

# 1 Namespace: "http://www.pharmml.org/2013/03/CommonTypes"

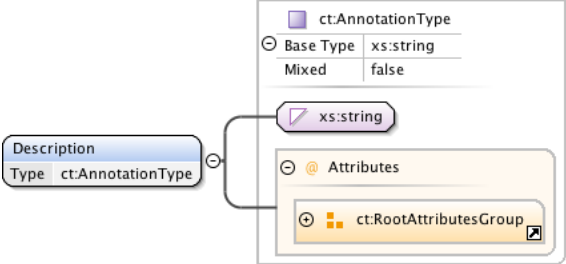
## 1.1 Schema(s)

### 1.1.1 Main schema commonTypes.xsd

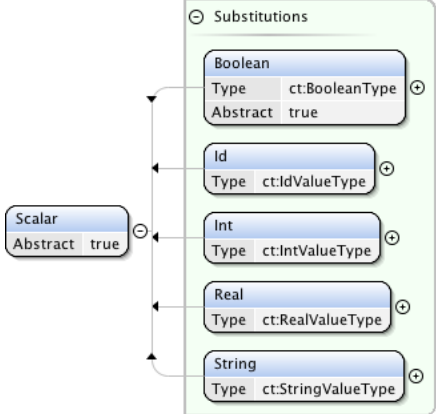
Namespace	http://www.pharmml.org/2013/03/CommonTypes
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## 1.2 Element(s)

### 1.2.1 Element ct:Description

Namespace	http://www.pharmml.org/2013/03/CommonTypes																
Annotations	Element provides additional documentation about its parent element.																
Diagram																	
Type	ct:AnnotationType																
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr></thead><tbody><tr><td>id</td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr></tbody></table>	QName	Type	Use				id	ct:IdType	optional							
QName	Type	Use															
id	ct:IdType	optional															
		The element identifier.															

### 1.2.2 Element ct:Scalar

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	An element that defines a scalar value. This element is abstract the specific scalar elements are specified by the substitution group.				
Diagram					

Substitution Group	<ul style="list-style-type: none"> <li>• <b>ct:Int</b></li> <li>• <b>ct:Real</b></li> <li>• <b>ct:String</b></li> <li>• <b>ct:Id</b></li> <li>• <b>ct:Boolean</b></li> <li>• <b>ct:True</b></li> <li>• <b>ct:False</b></li> </ul>
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### 1.2.3 Element **ct : SymbRef**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>				
Annotations	Element references a symbol defined elsewhere in the document.				
Diagram					
Type	<b>ct:SymbolRefType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>blkIdRef</b>	<b>ct:BlockIdType</b>	optional		
		ID referencing a Block.			
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			
	<b>symbIdRef</b>	<b>ct:SymbolIdType</b>	required		
		ID referencing a Symbol.			

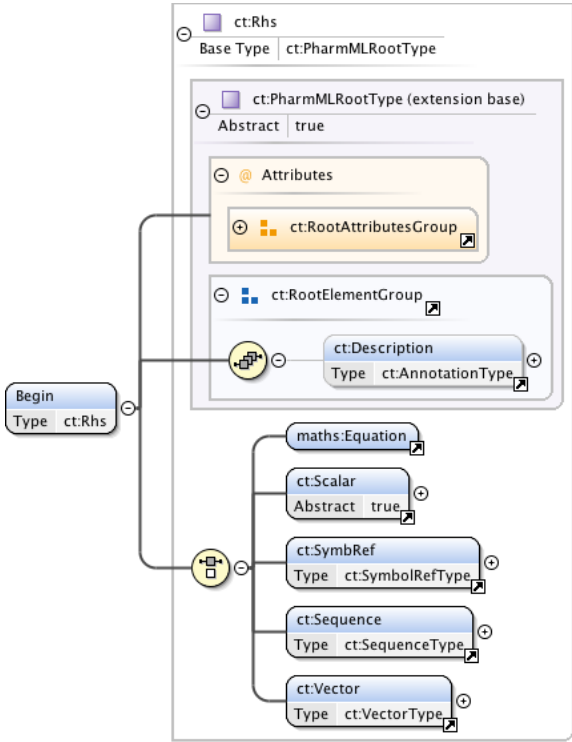
### 1.2.4 Element **ct : Sequence**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>
Annotations	Element defines a uniform sequence of values.

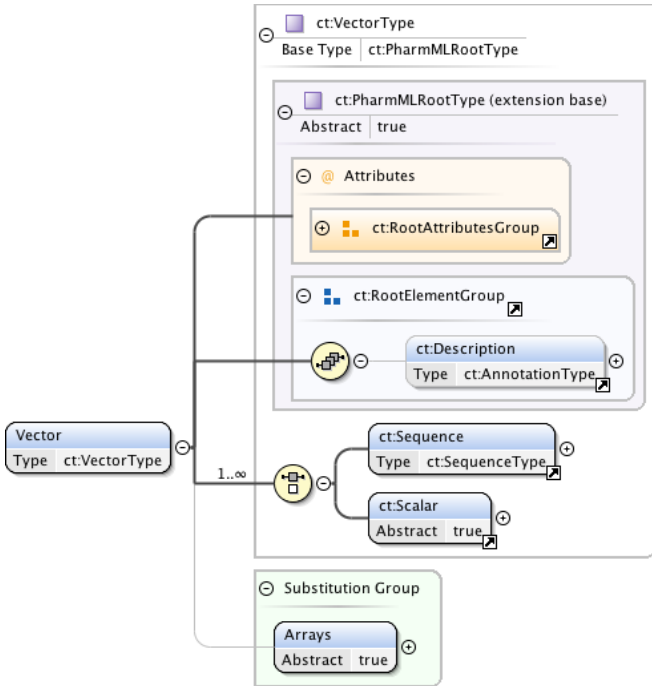
Diagram					
Type	ct:SequenceType				
Substitution Group Affiliation	<ul style="list-style-type: none"> <li>ct:Arrays</li> </ul>				
Attributes	QName	Type	Use		
	id	ct:IdType	optional		
		The element identifier.			

### 1.2.5 Element ct:SequenceType /ct:Begin

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	The initial value of the sequence.

Diagram						
Type	<b>ct:Rhs</b>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

### 1.2.6 Element **ct:Vector**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>					
Annotations	Element defines a vector of values.					
Diagram						

Type	ct:VectorType					
Substitution Group Affiliation	<ul style="list-style-type: none"> <li>ct:Arrays</li> </ul>					
Attributes	QName	Type	Use			
	id	ct:IdType	optional			
		The element identifier.				

### 1.2.7 Element ct:SequenceType /ct:StepSize

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	The amount incremented to get the next value in the sequence. The step size can be negative					
Diagram						
Type	ct:Rhs					
Attributes	QName	Type	Use			
	id	ct:IdType	optional			
		The element identifier.				

### 1.2.8 Element ct:SequenceType /ct:End

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	The maximum possible value of the sequence.					

Diagram					
Type	ct:Rhs				
Attributes	QName	Type	Use		
	id	ct:IdType	optional		
		The element identifier.			

### 1.2.9 Element ct:SequenceType /ct:Repetitions

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	The number of times to incrememnt the sequence by the step size.

Diagram					
Type	ct:Rhs				
Attributes	QName	Type	Use		
	id	ct:IdType	optional		
		The element identifier.			

### 1.2.10 Element ct : Symbol

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	Element defining the name of the symbol.				
Diagram					
Type	ct:SymbolNameType				
Attributes	QName	Type	Use		
	id	ct:IdType	optional		
		The element identifier.			

### 1.2.11 Element ct : Assign

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	This element indicates that the value(s) or equation defined by its child elements are to be assigned to its parent element. It is the equivalent of an assignment operator.				

Diagram					
Type	ct:Rhs				
Attributes	QName	Type	Use		
	id	ct:IdType	optional		
		The element identifier.			

### 1.2.12 Element ct:DerivativeVariableType /ct:IndependentVariable

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	The independent variable of the derivative.				
Diagram					
Type	ct:IndependentVariableReferenceType				

### 1.2.13 Element ct:DerivativeVariableType /ct:InitialCondition

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	The value of the initial condition.				



Diagram																	
Type	<b>ct:InitialConditionType</b>																
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td><b>ct:IdType</b></td><td>optional</td><td></td><td></td><td></td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	<b>ct:IdType</b>	optional				The element identifier.			
QName	Type	Use															
<b>id</b>	<b>ct:IdType</b>	optional															

#### 1.2.14 Element **ct:FunctionDefinitionType** /**ct:FunctionArgument**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>				
Annotations	The argument (parameter) to the function.				
Diagram					
Type	<b>ct:FuncParameterDefinitionType</b>				

Attributes	QName	Type	Use			
	<b>id</b>	ct:IdType	optional			
		The element identifier.				
	<b>symlId</b>	ct:SymbolIdType	required			
		The symbol id used to define the variable.				
	<b>symbolType</b>	ct:SymbolTypeType	required			
		The type of the function definition.				

#### 1.2.15 Element ct:FunctionDefinitionType /ct:Definition

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	The body of the function definition.					
Diagram						
Type	ct:ScalarRhs					
Attributes	QName	Type	Use			
	<b>id</b>	ct:IdType	optional			
		The element identifier.				

#### 1.2.16 Element ct:OIDRef

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	An element that provides a reference to an OID.					

Diagram						
Type	<b>ct:OidRefType</b>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
	<b>oidRef</b>	<b>ct:oidType</b>	required			

### 1.2.17 Element ct : Int

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>					
Annotations	The element defines an integer value. It is a scalar.					
Diagram						
Type	<b>ct:IntValueType</b>					
Substitution Group Affiliation	<ul style="list-style-type: none"> <li><b>ct:Scalar</b></li> </ul>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

### 1.2.18 Element ct : Real

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>
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Annotations	The element defines an real value. It is a scalar.																
Diagram																	
Type	<b>ct:RealValueType</b>																
Substitution Group Affiliation	<ul style="list-style-type: none"> <li>• <b>ct:Scalar</b></li> </ul>																
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td><b>ct:IdType</b></td><td>optional</td><td></td><td></td><td></td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	<b>ct:IdType</b>	optional				The element identifier.			
QName	Type	Use															
<b>id</b>	<b>ct:IdType</b>	optional															

### 1.2.19 Element ct:String

Namespace	http://www.pharmml.org/2013/03/CommonTypes																
Annotations	The element defines an string value. It is a scalar.																
Diagram																	
Type	<b>ct:StringValueType</b>																
Substitution Group Affiliation	<ul style="list-style-type: none"> <li>• <b>ct:Scalar</b></li> </ul>																
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td><b>ct:IdType</b></td><td>optional</td><td></td><td></td><td></td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	<b>ct:IdType</b>	optional				The element identifier.			
QName	Type	Use															
<b>id</b>	<b>ct:IdType</b>	optional															

### 1.2.20 Element ct:Id

Namespace	http://www.pharmml.org/2013/03/CommonTypes																
Annotations	Element defines a value of type Id.																
Diagram																	
Type	ct:IdValueType																
Substitution Group Affiliation	<ul style="list-style-type: none"> <li>ct:Scalar</li> </ul>																
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td>id</td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr> </tbody> </table>	QName	Type	Use				id	ct:IdType	optional				The element identifier.			
QName	Type	Use															
id	ct:IdType	optional															

### 1.2.21 Element ct: Boolean

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	This abstract element defines an Boolean value.				
Diagram					



Namespace	http://www.pharmml.org/2013/03/CommonTypes																						
Annotations	This element defines a FALSE Boolean value.																						
Diagram																							
Type	ct:FalseBooleanType																						
Substitution Group Affiliation	<ul style="list-style-type: none"> <li>ct:Boolean</li> </ul>																						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td>id</td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr> <tr> <td colspan="6">The element identifier.</td></tr> </tbody> </table>	QName	Type	Use				id	ct:IdType	optional				The element identifier.									
QName	Type	Use																					
id	ct:IdType	optional																					
The element identifier.																							

#### 1.2.24 Element ct : Name

Namespace	http://www.pharmml.org/2013/03/CommonTypes																						
Annotations	Element defines a human readable/display name for its parent element.																						
Diagram																							
Type	ct:NameType																						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td>id</td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr> <tr> <td colspan="6">The element identifier.</td></tr> </tbody> </table>	QName	Type	Use				id	ct:IdType	optional				The element identifier.									
QName	Type	Use																					
id	ct:IdType	optional																					
The element identifier.																							

### 1.2.25 Element `ct:Array`s

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	An abstract element that defines an array of values.
Diagram	
Substitution Group	<ul style="list-style-type: none"> <li>• <code>ct:Sequence</code></li> <li>• <code>ct:Vector</code></li> </ul>

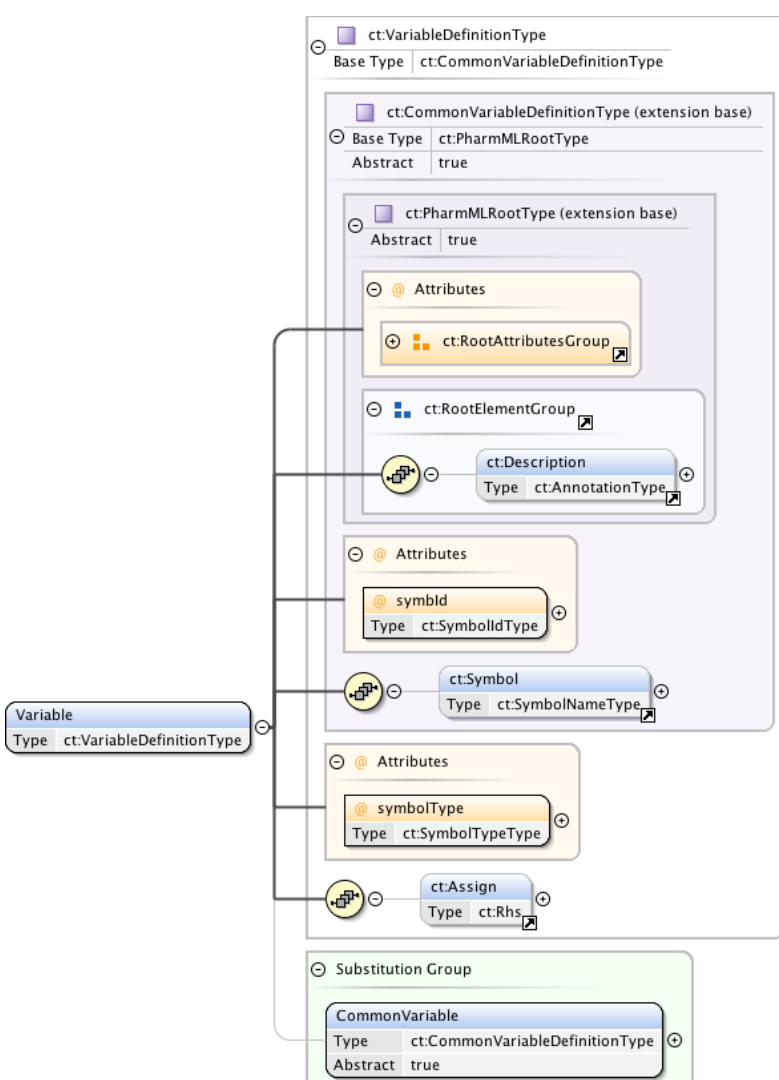
### 1.2.26 Element `ct:CommonVariable`

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	An abstract element that defines a variety of variable declarations. The possible variable declarations are defined by the substitution group.
Diagram	
Type	<code>ct:CommonVariableDefinitionType</code>
Substitution Group	<ul style="list-style-type: none"> <li>• <code>ct:Variable</code></li> <li>• <code>ct:DerivativeVariable</code></li> </ul>



Attributes	QName	Type	Use			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				
	<b>symbId</b>	<b>ct:SymbolIdType</b>	required			
		The symbol id used to define the variable.				

### 1.2.27 Element **ct:Variable**

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	Element specifies a standard variable definition.					
Diagram	 <p>The diagram illustrates the structure of the <b>ct:VariableDefinitionType</b> element. It is an abstract type that serves as a base for <b>ct:CommonVariableDefinitionType</b>. The <b>ct:CommonVariableDefinitionType</b> is an extension base for <b>ct:PharmMLRootType</b> and is abstract. The <b>ct:PharmMLRootType</b> is also an extension base and is abstract. The <b>ct:PharmMLRootType</b> contains several components: a group of attributes (including <b>ct:RootAttributesGroup</b>), a group of root elements (including <b>ct:Description</b>), a group of attributes (including <b>symbId</b>), a <b>ct:Symbol</b> element, a group of attributes (including <b>symbolType</b>), a <b>ct:Assign</b> element, and a substitution group containing <b>CommonVariable</b>. The <b>ct:Variable</b> element is shown as a specialization of <b>ct:VariableDefinitionType</b>.</p>					
Type	<b>ct:VariableDefinitionType</b>					
Substitution Group Affiliation	<ul style="list-style-type: none"> <li><b>ct:CommonVariable</b></li> </ul>					

Attributes	QName	Type	Use			
	<b>id</b>	ct:IdType	optional			
	<b>symblId</b>	ct:SymbolIdType	required			
	<b>symbolType</b>	ct:SymbolTypeType	required			
		The type of the variable.				

### 1.2.28 Element ct:DerivativeVariable

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	Element specifies a derivative variable definition.
Diagram	<p>The diagram illustrates the structure of the <b>ct:DerivativeVariableType</b> element. It is an abstract base type that extends <b>ct:CommonVariableDefinitionType</b>. The diagram shows the following components:</p> <ul style="list-style-type: none"> <li><b>Base Type:</b> <b>ct:CommonVariableDefinitionType</b> (extension base)</li> <li><b>Abstract:</b> true</li> <li><b>Attributes:</b> <ul style="list-style-type: none"> <li><b>ct:RootAttributesGroup</b> (Type: ct:RootAttributesGroup)</li> <li><b>ct:RootElementGroup</b> (Type: ct:RootElementGroup) <ul style="list-style-type: none"> <li><b>ct:Description</b> (Type: ct:AnnotationType)</li> </ul> </li> <li><b>ct:Symbol</b> (Type: ct:SymbolNameType)</li> <li><b>ct:SymbolType</b> (Type: ct:SymbolTypeType, Fixed: real)</li> </ul> </li> <li><b>Substitution Group:</b> <ul style="list-style-type: none"> <li><b>CommonVariable</b> (Type: ct:CommonVariableDefinitionType, Abstract: true)</li> </ul> </li> </ul> <p>The <b>ct:DerivativeVariableType</b> element is shown as a box with the following properties:</p> <ul style="list-style-type: none"> <li><b>DerivativeVariable</b> (Type: ct:DerivativeVariableType)</li> </ul>
Type	ct:DerivativeVariableType

Substitution Group Affiliation	<ul style="list-style-type: none"> <li>ct:CommonVariable</li> </ul>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Use</b>		
	<b>id</b>	ct:IdType		optional		
		The element identifier.				
	<b>symbId</b>	ct:SymbolIdType		required		
		The symbol id used to define the variable.				
	<b>symbolType</b>	ct:SymbolTypeType	real	required		
		The symbol type of a derivative variable is always set to be a real.				

### 1.2.29 Element ct:VariableAssignment

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	Element specifies a variable assignment.					
Diagram	<p>The diagram illustrates the structure of the <code>ct:VariableAssignmentType</code>. It is an abstract type that extends <code>ct:PharmMLRootType</code>. The <code>ct:PharmMLRootType</code> is an abstract type with the attribute <code>Abstract</code> set to <code>true</code>. It contains a <code>ct:RootAttributesGroup</code> and a <code>ct:RootElementGroup</code>. The <code>ct:RootElementGroup</code> contains a <code>ct:Description</code> (type <code>ct:AnnotationType</code>), a <code>ct:SymbRef</code> (type <code>ct:SymbolRefType</code>), and a <code>ct:Assign</code> (type <code>ct:Rhs</code>). The <code>ct:Assign</code> contains a <code>ct:Rhs</code>.</p>					
Type	ct:VariableAssignmentType					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	ct:IdType	optional			
		The element identifier.				

### 1.2.30 Element ct:VariabilityReference

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	The element provides a reference to a variability level. It associates its parent element with the reference variability level.					

Diagram																	
Type	<b>ct:LevelReferenceType</b>																
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td><b>ct:IdType</b></td><td>optional</td><td></td><td></td><td></td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	<b>ct:IdType</b>	optional				The element identifier.			
QName	Type	Use															
<b>id</b>	<b>ct:IdType</b>	optional															

### 1.2.31 Element **ct:FunctionDefinition**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>
Annotations	This element defines a function within the PharmML document.

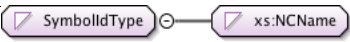
Diagram					
Type	ct:FunctionDefinitionType				
Attributes	QName	Type	Use		
	id	ct:IdType	optional		
		The element identifier.			
	symlId	ct:SymbolIdType	required		
		The symbol id used to define the variable.			
	symbolType	ct:SymbolTypeType	required		
		The type of the function definition.			

## 1.3 Simple Type(s)

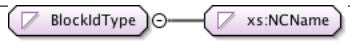
### 1.3.1 Simple Type ct:SymbolTypeType

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	Defines the symbol types. Restricted to the available types.				
Diagram					
Type	restriction of xs:token				
Facets	enumeration	int			
	enumeration	real			
	enumeration	boolean			
	enumeration	string			
	enumeration	id			

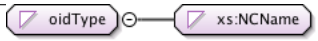
### 1.3.2 Simple Type ct:SymbolIdType

Namespace	http://www.pharmml.org/2013/03/CommonTypes		
Annotations	Type for symbols identifiers.		
Diagram			
Type	xs:NCName		


### 1.3.3 Simple Type ct:BlockIdType

Namespace	http://www.pharmml.org/2013/03/CommonTypes		
Annotations	Type for block identifiers.		
Diagram			
Type	xs:NCName		

### 1.3.4 Simple Type ct:oidType

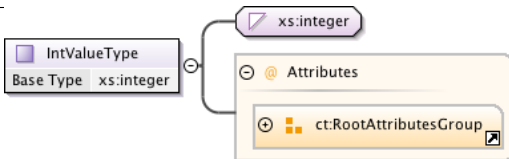
Namespace	http://www.pharmml.org/2013/03/CommonTypes		
Annotations	Type for OID identifiers.		
Diagram			
Type	xs:NCName		

### 1.3.5 Simple Type ct:IdType

Namespace	http://www.pharmml.org/2013/03/CommonTypes		
Annotations	Type of the element identifier.		
Diagram			
Type	xs:NCName		

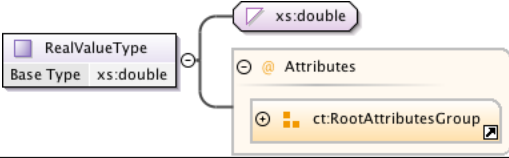
## 1.4 Complex Type(s)

### 1.4.1 Complex Type ct:IntValueType

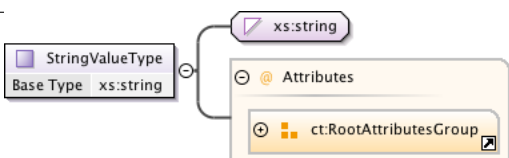
Namespace	http://www.pharmml.org/2013/03/CommonTypes																	
Annotations	Integer value.																	
Diagram																		
Type	extension of xs:integer																	
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr></thead><tbody><tr><td><b>id</b></td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr></tbody></table>	QName	Type	Use				<b>id</b>	ct:IdType	optional				The element identifier.				
QName	Type	Use																
<b>id</b>	ct:IdType	optional																

### 1.4.2 Complex Type ct:RealValueType

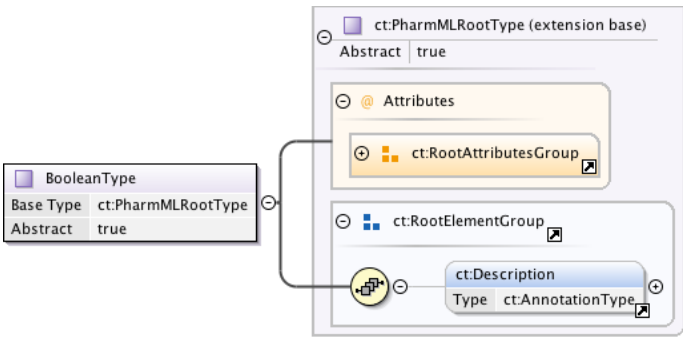
Namespace	http://www.pharmml.org/2013/03/CommonTypes		
Annotations	Real value.		

Diagram						
Type	extension of xs:double					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

### 1.4.3 Complex Type ct:StringValueType

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	String value.					
Diagram						
Type	extension of xs:string					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

### 1.4.4 Complex Type ct:BooleanType

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	A Boolean type.					
Diagram						
Type	extension of <b>ct:PharmMLRootType</b>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

### 1.4.5 Complex Type ct:PharmMLRootType

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	Root type of all elements and types defining elements in PharmML.					

Diagram																							
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr> <tr> <td></td><td colspan="5">The element identifier.</td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	ct:IdType	optional					The element identifier.								
QName	Type	Use																					
<b>id</b>	ct:IdType	optional																					
	The element identifier.																						

#### 1.4.6 Complex Type ct:AnnotationType

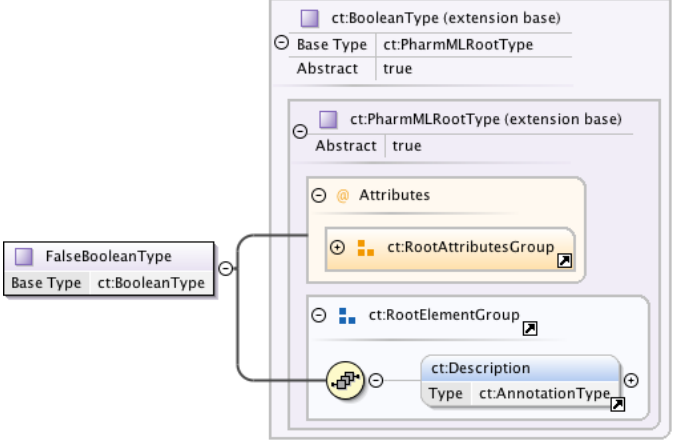
Namespace	http://www.pharmml.org/2013/03/CommonTypes																						
Diagram																							
Type	extension of xs:string																						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr> <tr> <td></td><td colspan="5">The element identifier.</td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	ct:IdType	optional					The element identifier.								
QName	Type	Use																					
<b>id</b>	ct:IdType	optional																					
	The element identifier.																						

#### 1.4.7 Complex Type ct:TrueBooleanType

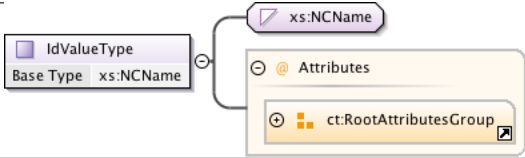
Namespace	http://www.pharmml.org/2013/03/CommonTypes																						
Annotations	A literal Boolean value for true.																						
Diagram																							
Type	extension of ct:BooleanType																						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td>ct:IdType</td><td>optional</td><td></td><td></td><td></td></tr> <tr> <td></td><td colspan="5">The element identifier.</td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	ct:IdType	optional					The element identifier.								
QName	Type	Use																					
<b>id</b>	ct:IdType	optional																					
	The element identifier.																						

#### 1.4.8 Complex Type ct:FalseBooleanType



Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	A literal Boolean value for false.				
Diagram					
Type	extension of <b>ct:BooleanType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			

#### 1.4.9 Complex Type ct : IdValueType

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	A literal Id value. This has a type of `id`.				
Diagram					
Type	extension of xs:NCName				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			

#### 1.4.10 Complex Type ct : OidRefType

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	Type used by element referencing an OID.				

Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b>	optional		
	<b>oidRef</b>	<b>ct:oidType</b>	required		

#### 1.4.11 Complex Type **ct : SymbolRefType**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>				
Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>blkIdRef</b>	<b>ct:BlockIdType</b>	optional		
		ID referencing a Block.			
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			
	<b>symbIdRef</b>	<b>ct:SymbolIdType</b>	required		
		ID referencing a Symbol.			

#### 1.4.12 Complex Type **ct : ScalarRhs**

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			

#### 1.4.13 Complex Type **ct : Rhs**

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			

#### 1.4.14 Complex Type ct : SequenceType

Namespace	http://www.pharmml.org/2013/03/CommonTypes																
Annotations	The definition of a uniform sequence of numbers. Conceptually is has two forms. The first form takes an initial number, a step size and the last number. The sequence starts at the first number and a new value, incremented by the step size, is added to the sequence until this value exceeds the end value. In the second the step size is incremented r times, where r is the number of repetitions.																
Diagram																	
Type	extension of <b>ct:PharmMLRootType</b>																
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td><b>ct:IdType</b></td><td>optional</td><td></td><td></td><td></td></tr> </tbody> </table>	QName	Type	Use				<b>id</b>	<b>ct:IdType</b>	optional				The element identifier.			
QName	Type	Use															
<b>id</b>	<b>ct:IdType</b>	optional															

#### 1.4.15 Complex Type ct : VectorType

Namespace	http://www.pharmml.org/2013/03/CommonTypes				
Annotations	The definition of a non-uniform sequence of numbers. The vector is an ordered list of values. The values of the sequence element are inserted into the vector at the point of definition. For example, take the vector (the [] brackets denote a sequence): 0, 4, [0:1:3], 33. Inserting the sequence gives us the vector of values: 0, 4, 0, 1, 2, 3, 33.				

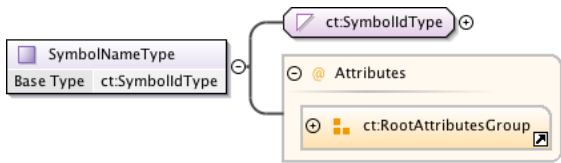
Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b> The element identifier.	optional		

#### 1.4.16 Complex Type **ct:CommonVariableDefinitionType**

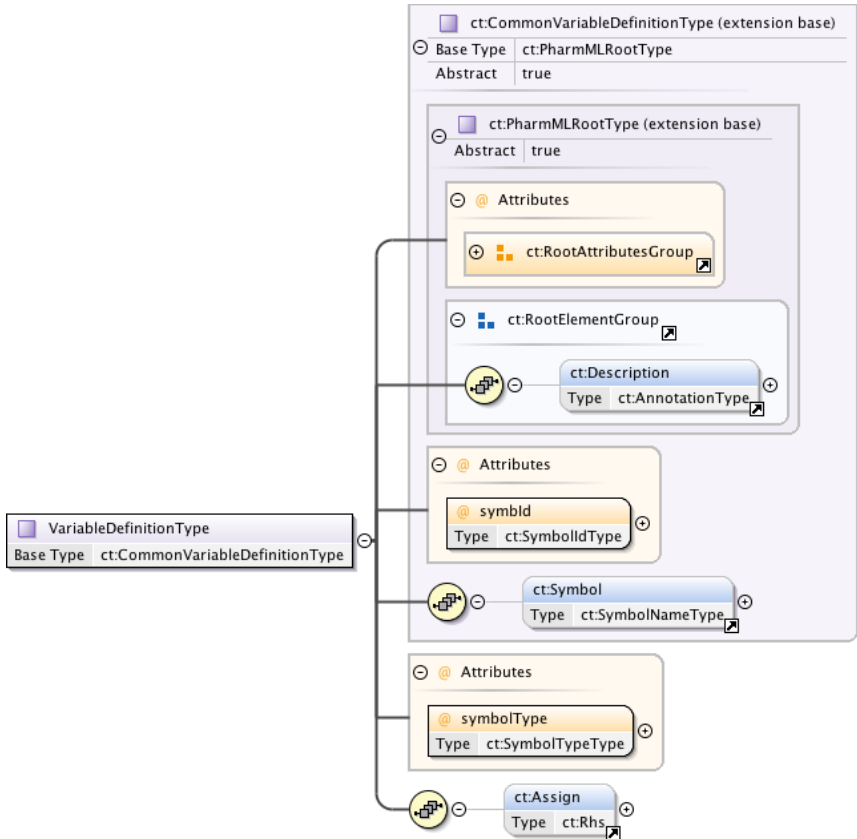
Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>				
Annotations	An abstract type defining the comment properties of a variable definition.				
Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b> The element identifier.	optional		
	<b>symbolId</b>	<b>ct:SymbolIdType</b> The symbol id used to define the variable.	required		

#### 1.4.17 Complex Type **ct:SymbolNameType**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>
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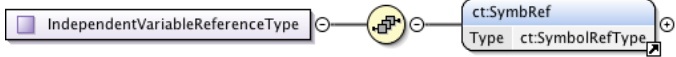
Annotations	Type defining the name of the symbol in a form suitable for display. Currently this should be plain text and not include any markup.					
Diagram						
Type	extension of <b>ct:SymbolIdType</b>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

#### 1.4.18 Complex Type **ct:VariableDefinitionType**

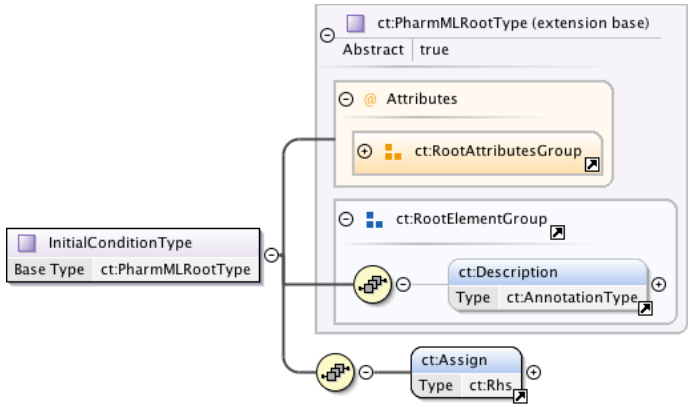
Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>					
Annotations	A standard variable definition. Elements defined using this XML Schema Type have a Symbol type in addition to other common variable definition properties.					
Diagram						
Type	extension of <b>ct:CommonVariableDefinitionType</b>					

Attributes	QName	Type	Use			
	<b>id</b>	ct:IdType	optional			
		The element identifier.				
	<b>symbolId</b>	ct:SymbolIdType	required			
		The symbol id used to define the variable.				
	<b>symbolType</b>	ct:SymbolTypeType	required			
		The type of the variable.				

#### 1.4.19 Complex Type ct:IndependentVariableReferenceType

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	References the independent variable.
Diagram	

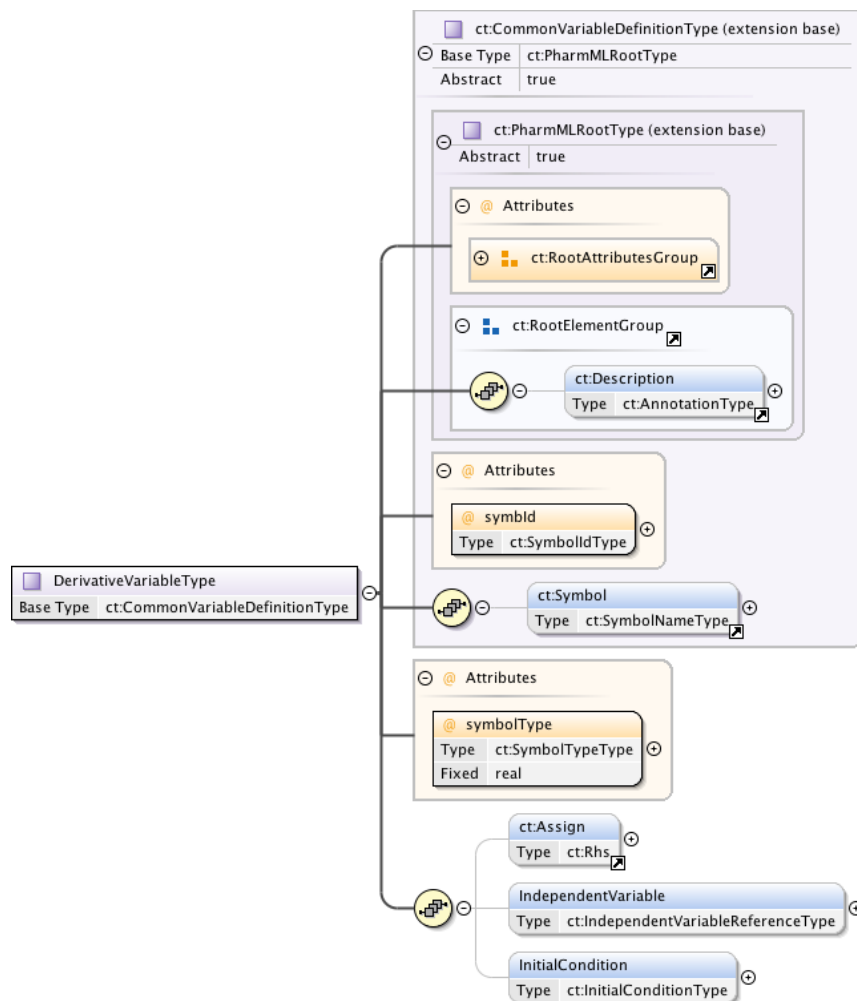
#### 1.4.20 Complex Type ct:InitialConditionType

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	The initial condition of the derivative variable.					
Diagram						
Type	extension of ct:PharmMLRootType					
Attributes	QName	Type	Use			
	<b>id</b>	ct:IdType	optional			
		The element identifier.				

#### 1.4.21 Complex Type ct:DerivativeVariableType

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	The type specifying a derivative variable.

Diagram



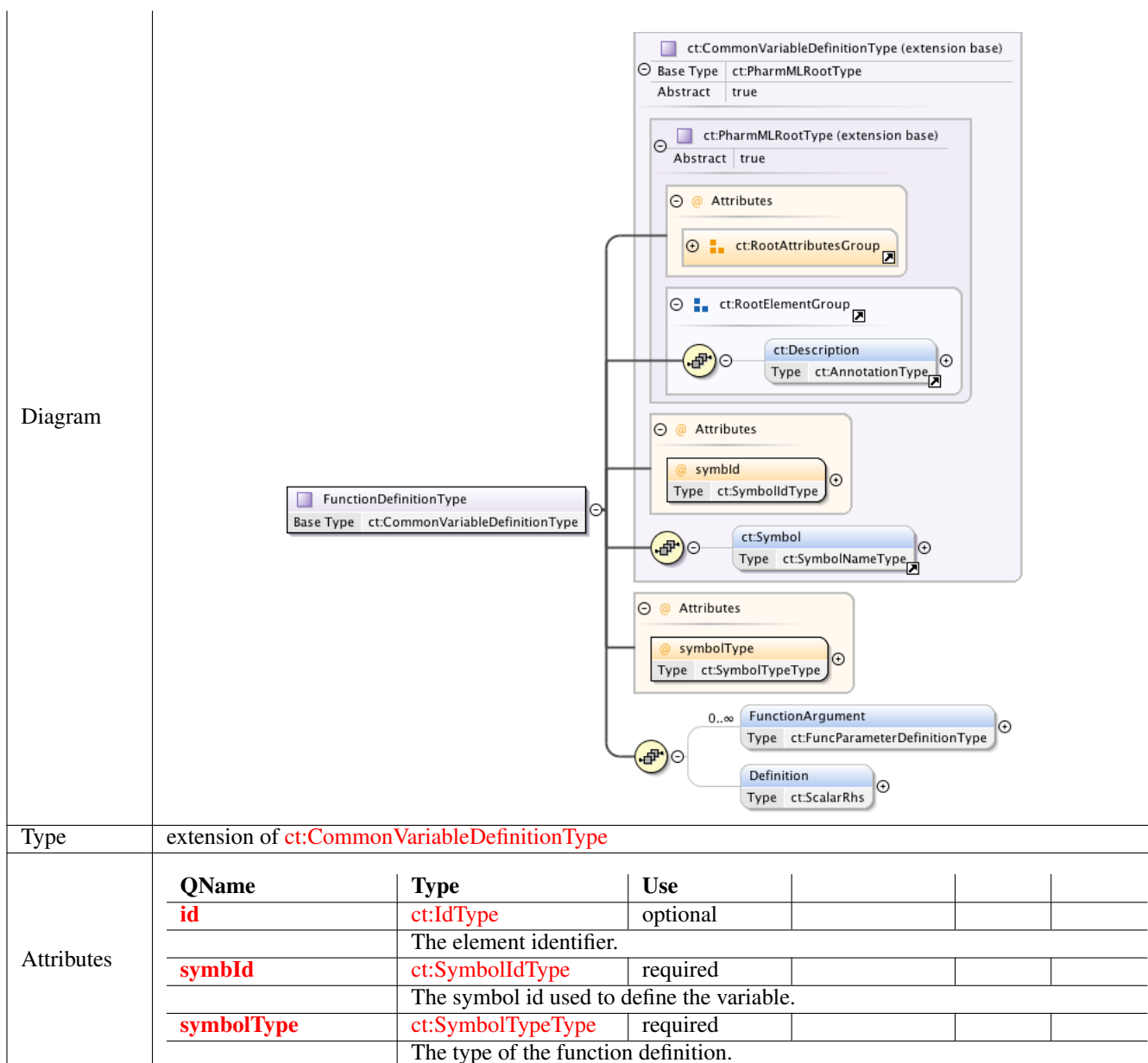
Type extension of **ct:CommonVariableDefinitionType**

Attributes	QName	Type	Fixed	Use		
	<b>id</b>	<b>ct:IdType</b>		optional		
	The element identifier.					
	<b>symbId</b>	<b>ct:SymbolIdType</b>		required		
	The symbol id used to define the variable.					
	<b>symbolType</b>	<b>ct:SymbolTypeType</b>	real	required		
	The symbol type of a derivative variable is always set to be a real.					

#### 1.4.22 Complex Type **ct:FunctionDefinitionType**

Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>
Annotations	This defines a function that can be used elsewhere in the PharmML document.





#### 1.4.23 Complex Type **ct:FuncParameterDefinitionType**

Namespace	http://www.pharmml.org/2013/03/CommonTypes
Annotations	Defines a function argument defintion type. The function argument has a symbol identifier, an optional name and a type.

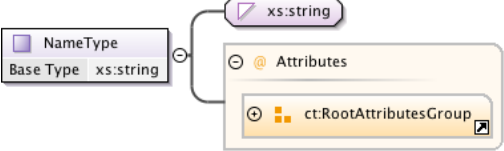
Diagram					
Type	extension of <b>ct:CommonVariableDefinitionType</b>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>		
	<b>id</b>	<b>ct:IdType</b>	optional		
		The element identifier.			
	<b>symbId</b>	<b>ct:SymbolIdType</b>	required		
		The symbol id used to define the variable.			
	<b>symbolType</b>	<b>ct:SymbolTypeType</b>	required		
		The type of the function definition.			

#### 1.4.24 Complex Type **ct : LevelReferenceType**

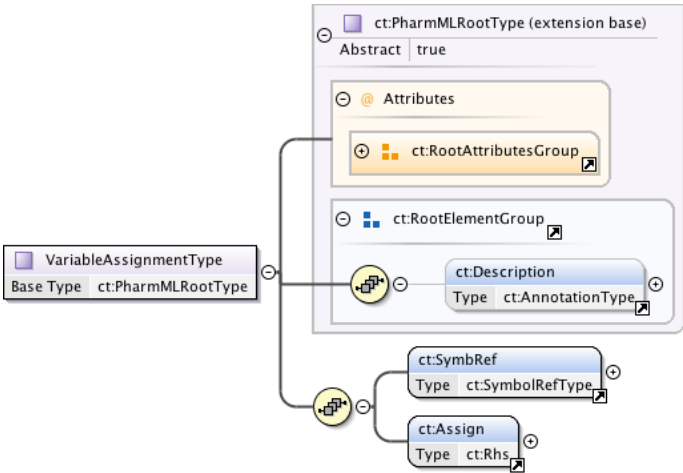
Namespace	<a href="http://www.pharmml.org/2013/03/CommonTypes">http://www.pharmml.org/2013/03/CommonTypes</a>				
Annotations	A reference to a variability level.				
Diagram					
Type	extension of <b>ct:PharmMLRootType</b>				

Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

#### 1.4.25 Complex Type ct : NameType

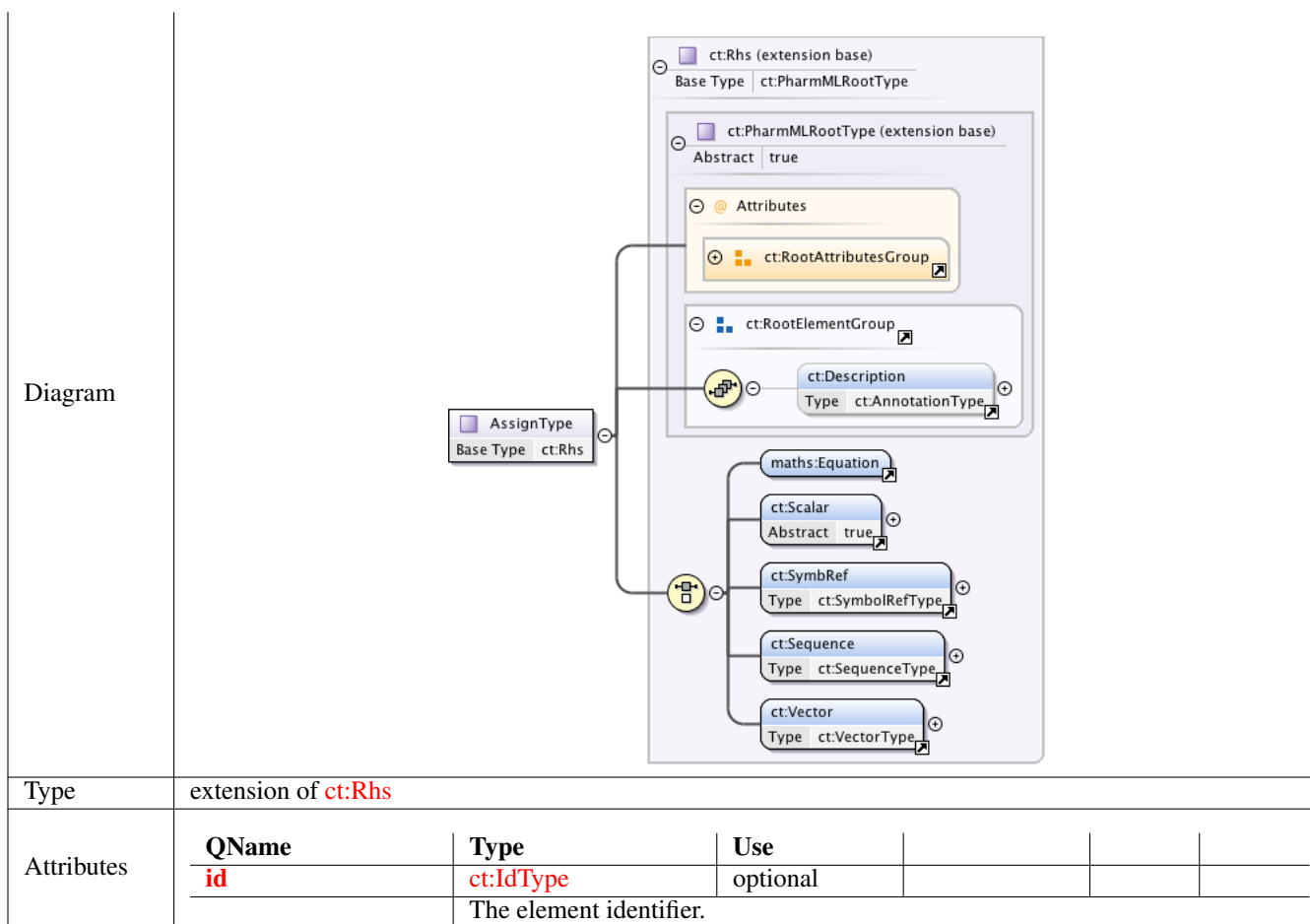
Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	Type specifying a descriptive name that can be displayed and so should be human readable.					
Diagram						
Type	extension of xs:string					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

#### 1.4.26 Complex Type ct : VariableAssignmentType

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	A type that specifies a variable assignment.					
Diagram						
Type	extension of <b>ct:PharmMLRootType</b>					
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>			
	<b>id</b>	<b>ct:IdType</b>	optional			
		The element identifier.				

#### 1.4.27 Complex Type ct : AssignType

Namespace	http://www.pharmml.org/2013/03/CommonTypes					
Annotations	The type specifies an assignment of a value(s) or equation to another element in the PharmML document.					



## 2 Namespace: ""

### 2.1 Attribute(s)

#### 2.1.1 Attribute **ct:SymbolRefType** /@blkIdRef

Namespace	No namespace
Annotations	ID referencing a Block.
Type	<b>ct:BlockIdType</b>

#### 2.1.2 Attribute **ct:SymbolRefType** /@symbIdRef

Namespace	No namespace
Annotations	ID referencing a Symbol.
Type	<b>ct:SymbolIdType</b>

#### 2.1.3 Attribute **ct:CommonVariableDefinitionType** /@symbId

Namespace	No namespace
Annotations	The symbol id used to define the variable.
Type	<b>ct:SymbolIdType</b>

#### 2.1.4 Attribute `ct:VariableDefinitionType` /@symbolType

Namespace	No namespace
Annotations	The type of the variable.
Type	<code>ct:SymbolTypeType</code>
Facets	enumeration int
	enumeration real
	enumeration boolean
	enumeration string
	enumeration id

#### 2.1.5 Attribute `ct:DerivativeVariableType` /@symbolType

Namespace	No namespace
Annotations	The symbol type of a derivative variable is always set to be a real.
Type	<code>ct:SymbolTypeType</code>
Facets	enumeration int
	enumeration real
	enumeration boolean
	enumeration string
	enumeration id

#### 2.1.6 Attribute `ct:FuncParameterDefinitionType` /@symbolType

Namespace	No namespace
Annotations	The type of the function definition.
Type	<code>ct:SymbolTypeType</code>
Facets	enumeration int
	enumeration real
	enumeration boolean
	enumeration string
	enumeration id

#### 2.1.7 Attribute `ct:FunctionDefinitionType` /@symbolType

Namespace	No namespace
Annotations	The type of the function definition.
Type	<code>ct:SymbolTypeType</code>
Facets	enumeration int
	enumeration real
	enumeration boolean
	enumeration string
	enumeration id