

진료회신서 CDA Template

3세부: EHR 상호운용 표준도구 적용과 표준개발

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Document Change History

Version	Description of Change	Name of Author	Date Published
0.9	First Draft	지은혜, 김항찬	2008-03-01
1.0	ClinicalDocument.recordTarget.patientRole.id[1](extension)값을 "197001011234567" 에서 " 7001011234567"으로 변경	김항찬	2008-03-11
	문서 내의 예제들 중 xml tag 오류 수정	지은혜	
	Observation Entry에 value element 추가	지은혜	
	투약내역 4개의 narrative items 중에서 생략된 3개의 items에 대한 entry 요소인 substanceAdministration 예를 추가	지은혜	
	Document Change History 추가	김항찬	

1. 문서 레벨 템플릿 생성

1.1. Mapping of CDA Document Level Module

진료의뢰서, 진료회신서는 LOINC 코드에서 Consultation Note로 매핑할 수 있으며, Type of Service (“Component”), Setting (“System”), Specialty/Training/ Professional Level (“Method”)의 속성에 따라 다른 값으로 매핑가능하다. 본 profile에서는 가장 일반적인 LOINC 코드를 매핑하였다.

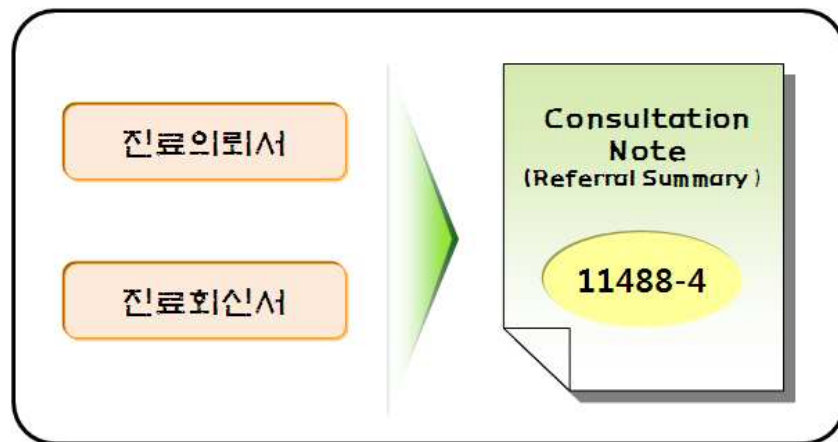


그림 1 Consultation Note의 문서코드

표 1 LOINC코드에서 Consultation Note의 속성

Local Document Name	Document Category	LOINC	Type of Service ("Component")	Setting ("System")	Specialty/Training/ Professional Level ("Method")
진료의뢰서	Consultation note	11488-4	Consultation note		{ Provider }
진료회신서	Consultation note	11488-4	Consultation note		{ Provider }

2. 진료의뢰서 CDA Document Level Specification

2.1. Definition

- ◎ 특정기관에서 진료 후 타 진료기관, 혹은 타과에서 진료를 받고자 하는 경우 1차 진료를 담당하는 의사로부터 요양급여기준에 따라 교부되는 문서.
- ◎ 1차 진료 시에 진단된 병명 및 진료내역 등을 기술하고 투약, 주요 실시검사 내용 등 주요 진료 결과를 포함하여야 함.

2.2. Standards

CDAR2 HL7 CDA Release 2.0
 CRS HL7 Care Record Summary
 CCD ASTM/HL7 Continuity of Care Document
 HL7 DSTU Consultation Note (U.S Realm)

2.3. Data Element Index

분당병원에서 제시한 요구사항에 따라 진료의뢰서의 바디레벨에 해당하는 각 섹션들을 목록화하면 다음과 같다.

각 섹션은 다음과 같이 구분될 수 있으며, Code값은 LOINC 코드를 매핑시킨 것이다. 섹션들의 Optionality는 추후 논의에 따라 Required/ Optional로 구별될 수 있는데, 이 섹션이 필수적인 항목인지, 선택적인 항목인지 구별하기 위한 값이다. Parents Template Id는 각 섹션이 정의되어 있는 표준문서의 템플릿 ID이다.

Section Category	Code	Data Element Name	Opt	Parents Template Id
진단명(상병명)	29548-5	Major diagnosis		
의뢰내역	42349-1	Reason for Referral		2.16.840.1.113883.10.20.4.8
환자상태	10164-2	History of Present Illness		1.3.6.1.4.1.19376.1.5.3.1.3.4
현재상태	11450-4	Problems		2.16.840.1.113883.10.20.1.11
약처방	10160-0	Medications		2.16.840.1.113883.10.20.1.8
과거병력	11348-0	Past Medical History		2.16.840.1.113883.10.20.2.9
수술 및 처치	47519-4	Procedure History		2.16.840.1.113883.10.20.1.12
검사결과	30954-2	Diagnostic Findings		2.16.840.1.113883.10.20.1.14

그림 2 Section Data Element Index

2.4. Sample Consultation Note Document

표 2 Sample Consultation Note CDA

```

<ClinicalDocument xmlns='urn:hl7-org:v3'>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  <templateId root="2.16.410.1.113883.10.20.2"/>
  <id root=" " extension=" "/>
  <code code="11488-4" displayName='CONSULTATION NOTE'
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
  <title>진료회신서</title>
  <effectiveTime value='20080204012005'/>
  <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
  <languageCode code='ko-KR'/>
  :
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root=" " />
          <!-- 회신진료소견 Section content -->
        </section>
      </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.4.8'/>
          <!-- 진단명(상병명) Section content -->
        </section>
      </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.1.8'/>
          <!-- 주요검사결과 Section content -->
        </section>
      </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.2.9'/>
          <!-- 치료(수술) 경과 Section content -->
        </section>
      </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.1.14'/>
          <!-- 투약정보 Section content-->
        </section>
      </component>

      <component>
        <section>
          <templateId root=" "/>
          <!-- 검사결과 Section content-->
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>

```

3. 진료의뢰서 Header 레벨 템플릿 생성

3.1. Header Module Data Elements

진료회신서의 헤더 부분은 진료의뢰서의 헤더와 동일한 구성을 가짐

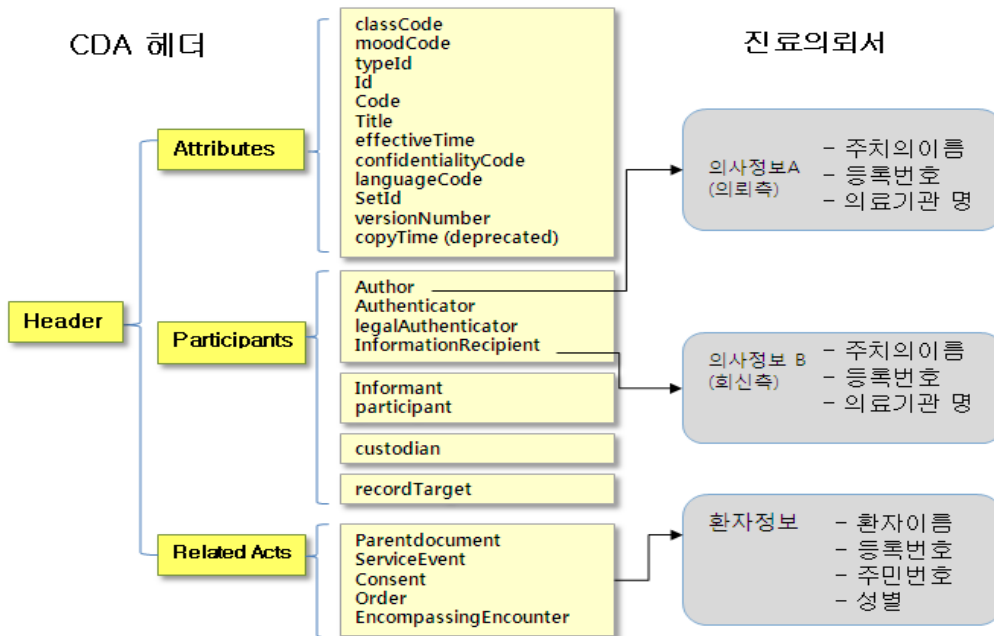


그림 3 CDA 헤더와 진료회신서의 헤더 항목

3.2. CDA Header level Specification

1) Standards

CDAR2 HL7 CDA Release 2.0

CRS HL7 Care Record Summary

CCD ASTM/HL7 Continuity of Care Document

HL7 DSTU Consultation Note (U.S Realm)

2) Module Specification

① Document Information

Clinical document section은 문서의 종류, 코드, 문서 자체에 대한 정보 및 기밀성정도에 대한 정보를 담고 있음. 문서생성에 상세한 정보를 제공하는 데이터들을 포함한다.

Element	Attributes	Description	Vocabulary	Cardinality
ClinicalDocument.typeId	root	문서 typeId		M:1..1
	extension			
	Comments			

ClinicalDocument.id	Example			
	<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>			
	root extension	문서 고유 id		M:1..1
	Comments			
	ID는 유일해야 한다. ID를 이용하여 다양한 임상문서들과 연결된다.			
ClinicalDocument.code	Example			
	<id root="db734647-fc99-424c-a864-7e3cda82e703"/>			
	code codeSystem codeSystemName	CDA 문서 종류	LOINC	M:1..1
	Comments			
	복합문서와 단일문서로 나눌 수 있다. 문서 코드는 LOINC코드를 사용한다.			
ClinicalDocument.title	Example			
	<code code="11488-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Consultation note"/>			
		문서 제목		M:1..1
	Comments			
	Code내의 displayName과 구분하여 사용해야 한다.			
ClinicalDocument.effectiveTime	Example			
	<title>진료의뢰서</title>			
	value	문서 생성시간		M:1..1
	Comments			
ClinicalDocument.confidentialityCode	Example			
	<effectiveTime value="20070407130000"/>			
	code codeSystem	문서의 기밀성 정도		M:1..1
	Comments			
	N:Normal access, R:Restricted Access, V:Very restricted access를 나타낸다.			
ClinicalDocument.languageCode	Example			
	<confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>			
	code	커뮤니케이션 언어		O:0..*
	Comments			
ClinicalDocument.languageCode	Example			
	<languageCode code="ko-KR"/>			

② Patient Information

환자정보(Record target)은 환자 및 보호자에 대한 정보가 담겨있다. 환자식별 메커니즘(patient identification mechanisms), 환자 특성(patient characteristics), 환자 이름(patient's name), 주소(address), 전화번호(phone number)를 포함한 환자 정보를 나타낸다.

Element	Attributes	Description	Vocabulary	Cardinality
recordTarget.patientRole.id	root extension	환자를 증명하는 Personal Health Number.		R:0..1
	Comments			
	의료시스템과 상호작용하는 고객 또는 환자식별에 사용되는 identifier.			
	Example			
	<id extension="996-756-495" root="2.16.840.1.113883.19.5"/>			
recordTarget.patientRole.addr	use	환자 주소		O:0..1
	Comments			
	Example			
	<addr use="HP"> <streetAddressLine>대구 수성구 황금동1가 78 그린APT 5/301 </streetAddressLine> </addr>			
recordTarget.patientRole.telecom	use value	환자 연락처		O:0..*
	Comments			
	전화번호와 이메일주소, URL정보가 포함된다.			
	Example			
	<telecom use="HP" value='tel:+82-053-123-1234'/> <telecom use="MC" value='tel:+82-011-222-3333'/> <telecom value='mailto:ksh001@naver.com'/>			
recordTarget.patientRole.patient.id	root extension	환자 ID		O:0..*
	Comments			
	recordTarget.patientRole.id와 동일			
	Example			
	<id extension="996-756-495" root="2.16.840.1.113883.19.5"/>			
recordTarget.patientRole.patient.name	use	환자 이름		M:1..*
	Comments			
	use 속성값을 통해 다양한 이름(별명, 출생이름 등)을 나타낼 수 있다.			
	Example			
	<name use="L"> <given>승현</given> <family>김</family> </name>			
recordTarget.patientRole.patient.name.prefix		환자 이름 타이틀 (예. Mr. Ms.)		O:0..1
	Comments			
	Example			
	<prefix>Mr.</prefix>			
recordTarget.patientRole.patient.name		환자를 구별하는 추가정보		O:0..1
	Comments			

suffix				
	Example			
	<suffix>19781123</suffix>			
recordTarget.patientRole.patient.administrativeGenderCode	code	환자 성별		R:1..1
	codeSystem			
	Comments			
	Example			
	<administrativeGenderCode code = "M" codeSystem = "2.16.840.1.113883.5.1" />			
recordTarget.patientRole.patient.birthTime	value	환자 생년월일		R:1..1
	Comments			
	환자 DOB는 불완전한 날짜가 되어서는 안된다.			
	Example			
	<birthTime value = "19781123"/>			

③ Healthcare Provider

문서 작성자, 회신자 정보, 처방이 내려진 처방기관, 법적 문서관리책임자에 대한 정보를 담고 있다.

a. 문서 작성자(Author)

문서 작성자(Author)는 처방을 내린 처방의에 대한 정보를 나타낸다.

Element	Attributes	Description	Vocabulary	Cardinality
author.time	value	CDA 문서를 생성한 시간		M:1..1
	Comments			
	시간의 부분만 나타내어서는 안 됨(년·월·일·시간 모두 표기하여야 함)			
	Example			
author.assignedAuthor.assignedPerson.name.given	<time value="2007040714"/>			
		처방을 내린 의사 이름		M:1..1
	Comments			
	Example			
	<author> <assignedAuthor> <assignedPerson> <time value="2007040714" /> <id extension="KP00017" root="2.16.840.1.113883.4.8" /> <addr> <streetAddressLine>대구시 송현동 1-2</streetAddressLine> <city>대구</city> <country>대한민국</country> </addr> <telecom value="tel:(053)777-7582" use="WP" /> <name>			

	<pre> <given>성재</given> <family>김</family> <prefix>MD</prefix> </name> </assignedPerson> </assignedAuthor> </author> </pre>
--	---

b. 회신자(informationRecipient)

Element	Attributes	Description	Vocabulary	Cardinality
InformationRecipient/intendedRecipient		진료의뢰서를 회신하는 병원 및 의사 정보		M:0...*
	Comments			
	Example			
	<pre> <informationRecipient> <intendedRecipient> <id extension="KP00017" root="2.16.840.1.113883.4.8"/> <addr> <streetAddressLine>대구시 송현동 1-2</streetAddressLine> <city>대구</city> <country>대한민국</country></addr> <telecom value="tel:(053)777-7582" use="WP"/> <assignedPerson> <name> <given>진료</given> <family>최</family> <prefix>MD</prefix> </name> <receivedOrganization> <id extension="C0001" root="not yet" /> <name>가야병원</name> <telecom value="031-222-2222" /> <addr> <streetAddressLine>대구시 봉덕동 1-2</streetAddressLine> <city>대구</city> <country>대한민국</country> </addr> </receivedOrganization> </intendedRecipient> </informationRecipient> </pre>			

C. 처방기관(Custodian)

Custodian은 처방이 내려진 처방기관에 대한 정보를 나타낸다.

Element	Attributes	Description	Vocabulary	Cardinality
custodian.assignedCustodian.representedCustodianOrganization.name		처방이 내려진 의료기관		M:1..1
	Comments			
	Example			
	<pre> <custodian> <assignedCustodian> <representedCustodianOrganization> <id root="1.2.410.200008.10"/> <name>건강병원</name> <telecom value="tel:(02)777-7582" use="WP"/> <addr> <streetAddressLine>대구시 수성구 황금동 1-2</streetAddressLine> <city>대구</city> <country>대한민국</country> </addr> </representedCustodianOrganization> </assignedCustodian> </custodian> </pre>			

D. 법적 문서관리책임자(Legal Authenticator)

Legal Authenticator는 법적으로 문서의 내용 및 서명에 대해 책임을 지는 사람을 말한다.

Element	Attributes	Description	Vocabulary	Cardinality
ClinicalDocument/legalAuthenticator		법적 문서관리 책임자		M:0..1
	Comments			
	Example			
	<pre> <time value='20080103171504'/> <assignedEntity> <id extension='1' root='기관 고유 관리체계'/> <addr>중구 동인동 111-11</addr> <telecom value="tel:(053)351-4567" use="WP"/> <assignedPerson> <name> <given>의사</given> <family>최</family> </name> </pre>			

4. 진료회신서 CDA Body level Specification

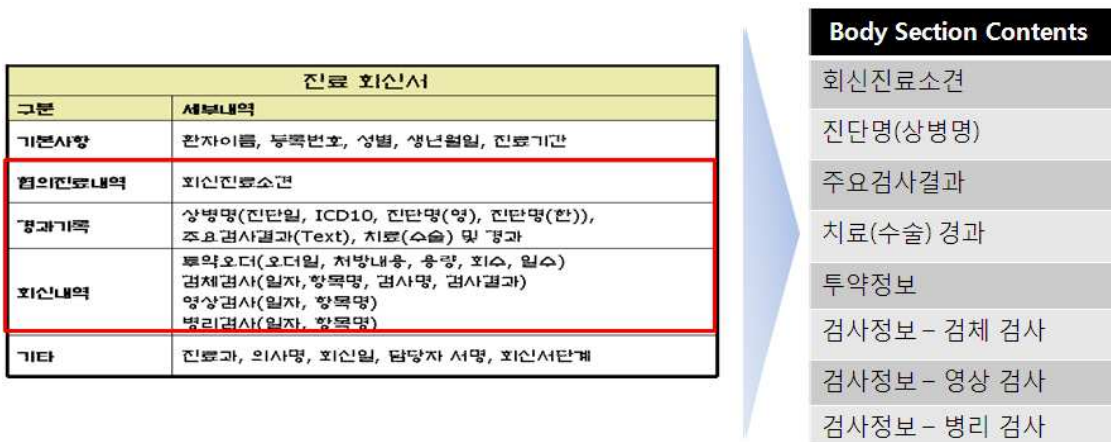


그림 4 진료회신서 항목과 CDA Body Section

4.1. ASSESSMENT AND PLAN (회신진료소견)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션은 의뢰된 환자의 치료결과 및 향후 치료 계획을 담고 있다.		M:1..1
	Comments			
	Example			
	<templateId root="2.16.840.1.113883.10.20.2.7" />			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	Example			
	<code code="18776-5" codeSystem="2.16.410.1.113883.6.1"/>			
component.section.title		회신진료소견		M:1..1
	Comments			
	Example			
	<title>회신진료소견</title>			
component.section.text		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 회신진료소견을 담고 있다. Text는 Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성될 수 있다.			
	Example			
	<component> <section> <templateId root="2.16.840.1.113883.10.20.2.7"/> <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"			

	<pre> code="18776-5" displayName="ASSESSMENT AND PLAN"/> <title>ASSESSMENT AND PLAN</title> <text> <list listType="ordered"> <item>multiple LN at left level 3,4 있어 R/O Reactive LAP 로 Neck CT , FNA 등 검사 시행하였습니다.</item> <item>시행 결과 R/O subacute necrotizing lymphadenitis 소견입니다.</item> <item>하기와 같이 medication 처방하였습니다.</item> <item>한달후 외래 f/u 할 예정입니다. </item> <item>진료의뢰해주셔서 감사드립니다.</item> </list> </text> </section> </component> </pre>
--	--

4.2. Diagnosis Section (상병명)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션에는 환자의 상병에 대한 정보 (진단명, 진단일시, 코드)가 담긴다.		M:1..1
	Comments			
	Example			
	<templateId root=""/>			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	Example			
	<code code="29548-5" codeSystem="2.16.410.1.113883.6.1"/>			
component.section.title		상병명		M:1..1
	Comments			
	Major Diagnosis			
	Example			
component.section.text		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 상병 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
	<component>			
	<section>			
	<templateId root=""/>			
	<code code='29548-5' codeSystem='2.16.840.1.113883.6.1' />			

	<pre> displayName='Diagnosis'/> <title>상병명</title> <text> <list> <item>상세불명의 급성편도염</item> </list> </text> <entry> : <!-- Required Diagnosis element --> : </entry> </section> </component> </pre>
--	--

4.3. Physical Examination (주요검사결과)

Element	Attributes	Description	Vocabulary	Cardinality
component.section. templateId	root	이 섹션에는 의사가 진찰한 환자의 상태에 대한 전반적인 관찰 결과 정보가 담긴다.		M:1..1
	Comments			
	Example			
	<pre> <templateId root="2.16.840.1.113883.10.20.2.10"/> (The CCD template identifier for the Past Medical History section) </pre>			
component.section. code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	Example			
	<pre> <code code="29545-1" codeSystem="2.16.410.1.113883.6.1"/> </pre>			
component.section. title		의뢰내역		M:1..1
	Comments			
	PHYSICAL FINDINGS			
	Example			
component.section. text		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 과거 질병 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
	<pre> <component> <section> <templateId root="2.16.840.1.113883.10.20.2.10"/> <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="29545-1" displayName="PHYSICAL FINDINGS"/> </pre>			

	<pre> <title>PHYSICAL EXAMINATION</title> <text> <paragraph>Lymph node edema, cough, general weakness </paragraph> </text> </section> </component> </pre>
--	---

4.4. Procedure History Section (치료 및 수술경과)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션은 환자가 현재까지 받은 수술 및 처치에 관한 기록을 담고 있다.		M:1..1
	Comments			
	Example			
	<pre> <templateId root="2.16.840.1.113883.10.20.1.12"/> (The CCD template identifier for the Procedure History) </pre>			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	Example			
	<pre> <code code="47519-4" codeSystem="2.16.410.1.113883.6.1"/> </pre>			
component.section.title		수술 및 처치		M:1..1
	Comments			
	Procedure History			
	Example			
component.section.text	<pre> <title>수술 및 처치</title> </pre>			
		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 수술 및 처치 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
component.section.text	<pre> <component> <section> <templateId root="2.16.840.1.113883.10.20.1.12"/> <code codeSystem="2.16.840.1.113883.6.1" code="47519-4" displayName="HISTORY OF PROCEDURES"/> <title>수술 및 처치</title> <text> <table border='1'> <thead> <tr> <th>수술 및 처치</th><th>일시</th><th>장소</th> </tr> </thead> </pre>			

	<pre> <tbody> <tr> <td>Laparoscopic Cholecystectomy</td> <td>2002년 9월28일</td> <td>대구병원</td> </tr> <tr> <td>Cesarean Section</td> <td>2003년 3월 2일</td> <td>강남병원</td> </tr> </tbody> </table> </text> </section> </component> </pre>
--	--

4.5. Medications Section (투약정보)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션에는 환자의 약처방내역이 담긴다. (예 : 약물처방목록, 외래 약물 처방 목록)		M:1..1
	Comments			
	Example			
	<pre> <templateId root="2.16.840.1.113883.10.20.1.8"/> (The CCD template identifier for the Medications section) </pre>			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	Example			
	<pre> <code code="10160-0 " codeSystem="2.16.410.1.113883.6.1"/> </pre>			
component.section.title		투약정보		M:1..1
	Comments			
	Medications			
	Example			
	<pre> <title>투약정보</title> </pre>			
component.section.text		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 투약 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
	<pre> <component> <section> <templateId root='2.16.840.1.113883.10.20.1.8'/> <id root=' ' extension=' '/> </pre>			

	<pre> <code code='10160-0' displayName='HISTORY OF MEDICATION USE' codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/> <text> <list listType="ordered"> <item><content ID="m1">Lisinopril 5 mg</content> 하루 1알 </item> <item><content ID="m2">Atenolol 25 mg</content> 하루 1알 </item> <item><content ID="m3">Furosemide 40 mg</content> 매일 4알씩</item> <item><content ID="m4">Gabapentin 300mg</content>이틀에 1알씩</item> <item><content ID="m5">Simvastatin (Zocor) 10 mg</content> 매일 취침전 1 알씩</item> </list> </text> <entry> : <!-- Required Medications element --> : </entry> </section> </component> </text> </section> </component> </pre>
--	---

4.6. Laboratory Data Section(검체검사)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션은 환자의 검체검사, 영상검사, 병리 검사에서 생성된 관찰 결과를 담는다. (CCD에서는 하나의 섹션에서 검사결과를 모두 포함하고 있다.) 검체검사는 주로 생화학, 혈액학, 혈청학, 조직학, 세포학, 미생물학, 바이러스학과 같은 영역에서의 검체 분석 결과 정보를 담고 있다.		M:1..1
	Comments			
	Example			
	<pre> <templateId root="2.16.840.1.113883.10.20.1.14.1"/> (The CCD template identifier for Results Section) </pre>			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA			
	Example			
	<pre> <code code="30954-2" codeSystem="2.16.410.1.113883.6.1"/> </pre>			
component.section		검체검사정보		M:1..1

n.title	Comments			
	Medications			
	Example			
	<title>검체검사정보</title>			
component.section.text		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 검체검사 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
	<component> <section> <templateId root="2.16.840.1.113883.10.20.1.14"/> <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="30954-2" displayName="RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA"/>			
	<!--검체검사 Section content--> <title>검사결과</title> <text> <item><content ID="lab1">Na</content>139 meq/l</item> <item><content ID="lab2">K</content>3.5 meq/l</item> </text> <entry> </entry> </section> </component>			

4.7. Image Data Section(영상검사)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	영상검사결과는 주로 심전도, MRI, CT, 심혈관조영술 등의 영상 정보대한 전문의의 분석에 의해 생성된다.		M:1..1
	Comments			
	Example			
	<templateId root="2.16.840.1.113883.10.20.1.14.2"/> (The CCD template identifier for Results Section)			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA			
	Example			
	<code code="30954-2" codeSystem="2.16.410.1.113883.6.1"/>			
component.section		영상검사정보		M:1..1

n.title	Comments		
	Medications		
	Example		
	<title>영상검사정보</title>		
component.section.text		실제 정보를 포함한다.	M:1..1
	Comments		
	실제 영상검사 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.		
	Example		
	<pre> <component> <section> <templateId root="2.16.840.1.113883.10.20.1.14"/> <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="30954-2" displayName="RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA"/> <title>영상검사결과</title> <text> <table> <tbody> <tr> <th>일자</th> <th>항목명</th> <th>검사결과</th> </tr> <tr> <td>2007-12-10</td> <td>Neck CT (3D, contrast)</td> <td>(가판독)R/O Reactive lymph node in right neck. R/O Inflammatory lymphadenopathy such as Kikuchi's disease.</td> </tr> </tbody> </table> </text> </section> </component> </pre>		

4.8. Diagnostic Data Section(진단적 검사- Procedure results)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	진단적검사는 시술행위를 하는 동안 발견된 관찰결과에 대한 보다 상세하고 정밀한 정보를 의료진에게 제공하기 위해 생성된다. 예를 들면 대장내시경에서 발견된 폴립의 크기, 부위, 손상정도, 위내시경에서 발견된 궤양의 형태 및 크기와 부위 등을 말한다.		M:1..1
	Comments			
	Example			

	<templateId root="2.16.840.1.113883.10.20.1.14.3"/> (The CCD template identifier for Results Section)		
component.section.code	code		
	codeSystem	코드와 코드시스템	LOINC
			M:1..1
	Comments		
	RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA		
component.section.title	Example		
	<code code="30954-2" codeSystem="2.16.410.1.113883.6.1"/>		
		진단적검사정보	M:1..1
	Comments		
	Medications		
component.section.text	Example		
	<title>진단적검사정보</title>		
		실제 정보를 포함한다.	M:1..1
	Comments		
	실제 진단적검사 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.		
component.section.text	Example		
	<pre> <component> <section> <templateId root="2.16.840.1.113883.10.20.1.14"/> <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="30954-2" displayName="RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA"/> <title>진단적검사결과</title> <text> <table> <tbody> <tr> <td>일자</td> <td>항목명</td> <td>검사결과</td> </tr> <tr> <td>2007-12-06</td> <td>세포비부인과검사</td> <td>1.채취부위:neck 2.임상진단: MICRO (4 Pap, 1 DQ) DIAGNOSIS : Lymph node, right neck, aspiration cytology, Satisfactory for evaluation Benign Mixed population of small and large lymphoid cells and abundant karyorrhectic debris ; favor subacute necrotizing lymphadenitis </td> </tr> <tr> <td>2007-12-06</td> <td>분자병리학적검사</td> <td>Summary: Negative for M. tuberculosis complex </td> </tr> </tbody> </table> </pre>		

	<pre></text> </section> </component></pre>
--	--

5. CDA Entry level Specification

5.1. Diagnosis Entry

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션에는 환자의 상병에 대한 정보 (진단명, 진단일시, 코드)가 담긴다.		M:1..1
	Comments			
	Example			
	<templateId root=""/>			
component.section.code	code codeSystem	코드와 코드시스템	LOINC	M:1..1
	Comments			
	Example			
	<code code="29548-5" codeSystem="2.16.410.1.113883.6.1"/>			
component.section.title		상병명		M:1..1
	Comments			
	Major Diagnosis			
	Example			
component.section.text		실제 정보를 포함한다.		M:1..1
	Comments			
	실제 상병 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
component.section.entry	Comments			
	진단명에 대한 상세 정보를 담고 있다. 진단일시, 진단 상태 등의 정보와 그에 대한 코드 및 코드시스템 정보로 구성된다.			
	Example			
	<entry> <observation classCode="COND" moodCode="EVN">			

	<pre> <value xsi:type='CD' code="J03.9" codeSystem="2.16.840.1.113883.6.3" codeSystemName="KCD4" displayName="상세불명의 급성편도염" /> <statusCode code="completed" /> <effectiveTime value="20071206" /> </observation> </entry> </pre>
--	---

5.2. Medication Entry

① Standards

Pharmacy HL7 Pharmacy Domain (Normative)

CCD ASTM/HL7 Continuity of Care Document

② Parent Template

This template is compatible with the (1.3.6.1.4.1.19376.1.5.3.1.3.4, as defined in the IHE PCC Technical Framework – XDS-MS)

Element	Attributes	Description	Vocabulary	Cardinality
component.section. templateId	root	Medications section의 template		M:1..1
	Comments			
	Example			
	<templateId root="2.16.840.1.113883.10.20.1.8"/>			
component.section. code	code codeSystem codeSystemName	코드와 코드시스템 이름		M:1..1
	Comments			
	Example			
	<code code="00001" codeSystem="2.16.410.1.113883.6.1" codeSystemName="K R_Std"/>			
component.section. title		투약정보 타이틀		M:1..1
	Comments			
	Example			
	<title>Medications</title>			
component.section. text		실제 투약정보를 포함한다.		M:1..1
	Comments			
	실제 투약정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
	<text> <item><content ID="m1">Lisinopril 5 mg</content> 하루한알</item> <item><content ID="m2">Atenolol 25 mg</content> 하루한알</item>			

	<div><item><content ID="m3">Furosemide 40 mg</content>하루 4알 (나누어 복용)</item> <item><content ID="m4">Gabapentin 300 mg</content>이틀에 한알</item> <item><content ID="m5">Simvastatin (Zocor) 10 mg</content>취침전한알</item></text></div>		
component.section.entry		투약정보 항목들을 포함한다.	M:1..1
	Comments		
	각각의 처방에 대한 투여시간, 투여경로, 복용량, 약 형태, 약품명, 투여방법, 상병명, 처방번호, 처방량 등의 정보와 그에 대한 코드 및 코드시스템 정보로 구성된다.		
	Example		
	<div><entry typeCode="DRIV"> <entry typeCode="DRIV"> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.20.1.24"/> <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66"/> <statusCode code="active"/> <originalText> <reference value="#m1"/> </originalText> <!-- 투여 시간(Administration Timing) --> <effectiveTime xsi:type="IVL_TS"> <low value="20070201"/> <high value="20070202"/> </effectiveTime> <effectiveTime xsi:type="PIVL_TS"> <period value="24" unit="h"/> </effectiveTime> <!-- 투여 경로(Route of Administration) --> <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112" codeSystemName="RouteOfAdministration"/> <!-- 복용량(Dose) --> <doseQuantity value="5" unit="mg"/> <!-- 약 형태(Product Form) 즉 투약 형태를 의미 --> <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1" displayName="tablet"/> </substanceAdministration> </entry> </entry> <entry typeCode="DRIV"> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.20.1.24"/> <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66"/> <statusCode code="active"/> <originalText> <reference value="#m2"/> </originalText> <!-- 투여 시간(Administration Timing) --> <effectiveTime xsi:type="IVL_TS"> <low value="20070201"/> <high value="20070202"/> </effectiveTime> <effectiveTime xsi:type="PIVL_TS"> <period value="24" unit="h"/> </effectiveTime> </substanceAdministration> </entry></div>		

	<pre> <!-- 투여 경로(Route of Administration) --> <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112" codeSystemName="RouteOfAdministration"/> <!-- 복용량(Dose) --> <doseQuantity value="25 " unit="mg"/> <!-- 약 형태(Product Form) 즉 투약 형태를 의미 --> <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1" displayName="tablet"/> </substanceAdministration> </entry> <entry typeCode="DRIV"> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.20.1.24"/> <id root="cdbc33f0-6cde-11db-9fe1-0800200c9a66"/> <statusCode code="active"/> <originalText> <reference value="#m3"/> </originalText> <!-- 투여 시간(Administration Timing) --> <effectiveTime xsi:type="IVL_TS"> <low value="20070201"/> <high value="20070202"/> </effectiveTime> <effectiveTime xsi:type="PIVL_TS"> <period value="6" unit="h"/> </effectiveTime> <!-- 투여 경로(Route of Administration) --> <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112" codeSystemName="RouteOfAdministration"/> <!-- 복용량(Dose) --> <doseQuantity value="40 " unit="mg"/> <!-- 약 형태(Product Form) 즉 투약 형태를 의미 --> <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1" displayName="tablet"/> </substanceAdministration> </entry> <entry typeCode="DRIV"> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.20.1.24"/> <id root="cdbc33f0-6cde-11db-9fe1-0800200c9a66"/> <statusCode code="active"/> <originalText> <reference value="#m4"/> </originalText> <!-- 투여 시간(Administration Timing) --> <effectiveTime xsi:type="IVL_TS"> <low value="20070201"/> <high value="20070202"/> </effectiveTime> <effectiveTime xsi:type="PIVL_TS"> <period value="48" unit="h"/> </effectiveTime> <!-- 투여 경로(Route of Administration) --> <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112" codeSystemName="RouteOfAdministration"/> </pre>
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mName="RouteOfAdministration"/>
<!-- 복용량(Dose) -->
    <doseQuantity value="300 " unit="mg"/>
<!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
    <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.2
6.1.1" displayName="tablet"/>
  </substanceAdministration>
</entry>
<entry typeCode="DRIV">
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.1.24"/>
    <id root="cdbc33f0-6cde-11db-9fe1-0800200c9a66"/>
    <statusCode code="active"/>
    <originalText>
      <reference value="#m5"/>
    </originalText>
<!-- 투여 시간(Administration Timing) -->
    <effectiveTime xsi:type="IVL_TS">
      <low value="20070201"/>
      <high value="20070202"/>
    </effectiveTime>
    <effectiveTime xsi:type="PIVL_TS">
      <period value="24" unit="h"/>
    </effectiveTime>
<!-- 투여 경로(Route of Administration) -->
    <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112" codeSystemName="RouteOfAdministration"/>
<!-- 복용량(Dose) -->
    <doseQuantity value="10 " unit="mg"/>
<!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
    <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.2
6.1.1" displayName="tablet"/>
  </substanceAdministration>
</entry>

<!-- 약물정보(Medication Information) -->

<entry>
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <consumable>
    <manufacturedProduct>
      <manufacturedLabeledDrug>
        <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC"
code="00006-0019-58"
displayName="LISINOPRIL (PRINIVIL)--PO 5MG TAB">
      <originalText>
        <reference value="#m1"/>
      </originalText>
    </code>
      </manufacturedLabeledDrug>
    </manufacturedProduct>
  </consumable>
</substanceAdministration>

```

	<pre> </entry> <entry> <substanceAdministration classCode="SBADM" moodCode="EVN"> <consumable> <manufacturedProduct> <manufacturedLabeledDrug> <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC" code="00781-1078-01" displayName="ATENOLOL--PO 25MG TAB"> <originalText> <reference value="#m2"/> </originalText> </code> </manufacturedLabeledDrug> </manufacturedProduct> </consumable> </substanceAdministration> </entry> <entry> <substanceAdministration classCode="SBADM" moodCode="EVN"> <consumable> <manufacturedProduct> <manufacturedLabeledDrug> <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC" code="00054-4299-31" displayName="FUROSEMIDE--PO 40MG TAB"> <originalText> <reference value="#m3"/> </originalText> </code> </manufacturedLabeledDrug> </manufacturedProduct> </consumable> </substanceAdministration> </entry> <entry> <substanceAdministration classCode="SBADM" moodCode="EVN"> <consumable> <manufacturedProduct> <manufacturedLabeledDrug> <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC" code="00172-4441-70" displayName="GABAPENTIN--PO 300MG TAB"> <originalText> <reference value="#m4"/> </originalText> </code> </manufacturedLabeledDrug> </manufacturedProduct> </consumable> </substanceAdministration> </entry> </pre>
--	---

	<pre> <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC" code="00006-0735-82" displayName="SIMVASTATIN (ZOCOR)--PO 10MG TAB"> <originalText> <reference value="#m5"/> </originalText> </code> </manufacturedLabeledDrug> </manufacturedProduct> </consumable> </substanceAdministration> </entry> </substanceAdministration> </entry> <entry> <substanceAdministration classCode="SBADM" moodCode="EVN"> <consumable> <consumable> <manufacturedProduct> <templateId root="2.16.410.1.113883.10.20.1.53"/> <!-- Product template --> <manufacturedMaterial> <code code="307782" codeSystem="2.16.410.1.113883.6.88" displayName="Artemisiae Argyi Folium 95% ethanol"> </manufacturedMaterial> </manufacturedProduct> </consumable> <!--효능 및 용법 (Indication) --> <entryRelationship typeCode="COMP"> <supply classCode="SPLY" moodCode="RQO"> <!-- 처방번호(Prescription Number) --> <id root='14ED7742-2428-4e2c-9446-A9B0D0075272' extension='SCRIP#'/> <!-- 처방량(Quantity Ordered) 또는 조제량 --> <quantity value="6"/> </supply> </entryRelationship> </substanceAdministration> </entry> </pre>
--	---

5.3. Laboratory Data Section(검체검사)

Element	Attributes	Description	Vocabulary	Cardinality
component.section.templateId	root	이 섹션은 환자의 검체검사, 영상검사, 병리 검사에서 생성된 관찰 결과를 담는다. (CCD		M:1..1

		에서는 하나의 섹션에서 검사결과를 모두 포함하고 있다.) 검체검사는 주로 생화학, 혈액학, 혈청학, 조직학, 세포학, 미생물학, 바이러스학과 같은 영역에서의 검체 분석 결과 정보를 담고 있다.		
	Comments			
	Example			
	<pre><templateId root="2.16.840.1.113883.10.20.1.14.1"/></pre> (The CCD template identifier for Results Section)			
component.section.code	code	codeSystem	코드와 코드시스템	LOINC
				M:1..1
	Comments			
	RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA			
	Example			
	<pre><code code="30954-2" codeSystem="2.16.410.1.113883.6.1"/></pre>			
		검체검사정보		M:1..1
	Comments			
component.section.title	Medications			
	Example			
	<pre><title>검체검사정보</title></pre>			
		실제 정보를 포함한다.		M:1..1
component.section.text	Comments			
	실제 검체검사 정보를 담고 있다. Table, list, paragraphs, hyperlinks, footnotes, references, 내장된 멀티미디어 객체들로 구성된다.			
	Example			
	<pre><component> <section> <templateId root="2.16.840.1.113883.10.20.1.14"/> <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="30954-2" displayName="RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA"/> <title>검사결과</title> <text> <item><content ID="lab1">Na</content>139 meq/l</item> <item><content ID="lab2">K</content>3.5 meq/l</item> </text> </section> </component></pre>			
	Comments			
	Example			
	<pre><templateId root='2.16.840.1.113883.10.20.1.24'/> <component> <observation typeCode='OBS' moodCode='EVN'> <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.13'/></pre>			

	<pre> <id root="" extension=""/> <codecode="15692-7" displayName="Sodium" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/> <entry> <text> <reference value='#lab1'/> <reference value='#lab2'/> </text> <!--검사시행상태--> <statusCode code='completed'/> <!--검사시행시각--> <effectiveTime value='20020203001212'/> <author typeCode='AUT'> <assignedAuthor typeCode='ASSIGNED'> <id/> </assignedAuthor> </author> </observation> </component> </entry> </pre>	<pre> <!--검사시행자정보--> </pre>
--	---	-----------------------------------

6. 진료회신서 샘플 CDA

표 3 진료회신서 샘플 CDA

```
<?xml version='1.0' encoding='euc-kr'?>
<ClinicalDocument xmlns="urn:hl7-org:v3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3" />
  <!--
*****
CDA Header
*****
-->
  <templateId root="2.16.410.1.113883.10.20.2" />
  <id root="" extension="" />
  <code code="11488-4" displayName="CONSULTATION NOTE" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" />
  <title>진료의뢰서</title>
  <effectiveTime value="20080204012005" />
  <confidentialityCode code="N" displayName="Normal" codeSystem="2.16.840.1.113883.5.25"
codeSystemName="Confidentiality" />
  <languageCode code="ko-KR" />

  <!--
*****
Patient Information
*****
-->
  <recordTarget>
    <patientRole>
      <id extension="7001011234567" root="2.16.840.1.113883.4.1" />
      <id extension="0331234" root="1.2.410.200008.10" />
      <addr>
        <streetAddressLine>대구시 수성구 1-2</streetAddressLine>
        <city>대구</city>
        <country>대한민국</country>
      </addr>
      <telecom value="tel:(053)123-4567" use="WP" />
      <patient>
        <name>
          <given>은혜</given>
          <family>지</family>
        </name>
        <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1" />
        <birthTime value="19700101" />
      </patient>
      <guardian>
        <telecom value="tel:011-456-7890" use="HP" />
      </guardian>
    </patientRole>
  </recordTarget>

  <!--
*****
Author Information
*****
-->
  <author>
    <assignedAuthor>
      <assignedPerson>
        <time value="2007040714" />
        <id extension="KP00017" root="2.16.840.1.113883.4.8" />
        <addr>
          <streetAddressLine>대구시 송현동 1-2</streetAddressLine>
          <city>대구</city>
          <country>대한민국</country>
        </addr>
        <telecom value="tel:(053)777-7582" use="WP" />
        <name>
          <given>성재</given>
          <family>김</family>
          <prefix>MD</prefix>
        </name>
      </assignedPerson>
    </assignedAuthor>
  </author>
</ClinicalDocument>
```

```

        </assignedPerson>
    </assignedAuthor>
</author>

<!--
*****
Information Recipient Information
*****
-->
<informationRecipient>
    <intendedRecipient>
        <id extension="KP00017" root="2.16.840.1.113883.4.8" />
        <addr>
            <streetAddressLine>대구시 송현동 1-2</streetAddressLine>
            <city>대구</city>
            <country>대한민국</country>
        </addr>
        <telecom value="tel:(053)777-7582" use="WP"/>
        <assignedPerson>
            <name>
                <given>진료</given>
                <family>최</family>
                <prefix>MD</prefix>
            </name>
        </assignedPerson>
        <receivedOrganization>
            <id extension="C0001" root="not yet" />
            <name>가야병원</name>
            <telecom value="031-222-2222" />
            <addr>
                <streetAddressLine>대구시 봉덕동 1-2</streetAddressLine>
                <city>대구</city>
                <country>대한민국</country>
            </addr>
        </receivedOrganization>
    </intendedRecipient>
</informationRecipient>

<!--
*****
Custodian Information
*****
-->
<custodian>
    <assignedCustodian>
        <representedCustodianOrganization>
            <id root="1.2.410.200008.10" />
            <name>건강병원</name>
            <telecom value="tel:(02)777-7582" use="WP" />
            <addr>
                <streetAddressLine>대구시 수성구 황금동 1-2</streetAddressLine>
                <city>대구</city>
                <country>대한민국</country>
            </addr>
        </representedCustodianOrganization>
    </assignedCustodian>
</custodian>

<!--
*****
Legal Authenticator Information
*****
-->
<legalAuthenticator>
    <assignedEntity>
        <time value="20080103171504" />
        <id extension="1" root="기관 고유 관리체계" />
        <addr>충구 동인동 111-11</addr>
        <telecom value="tel:(053)351-4567" use="WP" />
        <assignedPerson>
            <name>
                <given>의사</given>
                <family>최</family>
            </name>
        </assignedPerson>
    </assignedEntity>
</legalAuthenticator>

```

```

    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>

<!--
*****
CDA Body
*****
-->
  <component>
    <structuredBody>

      <!--회신진료소견 Section content -->
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.2.7"/>
          <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="18776-5"
displayName="ASSESSMENT AND PLAN"/>
          <title>ASSESSMENT AND PLAN</title>
          <text>
            <list listType="ordered">
              <item>multiple LN at left level 3,4 있어 R/O Reactive LAP 로 Neck CT , FNA 등 검사 시행하였습니
다.</item>
              <item>시행 결과 R/O subacute necrotizing lymphadenitis 소견입니다.</item>
              <item>하기와 같이 medication 처방하였습니다.</item>
              <item>한달후 외래 f/u 할 예정입니다. </item>
              <item>진료의뢰해주셔서 감사드립니다.</item>
            </list>
          </text>
        </section>
      </component>

      <!-- 상병명 Section content -->
      <component>
        <section>
          <templateId root= ""/>
          <code code='29548-5' codeSystem='2.16.840.1.113883.6.1' displayName='Diagnosis' />
          <title>상병명</title>
          <text>
            <list>
              <item>상세불명의 급성편도염</item>
            </list>
          </text>
          <entry>
            <observation classCode="COND" moodCode="EVN">
              <value xsi:type='CD' code="J03.9" codeSystem="2.16.840.1.113883.6.3" codeSystemName="KCD4"
displayName="상세불명의 급성편도염" />
              <statusCode code="completed" />
              <effectiveTime value="20071206" />
            </observation>
          </entry>
        </section>
      </component>

      <!-- 주요검사결과 Section content -->
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.2.10"/>
          <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="29545-1"
displayName="PHYSICAL FINDINGS"/>
          <title>PHYSICAL EXAMINATION</title>
          <text>
            <paragraph>Lymph node edema, cough, general weakness </paragraph>
          </text>
        </section>
      </component>

      <!--치료 및 수술 결과 Section content -->
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.12"/>
          <code codeSystem="2.16.840.1.113883.6.1" code="47519-4" displayName="HISTORY OF PROCEDURES"/>
          <title>수술 및 처치</title>

```

```

<text>
  <table border='1'>
    <thead>
      <tr>
        <th>수술 및 처치</th><th>일시</th><th>장소</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Laparoscopic Cholecystectomy</td>
        <td>2002년 9월28일</td>
        <td>대구병원</td>
      </tr>
      <tr>
        <td>Cesarean Section</td>
        <td>2003년 3월 2일</td>
        <td>강남병원</td>
      </tr>
    </tbody>
  </table>
</text>
</section>
</component>

<!-- 투약정보 Section content -->
<component>
  <section>
    <templateId root='2.16.840.1.113883.10.20.1.8' />
    <id root=' ' extension=' ' />
    <code code='10160-0' displayName='HISTORY OF MEDICATION USE'
codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
    <text>
      <list listType="ordered">
        <item><content ID="m1">Lisinopril 5 mg</content> 하루 1알 </item>
        <item><content ID="m2">Atenolol 25 mg</content> 하루 1알 </item>
        <item><content ID="m3">Furosemide 40 mg</content> 매일 4알씩</item>
        <item><content ID="m4">Gabapentin 300mg</content>이틀에 1알씩</item>
        <item><content ID="m5">Simvastatin (Zocor) 10 mg</content> 매일 1알씩</item>
      </list>
    </text>

    <!-- Drug Administration Information -->
    <entry typeCode="DRIV">
      <substanceAdministration classCode="SBADM" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.1.24" />
        <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66" />
        <statusCode code="active" />
        <originalText>
          <reference value="#m1" />
        </originalText>
        <!-- 투여 시간(Administration Timing) -->
        <effectiveTime xsi:type="IVL_TS">
          <low value="20070201" />
          <high value="20070202" />
        </effectiveTime>
        <effectiveTime xsi:type="PIVL_TS">
          <period value="24" unit="h" />
        </effectiveTime>
        <!-- 투여 경로(Route of Administration) -->
        <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112"
codeSystemName="RouteOfAdministration" />
        <!-- 복용량(Dose) -->
        <doseQuantity value="5" unit="mg" />
        <!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
        <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1"
displayName="tablet" />
      </substanceAdministration>
    </entry>
    <entry typeCode="DRIV">
      <substanceAdministration classCode="SBADM" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.1.24" />
        <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66" />
        <statusCode code="active" />
        <originalText>

```

```

        <reference value="#m2"/>
      </originalText>
      <!-- 투여 시간(Administration Timing) -->
      <effectiveTime xsi:type="IVL_TS">
        <low value="20070201"/>
        <high value="20070202"/>
      </effectiveTime>
      <effectiveTime xsi:type="PIVL_TS">
        <period value="24" unit="h"/>
      </effectiveTime>
      <!-- 투여 경로(Route of Administration) -->
      <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112"
codeSystemName="RouteOfAdministration"/>
      <!-- 복용량(Dose) -->
      <doseQuantity value="25 " unit="mg"/>
      <!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
      <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1"
displayName="tablet"/>
    </substanceAdministration>
  </entry>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.1.24"/>
      <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66"/>
      <statusCode code="active"/>
      <originalText>
        <reference value="#m3"/>
      </originalText>
      <!-- 투여 시간(Administration Timing) -->
      <effectiveTime xsi:type="IVL_TS">
        <low value="20070201"/>
        <high value="20070202"/>
      </effectiveTime>
      <effectiveTime xsi:type="PIVL_TS">
        <period value="6" unit="h"/>
      </effectiveTime>
      <!-- 투여 경로(Route of Administration) -->
      <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112"
codeSystemName="RouteOfAdministration"/>
      <!-- 복용량(Dose) -->
      <doseQuantity value="40 " unit="mg"/>
      <!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
      <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1"
displayName="tablet"/>
    </substanceAdministration>
  </entry>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.1.24"/>
      <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66"/>
      <statusCode code="active"/>
      <originalText>
        <reference value="#m4"/>
      </originalText>
      <!-- 투여 시간(Administration Timing) -->
      <effectiveTime xsi:type="IVL_TS">
        <low value="20070201"/>
        <high value="20070202"/>
      </effectiveTime>
      <effectiveTime xsi:type="PIVL_TS">
        <period value="48" unit="h"/>
      </effectiveTime>
      <!-- 투여 경로(Route of Administration) -->
      <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112"
codeSystemName="RouteOfAdministration"/>
      <!-- 복용량(Dose) -->
      <doseQuantity value="300 " unit="mg"/>
      <!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
      <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1"
displayName="tablet"/>
    </substanceAdministration>
  </entry>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="EVN">

```

```

        <templateId root="2.16.840.1.113883.10.20.1.24"/>
        <id root="cbbd33f0-6cde-11db-9fe1-0800200c9a66"/>
        <statusCode code="active"/>
        <originalText>
            <reference value="#m5"/>
        </originalText>
        <!-- 투여 시간(Administration Timing) -->
        <effectiveTime xsi:type="IVL_TS">
            <low value="20070201"/>
            <high value="20070202"/>
        </effectiveTime>
        <effectiveTime xsi:type="PIVL_TS">
            <period value="24" unit="h"/>
        </effectiveTime>
        <!-- 투여 경로(Route of Administration) -->
        <routeCode code="PO" codeSystem="2.16.410.1.113883.5.112"
codeSystemName="RouteOfAdministration"/>
        <!-- 복용량(Dose) -->
        <doseQuantity value="10" unit="mg"/>
        <!-- 약 형태(Product Form) 즉 투약 형태를 의미 -->
        <administrationUnitCode code="100" codeSystem="2.16.410.1.113883.3.26.1.1"
displayName="tablet"/>
        </substanceAdministration>
    </entry>

    <!-- 약물정보(Medication Information) -->
    <entry>
        <substanceAdministration classCode="SBADM" moodCode="EVN">
            <consumable>
                <manufacturedProduct>
                    <manufacturedLabeledDrug>
                        <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC"
code="00006-0019-58" displayName="LISINOPRIL (PRINIVIL)--PO 5MG TAB">
                            <originalText>
                                <reference value="#m1"/>
                            </originalText>
                        </code>
                    </manufacturedLabeledDrug>
                </manufacturedProduct>
            </consumable>
        </substanceAdministration>
    </entry>
    <entry>
        <substanceAdministration classCode="SBADM" moodCode="EVN">
            <consumable>
                <manufacturedProduct>
                    <manufacturedLabeledDrug>
                        <code codeSystem="2.16.840.1.113883.6.69" codeSystemName="KDC"
code="00781-1078-01" displayName="ATENOLOL--PO 25MG TAB">
                            <originalText>
                                <reference value="#m2"/>
                            </originalText>
                        </code>
                    </manufacturedLabeledDrug>
                </manufacturedProduct>
            </consumable>
        </substanceAdministration>
    </entry>
    <entry>
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                                <reference value="#m3"/>
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<!--검사 소견 Section content-->
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displayName="RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA"/>

    <!--검체검사 Section content-->
    <title>검사결과</title>
    <text>
      <item><content ID="lab1">Na</content>139 meq/l</item>
      <item><content ID="lab2">K</content>3.5 meq/l</item>
    </text>

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          <!--검사시행시각-->
          <effectiveTime value='20020203001212'/>
          <!--검사시행자정보-->
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        <th>일자</th>
        <th>항목명</th>
        <th>검사결과</th>
      </tr>
      <tr>
        <td>2007-12-10</td>
        <td>Neck CT (3D, contrast)</td>
        <td>(가판독)R/O Reactive lymph node in right neck. R/O Inflammatory lymphadenopathy such
as Kikuchi's disease.</td>
      </tr>
    </tbody>
  </table>
</text>

<!--진단적검사 Section content-->
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        <td>항목명</td>
        <td>검사결과</td>
      </tr>
      <tr>
        <td>2007-12-06</td>
        <td>세포비부인과검사</td>
        <td>1. 채취부위:neck
2. 임상진단: MICRO (4 Pap, 1 DQ) DIAGNOSIS : Lymph node, right neck, aspiration cytology
: Satisfactory for evaluation Benign Mixed population of small and large lymphoid cells and
abundant karyorrhectic debris ; favor subacute necrotizing lymphadenitis </td>
      </tr>
      <tr>
        <td>2007-12-06</td>
        <td>분자병리학적검사</td>
        <td>Summary: Negative for M. tuberculosis complex</td>
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</ClinicalDocument>

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