsVersion to v1.2.1

12/03/07 – v1.2.0

1. Changed xs:all to xs:sequence for Hospital Complications. The line below was not validating because the <maxOccurs> indicator can only be set to 1 when using the <all> indicator.

```
<xs:element name="HospitalComplications">
  <xs:complexType>
    <xs:all>  -- changed this line
      <xs:element name="item" maxOccurs="10">   -- error line
```

11/26/07

1. Changed InterFacilityTransfer and SupplementalOxygen enumerated values from 0 and 1 to 1 and 2 (to match the DD).
2. HospitalProcedure changed max length from 6 to 5.
3. Various documentation / annotation corrections.
    a. Corrected enumeration values and descriptions to match the DD
        -   DrugUseIndicator (value 2)
        -   PatientsOccupationalIndustry (values 11 and 14)
        -   EdDischargeDisposition (value 8)
    b. HospitalArrivalTime - Changed to use the Time simple type and comment out the 'HospitalArrivalTime' simple type
    c. Commented out the below simple types since they are no longer used (these were replaced with the Time simpleType):
        EmsLeftTime
        EmsArrivalTime

IncidentTime
EmsNotifyTime
EdDischargeTime
HospitalProcedureStartTime
HospitalDischargeTime

11/13/07

1. InjuryDiagnosis changed max from 5 to 6.

11/6/2007

1. Bound Race at 2 items
2. Ethnicity becomes a single item – no longer a List
3. Add the following new elements:
   - IncidentCountry same data type as PatientCountry
   - AisPredot, AisSeverity, IssRegion, AisVersion, IssLocal – no biu since optional
4. OtherTransport bounded to 5 items
5. SBP (Field and ED) range now 0 to 299
6. PulseRate (Field and ED) range now 0 to 299
7. RespRate (Field and ED) range now 0 to 59
8. Temperature range now 0 to 120
9. Procedures bounded to 200 items
10. Diagnoses bounded to 50 items
11. ProtectiveDevices bounded to 10 items
12. AirbagDeployments bounded to 4 items
13. Removed Facility elements
14. Commented out HomeZip and InjuryZip simple types since they weren't being used and changed the
Zip simple type to require min 5 digits or max 5 + "-" + 4 digits.
15. Complications bounded to 10 items.

9/6/2007

1. Valid range for Age changed to 0 - 120.
2. Valid range for EmsTotalGcs and TotalGcs changed to 3 - 15.
3. LocationECode minExclusive = 0 changed to minInclusive = 0 to include 0 as a valid value.
4. HomeCountry changed to 2 character string with pattern A - Z.
5. HomeState and IncidentState changed to both be a 2 character string with pattern 0 - 9.
6. HomeCounty and IncidentCounty changed to both be a 3 character string with pattern 0 - 9.
7. HomeCity and IncidentCity changed to both be a 5 character string with pattern 0 - 9.
8. ComorbidCondition, PatientsOccupationalIndustry, EdDischargeDisposition, DeathInEd,
and HospitalComplication all changed to type integer.
9. PrimaryEcode and AdditionalEcode changed to be type string with minimum 3 maximum 5 characters.
10. InjuryDiagnosis changed to introduce a minimum of 3 characters and a maximum of 5.

8/17/2007

1. RespiratoryAssistance was missing from the XSD (the type was declared only).
2. Various documentation / annotation corrections.