Health & Care Information Model:

nl.nfu.LaboratoryTestResultForTransfer-v 1.2.2

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Nictiz

Content

1. nl.nfu.LaboratoryTestResultForTransfer-v1.2.2

DCM::CoderList	Kerngroep Registratie aan de Bron
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::CreationDate	7-6-2012
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	NFU
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.13.1
DCM::KeywordList	laboratorium uitslag, lab, laboratorium bepaling
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.nfu.OverdrachtLaboratoriumUitslag
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DCM::Superseeds	
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1.1 Revision History

Publicatieversie 1.0 (15-02-2013)

Publicatieversie 1.1 (01-07-2013)

Publicatieversie 1.2 (01-04-2015)
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Publicatieversie 1.2.2 (16-07-2015)
Bevat: ZIB-420.

1.2 Concept

A laboratory result describes the result of a laboratory analysis.
In addition to the results of tests with a singular result, the results of more complex tests with multiple results or a ‘panel’ can also be recorded.

1.3 Mindmap

1.4 Purpose

Laboratory tests are done for the purpose of diagnosing and preventing disease and follow-up on the effects of treatment.

1.5 Patient Population

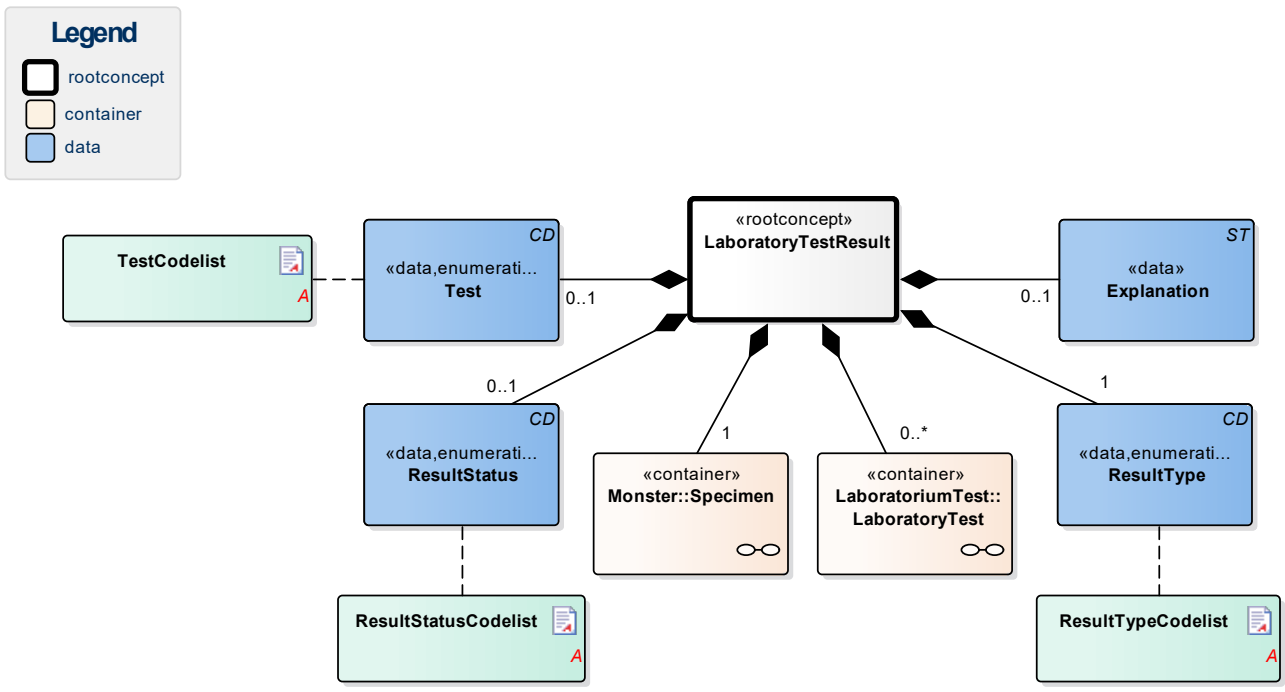
1.6 Evidence Base

There are two building blocks for recording laboratory test results: TextResultTransfer and LaboratoryResultTransfer.

In the case of laboratory test results, it is difficult to clearly indicate exactly when to use this building block and when to use the TextResultTransfer building block.
In general, laboratory tests resulting in a value (7.1 mmol/L), ordinal number (++ from series to ++++) or a quantitative result (Low) are recorded using this building block. The TextResultTransfer building block is better suited for textual results that are more descriptive in nature and which are longer than just a few words. Both types of tests occur in almost all laboratories.
The applicability of the aforementioned building blocks is not determined by the kind of lab but by the kind of result.

In developing the building block, the definitions were used from the data set and coding choices from the IHE/Nictiz e-Lab program.
The now determined building block is a subset of the e-Lab data set, provided that the detailing that is less relevant to the general transfer use case was left out. If this information is required, it can be entered in the comments field.

1.7 Information Model



«rootconcept»	LaboratoryTestResult	
Definitie	Root concept of the LaboratoryTestResultTransfer building block. This root concept contains all data elements of the Laboratory TestResultTransfer building block.	
Datatype		
DCM::ConceptId	NL-CM:13.1.1	
Opties		

«data»	Test	
Definitie	For laboratory tests comprising multiple subtests and often requested together as a whole, this concept contains the name of the compound request (often indicated as a ‘panel’, ‘battery’ or ‘cluster’). Examples include: blood gases and EBV serology.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.4	
DCM::ExampleValue	Bloedgassen	
DCM::ValueSet	TestCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.5
Opties		

«data»	ResultStatus	
Definitie	The status of the laboratory test result.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.6	
DCM::ExampleValue	Definitief	
DCM::ValueSet	ResultStatusCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.8
Opties		

«data»	Explanation	
Definitie	Comments, such as a textual interpretation or advice accompanying the result, for example.	
Datatype	ST	
DCM::ConceptId	NL-CM:13.1.5	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«data»	ResultType	
Definitie	The type of result defines the laboratory specialty under which the test is categorized.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.7	
DCM::ExampleValue	Klinische Chemie	
DCM::ValueSet	ResultTypeCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.1
Opties		

«document»	ResultStatusCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.8	
Opties		

ResultaatStatusCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.8		
Concept Name	**Concept Code**	**CodeSys. Name**	**CodeSystem OID**	**Description**
Pending	pending	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Uitslag volgt
Preliminary	preliminary	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Voorlopig
Final	final	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Definitief
Appended	appended	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Aanvullend
Corrected	corrected	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Gecorrigeerd

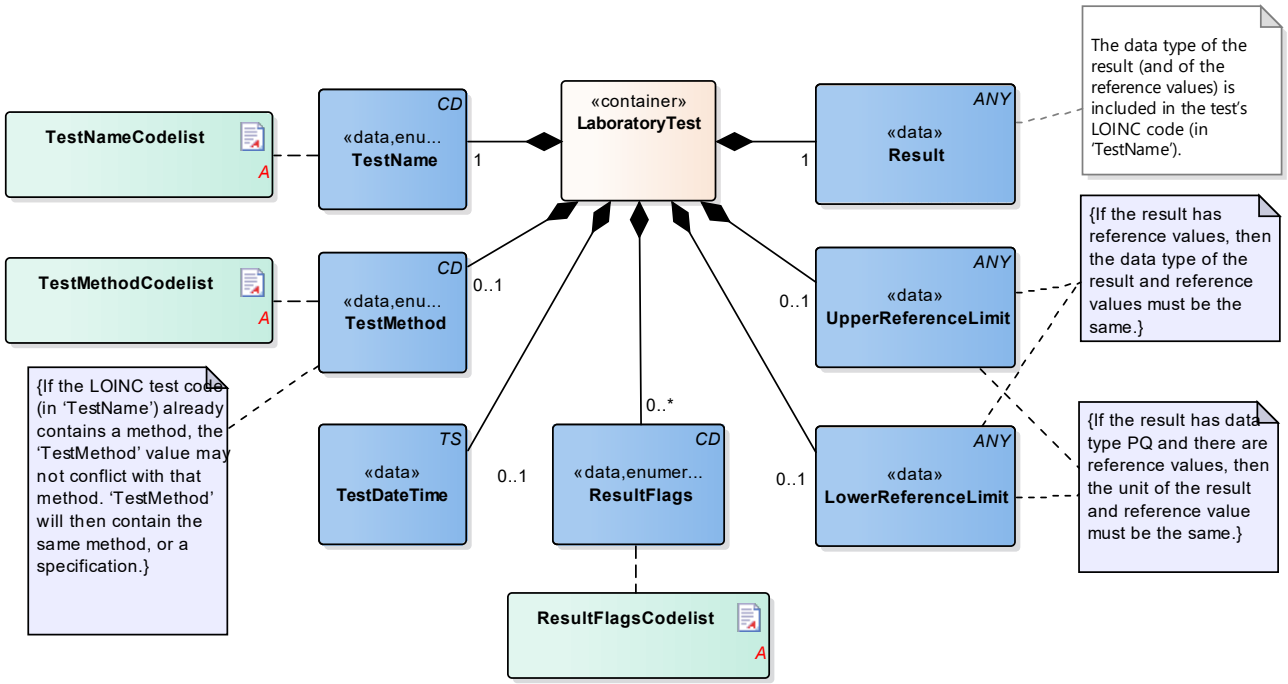
«document»	TestCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.5	
Opties		

OnderzoekCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.5
Codes	Coding Syst. Name	Coding System OID
Alle waarden	LOINC	2.16.840.1.113883.6.1

«document»	ResultTypeCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.1	
Opties		

ResultaatTypeCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.1	
Concept Name	**Concept Code**	**Coding Syst. Name**	**Coding System OID**	**Omschrijving**
Hematology	252275004	SNOMED CT	2.16.840.1.113883.6.96	Hematologie
Chemistry	275711006	SNOMED CT	2.16.840.1.113883.6.96	Klinische chemie
Serology	68793005	SNOMED CT	2.16.840.1.113883.6.96	Serologie/ immunologie
Virology	395124008	SNOMED CT	2.16.840.1.113883.6.96	Virologie
Toxicology	314076009	SNOMED CT	2.16.840.1.113883.6.96	Toxicologie
Microbiology	19851009	SNOMED CT	2.16.840.1.113883.6.96	Microbiologie

1.7.1 LaboratoriumTest



«container»	LaboratoryTest	
Definitie	Container of the LaboratoryTest concept. This container contains all data elements of the LaboratoryTest concept.	
Datatype		
DCM::ConceptId	NL-CM:13.1.3	
Opties		

«data»	TestName	
Definitie	The TestName is the name of the executed test.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.8	
DCM::ExampleValue	HbA1c	
DCM::ValueSet	TestNameCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.3
Opties		

«data»	TestMethod	
Definitie	The test method used to obtain the result.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.9	
DCM::ExampleValue	IFCC	
DCM::ValueSet	TestMethodCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.4
Opties		

«data»	TestDateTime
Definitie	The date and if possible the time at which the test was carried out.

Datatype	TS	
DCM::ConceptId	NL-CM:13.1.13	
DCM::ExampleValue	10-07-2012 20:15	
Opties		

«data»	Result	
Definitie	The test result. Depending on the type of test, the result will consist of a value with a unit or a coded value (ordinal or nominal).	
Datatype	ANY	
DCM::ConceptId	NL-CM:13.1.10	
DCM::ExampleValue	53 mmol/mol	
Opties		

«data»	UpperReferenceLimit	
Definitie	The upper reference limit for the patient of the value measured in the test.	
Datatype	ANY	
DCM::ConceptId	NL-CM:13.1.11	
DCM::ExampleValue	42 mmol/mol	
Opties		

«data»	LowerReferenceLimit	
Definitie	The lower reference limit for the patient of the value measured with the test.	
Datatype	ANY	
DCM::ConceptId	NL-CM:13.1.12	
DCM::ExampleValue	20 mmol/mol	
Opties		

«data»	ResultFlags	
Definitie	Attention codes indicating whether the result is above or below certain reference values.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.14	
DCM::ExampleValue	High	
DCM::ValueSet	ResultFlagsCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.7
Opties		

«document»	TestMethodCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.4	
Opties		

TestmethodeCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.4**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	SNOMED CT	2.16.840.1.113883.6.96

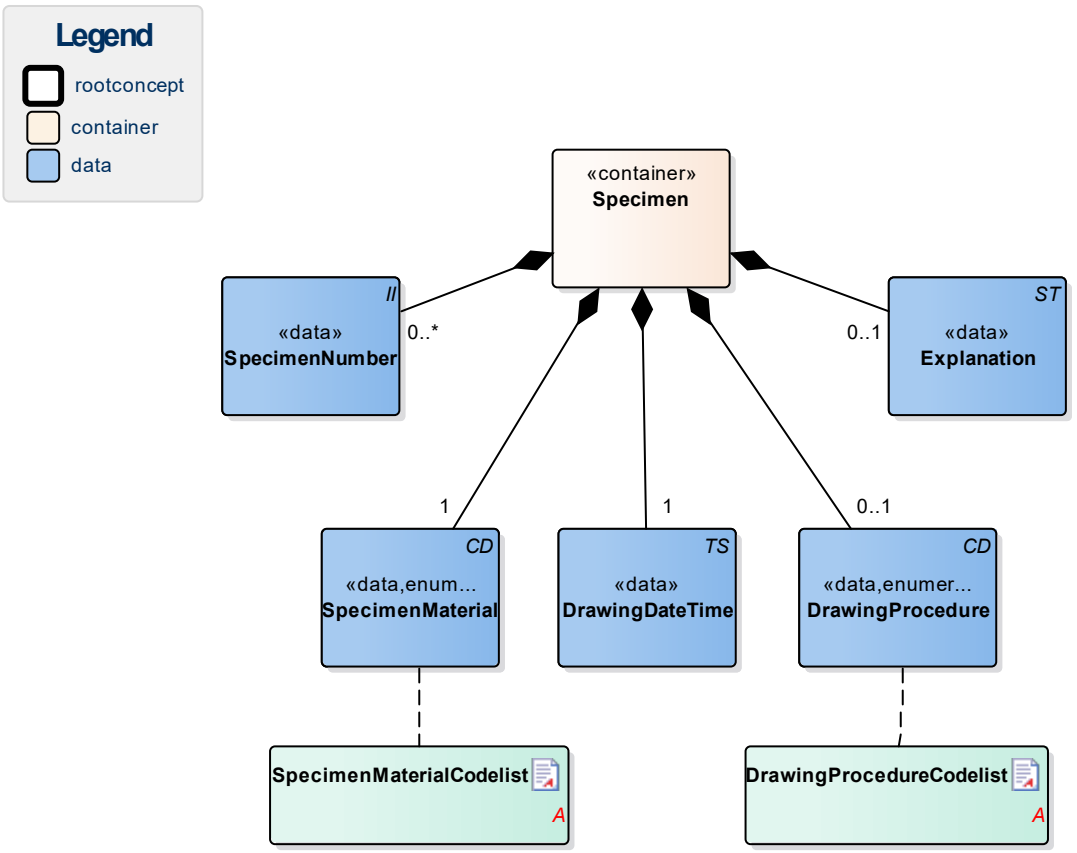
«document»	TestNameCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.3	
Opties		

TestNaamCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.3
Codes	Coding Syst. Name	Coding System OID
Alle waarden	LOINC	2.16.840.1.113883.6.1

«document»	ResultFlagsCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.7	
Opties		

ResultaatVlaggenCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.7	
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
High	H	ObservationInterpretation	2.16.840.1.113883.5.83	Boven referentiewaarde
Low	L	ObservationInterpretation	2.16.840.1.113883.5.83	Onder referentiewaarde
Intermediate	I	ObservationInterpretation	2.16.840.1.113883.5.83	Variabel
Resistant	R	ObservationInterpretation	2.16.840.1.113883.5.83	Resistent
Susceptible	S	ObservationInterpretation	2.16.840.1.113883.5.83	Sensitief

1.7.2 Monster



«container»	Specimen	
Definitie	Container of the Specimen concept. This container contains all data elements of the Specimen concept.	
Datatype		
DCM::ConceptId	NL-CM:13.1.2	
Opties		

«data»	SpecimenNumber	
Definitie	Identification number of the material obtained, as a reference for inquiries to the source organization. In a transmural setting, this number will consist of a specimen number including the identification of the issuing organization, to be unique outside of the borders of an organization.	
Datatype	II	
DCM::ConceptId	NL-CM:13.1.15	
Opties		

«data»	SpecimenMaterial
Definitie	SpecimenMaterial describes the material obtained. If the LOINC test code also implicitly describes a material, this element may not conflict with the description. If desired, this component can provide a more detailed description of the material: LOINC codes only contain the materials at a main level. This is in line with the agreements made in the IHE/Nictiz program e-Lab. If the test is carried out on derived material (such as plasma), this element will still contain the material drawn (in this case, blood). In this case, the LOINC code will generally refer to plasma.
Datatype	CD

DCM::ConceptId	NL-CM:13.1.16	
DCM::ExampleValue	Urine	
DCM::ValueSet	SpecimenMaterialCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.6
Opties		

«data»	DrawingDateTime	
Definitie	Time at which the material was drawn.	
Datatype	TS	
DCM::ConceptId	NL-CM:13.1.17	
DCM::DefinitionCode	SNOMED CT: 399445004 specimen collection date	
DCM::ExampleValue	10-07-2012 17:20	
Opties		

«data»	DrawingProcedure	
Definitie	If relevant for the results, the method of obtaining the specimen can be entered as well.	
Datatype	CD	
DCM::ConceptId	NL-CM:13.1.18	
DCM::ExampleValue	Midstream	
DCM::ValueSet	DrawingProcedureCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.2
Opties		

«data»	Explanation	
Definitie	Comments on administering the test, such as drawing material after a (glucose) stimulus or taking medicine.	
Datatype	ST	
DCM::ConceptId	NL-CM:13.1.19	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
DCM::ExampleValue	Na (glucose)stimulus	
Opties		

«document»	DrawingProcedureCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.2	
Opties		

AfnameprocedureCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.2**
Codes	Coding Syst. Name	Coding System OID
SNOMED CT: <17636008 | specimen collection |	SNOMED CT	2.16.840.1.113883.6.96

«document»	SpecimenMaterialCodelist
Definitie	
Datatype	

DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.13.1.6	
Opties		

MonstermateriaalCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.6
Codes	Coding Syst. Name	Coding System OID
SNOMED CT: <123038009 | specimen |	SNOMED CT	2.16.840.1.113883.6.96

1.8 Example Instances

LaboratoriumUitslag									
Resultaat Type	Resultaat Status	Monster		LaboratoriumTest					
		Monster materiaal	Afname DatumTijd	TestNaam	Test DatumTijd	Uitslag	Referentie Ondergrens	Referentie Bovengrens	Resultaat Vlaggen
Klinische chemie	Definitief	Bloed	12-06-2012 09:00	Natrium	12-06-2012 13:15	138 mmol/l	136 mmol/l	146 mmol/l	

LaboratoriumUitslag									
Resultaat Type	Resultaat Status	Monster		LaboratoriumTest					
		Monster materiaal	Afname DatumTijd	TestNaam	Test DatumTijd	Uitslag	Referentie Ondergrens	Referentie Bovengrens	Resultaat Vlaggen
Klinische chemie	Definitief	Bloed	23-05-2012 08:08	Chloride	23-05-2012 12:00	109 mmol/l	99 mmol/l	108 mmol/l	Boven referentie-waarde

LaboratoriumUitslag									
Resultaat Type	Resultaat Status	Monster		LaboratoriumTest					
		Monster materiaal	Afname DatumTijd	TestNaam	Test DatumTijd	Uitslag	Referentie Ondergrens	Referentie Bovengrens	Resultaat Vlaggen
Virologie	Definitief	Bloed	16-01-2012 08:00	Hepatitis A IgM	16-01-2012 10:12	Negatief			

1.9 Instructions

1.10 Interpretation

1.11 Care Process

1.12 Example of the Instrument

1.13 Constraints

1.14 Issues

1.15 References

1. Nederlandse Vereniging voor Medische Microbiologie (2010) *ELab en EvT.* [Online] Beschikbaar op:

http://www.nvmm.nl/ict/vereniging/werkgroepen_commissies/elab-en-evt [Geraadpleegd: 23 juli 2014].

1.16 Functional Model

1.17 Traceability to other Standards

1.18 Disclaimer

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