

# ISO 21090:2011-02 (E)

## Health informatics - Harmonized data types for information interchange

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>4</b>	<b>Abbreviated terms .....</b>	<b>4</b>
<b>5</b>	<b>Conformance .....</b>	<b>5</b>
<b>5.1</b>	<b>General .....</b>	<b>5</b>
<b>5.2</b>	<b>Direct conformance .....</b>	<b>5</b>
<b>5.3</b>	<b>Indirect conformance .....</b>	<b>7</b>
<b>6</b>	<b>Datatypes overview .....</b>	<b>9</b>
<b>6.1</b>	<b>What is a datatype? .....</b>	<b>9</b>
<b>6.2</b>	<b>Definitions of datatypes .....</b>	<b>9</b>
<b>6.3</b>	<b>Datatype names and re-use of common datatype names .....</b>	<b>10</b>
<b>6.4</b>	<b>Mapping to this datatypes International Standard .....</b>	<b>10</b>
<b>6.5</b>	<b>Conformance with ISO/IEC 11404 .....</b>	<b>10</b>
<b>6.6</b>	<b>Reference to UML 2 .....</b>	<b>11</b>
<b>6.7</b>	<b>Modelling of datatypes .....</b>	<b>11</b>
<b>7</b>	<b>Datatypes .....</b>	<b>15</b>
<b>7.1</b>	<b>General properties .....</b>	<b>15</b>
<b>7.2</b>	<b>Top level model .....</b>	<b>20</b>
<b>7.3</b>	<b>Basic datatypes .....</b>	<b>22</b>
<b>7.4</b>	<b>Text and binary datatypes .....</b>	<b>33</b>
<b>7.5</b>	<b>Coded datatypes (terminology) .....</b>	<b>48</b>
<b>7.6</b>	<b>Identification and location datatypes .....</b>	<b>61</b>
<b>7.7</b>	<b>Name and address datatypes .....</b>	<b>72</b>
<b>7.8</b>	<b>Quantity datatypes .....</b>	<b>93</b>
<b>7.9</b>	<b>Collections of datatypes .....</b>	<b>121</b>
<b>7.10</b>	<b>Continuous set datatypes .....</b>	<b>136</b>
<b>7.11</b>	<b>Uncertainty datatypes .....</b>	<b>155</b>
<b>7.12</b>	<b>Structured text .....</b>	<b>158</b>
	<b>Annex A (normative) XML representation .....</b>	<b>180</b>
	<b>Annex B (normative) UML support types .....</b>	<b>183</b>
	<b>Annex C (informative) RM-ODP viewpoint mappings .....</b>	<b>186</b>
	<b>Annex D (informative) HL7 V3 Abstract Data Types mapping .....</b>	<b>187</b>
	<b>Annex E (informative) Schema for XML representation .....</b>	<b>194</b>
	<b>Bibliography .....</b>	<b>195</b>