

Women's Health: Reproductive Health Order Set

Order Set: Conceptual Structure

Contract: VA118-16-D-1008, Task Order (TO): VA-118-16-F-1008-0007, CLIN0008BA

Department of Veterans Affairs (VA)



**Knowledge Based Systems (KBS)
Office of Informatics and Information Governance (OIIG)
Clinical Decision Support (CDS)**

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Women's Health: Reproductive Health Order Set: Order Set: Conceptual Structure

by Knowledge Based Systems (KBS), Office of Informatics and Information Governance (OIIG), and Clinical Decision Support (CDS)

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Table of Contents

Preface	v
Artifact Applicability	vi
Models	vii
1. External Data Definitions	1
Definitions	1
Triggers	1
2. Expression Definitions	2
3. Laboratory Tests	3
4. Point of Care Tests	5
5. Medications and Devices	6
6. Procedures	18
7. Tabular List	19
8. Behavior Symbols	27
A. References	29

List of Tables

1. Revision History	v
2. Clinical White Paper Contributors	v
3. Artifact Identifier	v
4. Applicability Foci, Description and Codes	vi
5. Model References	vii
1.1. Disqualifications	1
2.1. PatientAge	2
2.2. PatientGender	2
7.1. Terminology Versions	19
7.2. Terminology References	19
8.1. Group Organizational Behavior	27
8.2. Group Selection Behavior	27
8.3. Required Behavior	27
8.4. Precheck Behavior	28
8.5. Cardinality Behavior	28
8.6. Item Flags	28
8.7. Read Only Behavior	28

Preface

Table 1. Revision History

Date	Life Cycle Event
May 23, 2018	Published
May 23, 2018	Reviewed
March 21, 2018	Created

Table 2. Clinical White Paper Contributors

Name	Role	Affiliation
C. Yvette Williams-Harris, MD MPH	Author	Physician, 1670 Clairmont Rd Atlanta, GA 30033
Megan Geber, MD MPH	Author	Physician, VA Boston HealthCare System, 150 South Huntington Ave Boston, MA 02130
Caitlin M. Cusack, MD MPH	Author	Contractor - Physician Informaticist, Office of Women's Health Services, 8455 Colesville Rd, 12th Floor Silver Spring, MD 20910

Table 3. Artifact Identifier

Domain	Artifact ID	Name
urn:va.gov:kbs:knart:artifact:r1	adf20fe0-7b1c-555b-958c-1fdc00de60bf	O17

Artifact Applicability

Table 4. Applicability Foci, Description and Codes

Focus	Description	Code System	Code	Value Set	Value Set Version
PatientAgeGroup	>=13 and <52 years of age.			N/A	N/A
PatientGender	Female	SNOMED CT	248152002 Female (finding)	N/A	N/A
ClinicalVenue	Outpatient	SNOMED CT	33022008 Hospital-based outpatient department (environment)	N/A	N/A
TargetUser	Primary Care	SNOMED CT	453231000124104 Primary care provider (occupation)	N/A	N/A
TargetUser	Designated women's health providers			N/A	N/A
TargetUser	Gynecologist			N/A	N/A

Models

Table 5. Model References

Referenced Model	Description
urn:solor.io:anf-model:1.0	VA Analysis Normal Form Model

Chapter 1. External Data Definitions

Definitions

Table 1.1. Disqualifications

Expression: type=elm:Retrieve , dataType=anf:ClinicalStatement, codeProperty=topic, dateProperty=dateTime Annotation: Codes: elm:element[elm:Code]: [236886002 Hysterectomy (procedure)]elm:element[elm:Code]: [76876009 Bilateral oophorectomy (procedure)]elm:element[elm:Code]: [77543007 Ligation of fallopian tube (procedure)]elm:element[elm:Code]: [Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[76498008 Postmenopausal state (finding)]elm:element[elm:Code]: [Observation procedure (procedure)] ->(363702006 Has focus (attribute))-d5d1c4f4-5d27-4e48-94b9-866c5c08f163 Failure to conceive (finding)]
--

Triggers

No trigger definitions are present.

Chapter 2. Expression Definitions

Table 2.1. PatientAge

Expression: type=elm:SingletonFrom Annotation: Codes: elm:value[elm:Code]: [398166005 Performed (qualifier value) elm:value[elm:Code]: [[a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[105726004 Age AND/OR growth finding (finding)]]
--

Table 2.2. PatientGender

Expression: type=elm:SingletonFrom Annotation: Codes: elm:element[elm:Code]: [[a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[248152002 Female (finding)]]

Chapter 3. Laboratory Tests

If the patient is not known to be pregnant, then consider ordering a pregnancy test.

✱ quantitative human chorionic gonadotropin-serum now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 167037004 |Measurement of serum total human chorionic gonadotropin (procedure)|

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

✱ qualitative human chorionic gonadotropin-urine now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 104405006 |Urine pregnancy test, by visual color comparison methods

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

Sexually Transmitted Infection Screening

☐ chlamydia nucleic acid amplification testing vaginal swab now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [398452009 |Chlamydia trachomatis nucleic acid assay (procedure)]->(116686009 |Has specimen (attribute))->[258520000 |Vaginal swab (specimen)]

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

☐ gonorrhea nucleic acid amplification testing vaginal swab now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [398381009 |Neisseria gonorrhoeae nucleic acid assay (procedure)]->(116686009 |Has specimen (attribute))->[258520000 |Vaginal swab (specimen)]

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

☐ HIV screen-serum now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 171121004 |Human immunodeficiency virus screening (procedure)|

	<div>unstructured[0]: Serum</div> <div>priority: Precoordinated Expression 50811001 Routine (qualifier value) </div>
--	---

Chapter 4. Point of Care Tests

□ Point of Care Urine pregnancy test now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 104405006 |Urine pregnancy test, by visual color comparison methods (procedure)|

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

Chapter 5. Medications and Devices

If the patient is not known to be pregnant, then consider ordering a pregnancy test prior to ordering any contraceptive options

Please consider the following contraception options

Contraceptive Implants

✱ Etonogestrel 68 mg implant subdermal for implantation now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [71861002 |Implantation (procedure)] ->(260686004 |Method (attribute))->[257867005 |Insertion - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;389221 Etonogestrel 68 MG Drug Implant]

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

✱ Levonorgestrel 20 micrograms/day device intrauterine for insertion now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[257867005 |Insertion - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;804156 Levonorgestrel 0.000833 MG/HR Intrauterine System]

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

✱ Levonorgestrel 14 micrograms/day device intrauterine for insertion now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[257867005 |Insertion - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;1366334 Levonorgestrel 0.000583 MG/HR Intrauterine System]

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

✱ Copper T 380A device intrauterine for insertion now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 65200003 |Insertion of intrauterine contraceptive device (procedure)|

	<p>unstructured[0]: Copper T 380A device</p> <p>priority: Precoordinated Expression 50811001 Routine (qualifier value) </p>
Contraceptive Injection	
<p>□ Medroxyprogesterone acetate injectable suspension 150 mg/mL. Give 1 mL solution intramuscular every 3 months, first dose now</p> <p>actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]</p> <p>statementType: Precoordinated Expression 385644000 Requested (qualifier value) </p> <p>topic: Postcoordinated Expression [416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129326001 Injection - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;1000153 1 ML medroxyPROGESTERone acetate 150 MG/ML Prefilled Syringe] ->(410675002 Route of administration (attribute))->[78421000 Intramuscular route (qualifier value)]</p> <p>requestedResult.lowerBound: 1</p> <p>requestedResult.upperBound: 1</p> <p>requestedResult.includeLowerBound: True</p> <p>requestedResult.includeUpperBound: True</p> <p>requestedResult.measureSemantic: Precoordinated Expression 258773002 Milliliter (qualifier value) </p> <p>priority: Precoordinated Expression 50811001 Routine (qualifier value) </p> <p>repetition[0].eventFrequency.lowerBound: 3</p> <p>repetition[0].eventFrequency.upperBound: 3</p> <p>repetition[0].eventFrequency.includeLowerBound: True</p> <p>repetition[0].eventFrequency.includeUpperBound: True</p> <p>repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258706009 month (qualifier value) </p>	
Combined Oral Contraceptives	
<p>⊗ Desogestrel 0.15 mg/ethinyl estradiol 0.03 mg. Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills</p> <p>actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]</p> <p>statementType: Precoordinated Expression 385644000 Requested (qualifier value) </p> <p>topic: Postcoordinated Expression [416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;240707 Desogestrel 0.15 MG / Ethinyl Estradiol 0.03 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]</p> <p>unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills</p>	

	<p>requestedResult.lowerBound: 1</p> <p>requestedResult.upperBound: 1</p> <p>requestedResult.includeLowerBound: True</p> <p>requestedResult.includeUpperBound: True</p> <p>requestedResult.measureSemantic: Precoordinated Expression 421026006 Conventional release oral tablet (dose form) </p> <p>repetition[0].periodDuration.lowerBound: 1</p> <p>repetition[0].periodDuration.upperBound: 168</p> <p>repetition[0].periodDuration.resolution: 1</p> <p>repetition[0].periodDuration.includeLowerBound: True</p> <p>repetition[0].periodDuration.includeUpperBound: True</p> <p>repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 day (qualifier value) </p> <p>repetition[0].eventFrequency.lowerBound: 1</p> <p>repetition[0].eventFrequency.upperBound: 1</p> <p>repetition[0].eventFrequency.includeLowerBound: True</p> <p>repetition[0].eventFrequency.includeUpperBound: True</p> <p>repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258773002 Milliliter (qualifier value) </p>
<p>⊛ Ethinyl estradiol 0.02 mg/levonorgestrel 0.1 mg. Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills</p>	<p>actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]</p> <p>statementType: Precoordinated Expression 385644000 Requested (qualifier value) </p> <p>topic: Postcoordinated Expression [416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;242297 Ethinyl Estradiol 0.02 MG / Levonorgestrel 0.1 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]</p> <p>unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills</p> <p>requestedResult.lowerBound: 1</p> <p>requestedResult.upperBound: 1</p> <p>requestedResult.includeLowerBound: TRUE</p> <p>requestedResult.includeUpperBound: TRUE</p> <p>requestedResult.measureSemantic: Precoordinated Expression 421026006 Conventional release oral tablet (dose form) </p> <p>repetition[0].periodDuration.lowerBound: 1</p> <p>repetition[0].periodDuration.upperBound: 168</p> <p>repetition[0].periodDuration.includeLowerBound: TRUE</p> <p>repetition[0].periodDuration.includeUpperBound: TRUE</p>

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repetition[0].periodDuration.resolution: 1
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 1
repetition[0].eventFrequency.upperBound: 1
repetition[0].eventFrequency.includeLowerBound: TRUE
repetition[0].eventFrequency.includeUpperBound: TRUE
repetition[0].eventFrequency.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
⊛ Ethinyl estradiol 0.03 mg/levonorgestrel 0.15 mg. Take 1 tablet oral daily 1 time. Take pills
in sequence. Do not skip pills. Dispense 3 kits. 3 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |Re-
quested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))->[129445006
|Administration - action (qualifier value)] ->(363701004 |Di-
rect substance (attribute))->[Rx;238019 Ethinyl Estradiol 0.03
MG / Levonorgestrel 0.15 MG Oral Tablet] ->(410675002 |
Route of administration (attribute))->[26643006 |Oral route
(qualifier value)]
unstructured[0]: Take pills in sequence. Do not skip pills. Dis-
pense 3 kits. 3 refills
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: TRUE
requestedResult.includeUpperBound: TRUE
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Conventional release oral tablet (dose form)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 168
repetition[0].periodDuration.includeLowerBound: TRUE
repetition[0].periodDuration.includeUpperBound: TRUE
repetition[0].periodDuration.resolution: 1
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 1
repetition[0].eventFrequency.upperBound: 1
repetition[0].eventFrequency.includeLowerBound: TRUE
repetition[0].eventFrequency.includeUpperBound: TRUE
repetition[0].eventFrequency.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|

```


⊗ Ethinyl estradiol 0.03 mg/levonorgestrel 0.05 mg, ethinyl estradiol 0.04 mg/levonorgestrel 0.075 mg, ethinyl estradiol 0.03 mg/levonorgestrel 0.125 mg (triphasic). Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))>[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))>[Rx;748832 {6 (Ethinyl Estradiol 0.03 MG / Levonorgestrel 0.05 MG Oral Tablet) / 10 (Ethinyl Estradiol 0.03 MG / Levonorgestrel 0.125 MG Oral Tablet) / 5 (Ethinyl Estradiol 0.04 MG / Levonorgestrel 0.075 MG Oral Tablet) / 7 (Inert Ingredients 1 MG Oral Tablet) } Pack] ->(410675002 |Route of administration (attribute))>[26643006 |Oral route (qualifier value)]

unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

requestedResult.lowerBound: 1

requestedResult.upperBound: 1

requestedResult.includeLowerBound: TRUE

requestedResult.includeUpperBound: TRUE

requestedResult.measureSemantic: Precoordinated Expression 421026006 |Conventional release oral tablet (dose form)|

repetition[0].periodDuration.lowerBound: 1

repetition[0].periodDuration.upperBound: 168

repetition[0].periodDuration.includeLowerBound: TRUE

repetition[0].periodDuration.includeUpperBound: TRUE

repetition[0].periodDuration.resolution: 1

repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

repetition[0].eventFrequency.lowerBound: 1

repetition[0].eventFrequency.upperBound: 1

repetition[0].eventFrequency.includeLowerBound: TRUE

repetition[0].eventFrequency.includeUpperBound: TRUE

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

⊗ Ethinyl estradiol 0.035 mg/norethindrone 1 mg. Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

⊗ Ethinyl estradiol 0.035 mg/norethindrone 0.5 mg, ethinyl estradiol 0.035 mg/norethindrone 0.75 mg, ethinyl estradiol 0.035 mg/norethindrone 1 mg (triphasic). Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;749852 {7 (Ethinyl Estradiol 0.035 MG / Norethindrone 0.5 MG Oral Tablet) / 7 (Ethinyl Estradiol 0.035 MG / Norethindrone 0.75 MG Oral Tablet) / 7 (Ethinyl Estradiol 0.035 MG / Norethindrone 1 MG Oral Tablet) / 7 (Inert Ingredients 1 MG Oral Tablet) } Pack] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]

unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

requestedResult.lowerBound: 1

requestedResult.upperBound: 1

requestedResult.includeLowerBound: TRUE

requestedResult.includeUpperBound: TRUE

requestedResult.measureSemantic: Precoordinated Expression 421026006 |Conventional release oral tablet (dose form)|

repetition[0].periodDuration.lowerBound: 1

repetition[0].periodDuration.upperBound: 168

repetition[0].periodDuration.includeLowerBound: TRUE

repetition[0].periodDuration.includeUpperBound: TRUE

repetition[0].periodDuration.resolution: 1

repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

repetition[0].eventFrequency.lowerBound: 1

repetition[0].eventFrequency.upperBound: 1

repetition[0].eventFrequency.includeLowerBound: TRUE

repetition[0].eventFrequency.includeUpperBound: TRUE

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

⊗ Ethinyl estradiol 0.035 mg/norgestimate 0.25 mg. Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;240128 Ethinyl Estradiol 0.035 MG / norgestimate 0.25 MG Oral Tablet] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]

unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

requestedResult.lowerBound: 1

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requestedResult.upperBound: 1
requestedResult.includeLowerBound: TRUE
requestedResult.includeUpperBound: TRUE
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Conventional release oral tablet (dose form)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 168
repetition[0].periodDuration.includeLowerBound: TRUE
repetition[0].periodDuration.includeUpperBound: TRUE
repetition[0].periodDuration.resolution: 1
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 1
repetition[0].eventFrequency.upperBound: 1
repetition[0].eventFrequency.includeLowerBound: TRUE
repetition[0].eventFrequency.includeUpperBound: TRUE
repetition[0].eventFrequency.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|

⊛ Ethinyl estradiol 0.035 mg/norgestimate 0.18 mg, ethinyl estradiol 0.035 mg/norgestimate
0.215 mg, ethinyl estradiol 0.035 mg/norgestimate 0.25 mg (triphasic). Take 1 tablet oral daily
1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Re-
quested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))>[129445006 |
Administration - action (qualifier value)] ->(363701004 |Direct
substance (attribute))>[Rx;749784 {7 (Ethinyl Estradiol 0.035
MG / norgestimate 0.18 MG Oral Tablet) / 7 (Ethinyl Estradi-
ol 0.035 MG / norgestimate 0.215 MG Oral Tablet) / 7 (Ethinyl
Estradiol 0.035 MG / norgestimate 0.25 MG Oral Tablet) / 7
(Inert Ingredients 1 MG Oral Tablet) } Pack] ->(410675002 |
Route of administration (attribute))>[26643006 |Oral route
(qualifier value)]
unstructured[0]: Take pills in sequence. Do not skip pills. Dis-
pense 3 kits. 3 refills
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: TRUE
requestedResult.includeUpperBound: TRUE
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Conventional release oral tablet (dose form)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 168

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repetition[0].periodDuration.includeLowerBound: TRUE
repetition[0].periodDuration.includeUpperBound: TRUE
repetition[0].periodDuration.resolution: 1
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 1
repetition[0].eventFrequency.upperBound: 1
repetition[0].eventFrequency.includeLowerBound: TRUE
repetition[0].eventFrequency.includeUpperBound: TRUE
repetition[0].eventFrequency.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|

⊗ Mestranol 0.05 mg/norethindrone 1 mg. Take 1 tablet oral daily 1 time. Take pills in se-
quence. Do not skip pills. Dispense 3 kits. 3 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Re-
quested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))>[129445006
|Administration - action (qualifier value)] ->(363701004 |Di-
rect substance (attribute))>[Rx;198043 Mestranol 0.05 MG /
Norethindrone 1 MG Oral Tablet] ->(410675002 |Route of ad-
ministration (attribute))>[26643006 |Oral route (qualifier val-
ue)]
unstructured[0]: Take pills in sequence. Do not skip pills. Dis-
pense 3 kits. 3 refills
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: TRUE
requestedResult.includeUpperBound: TRUE
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Conventional release oral tablet (dose form)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 168
repetition[0].periodDuration.includeLowerBound: TRUE
repetition[0].periodDuration.includeUpperBound: TRUE
repetition[0].periodDuration.resolution: 1
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 1
repetition[0].eventFrequency.upperBound: 1
repetition[0].eventFrequency.includeLowerBound: TRUE
repetition[0].eventFrequency.includeUpperBound: TRUE
repetition[0].eventFrequency.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|

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⊗ Ethinyl estradiol 0.03 mg/levonorgestrel 0.15 mg, ethinyl estradiol 0.01 mg. Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))>[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))>[Rx;749761 {7 (Ethinyl Estradiol 0.01 MG Oral Tablet) / 84 (Ethinyl Estradiol 0.03 MG / Levonorgestrel 0.15 MG Oral Tablet) } Pack] ->(410675002 |Route of administration (attribute))>[26643006 |Oral route (qualifier value)]

unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

requestedResult.lowerBound: 1

requestedResult.upperBound: 1

requestedResult.includeLowerBound: TRUE

requestedResult.includeUpperBound: TRUE

requestedResult.measureSemantic: Precoordinated Expression 421026006 |Conventional release oral tablet (dose form)|

repetition[0].periodDuration.lowerBound: 1

repetition[0].periodDuration.upperBound: 168

repetition[0].periodDuration.includeLowerBound: TRUE

repetition[0].periodDuration.includeUpperBound: TRUE

repetition[0].periodDuration.resolution: 1

repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

repetition[0].eventFrequency.lowerBound: 1

repetition[0].eventFrequency.upperBound: 1

repetition[0].eventFrequency.includeLowerBound: TRUE

repetition[0].eventFrequency.includeUpperBound: TRUE

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

Combined Contraceptive Vaginal Ring

□ Ethinyl estradiol 0.015 mg/day/etonogestrel ethinyl 0.120 mg/day. 1 vaginal ring. Insert ring into vagina. Leave in place continuously for 3 weeks. Remove for 1 week. Then immediately replace. Dispense 1 box. 3 refills

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))>[257867005 |Insertion - action (qualifier value)] ->(363701004 |Direct sub-

stance (attribute))>[Rx;1367436 21 DAY Ethinyl Estradiol 0.000625 MG/HR / Etonogestrel 0.005 MG/HR Vaginal Ring]
 unstructured[0]: Insert ring into vagina. Leave in place continuously for 3 weeks. Remove for 1 week. Then immediately replace. Dispense 1 box. 3 refills
 requestedResult.lowerBound: 1
 requestedResult.upperBound: 1
 requestedResult.includeLowerBound: TRUE
 requestedResult.includeUpperBound: TRUE
 requestedResult.measureSemantic: Precoordinated Expression 385292009 |Vaginal dose form (dose form)|
 repetition[0].periodDuration.lowerBound: 1
 repetition[0].periodDuration.upperBound: 48
 repetition[0].periodDuration.includeLowerBound: TRUE
 repetition[0].periodDuration.includeUpperBound: TRUE
 repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258705008 |week (qualifier value)|

Progestin-Only Contraceptive Pill

☐ Norethindrone 0.35 mg. Take 1 tablet oral daily 1 time. Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
 topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))>[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))>[Rx;198042 Norethindrone 0.35 MG Oral Tablet]
 unstructured[0]: Take pills in sequence. Do not skip pills. Dispense 3 kits. 3 refills
 requestedResult.lowerBound: 1
 requestedResult.upperBound: 1
 requestedResult.includeLowerBound: TRUE
 requestedResult.includeUpperBound: TRUE
 requestedResult.measureSemantic: Precoordinated Expression 421026006 |Conventional release oral tablet (dose form)|
 repetition[0].periodDuration.lowerBound: 1
 repetition[0].periodDuration.upperBound: 168
 repetition[0].periodDuration.includeLowerBound: TRUE
 repetition[0].periodDuration.includeUpperBound: TRUE
 repetition[0].periodDuration.resolution: 1
 repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|
 repetition[0].eventFrequency.lowerBound: 1

	repetition[0].eventFrequency.upperBound: 1 repetition[0].eventFrequency.includeLowerBound: TRUE repetition[0].eventFrequency.includeUpperBound: TRUE repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 day (qualifier value)
Emergency Contraceptive	
"1 refill now" allows the patient to take home medications for future emergency use when indicated.	
⊛ Levonorgestrel 0.75 mg tablet. Take one tablet oral every 12 hours. Take first tablet as soon as possible after and within 72 hours of unprotected intercourse. Take second tablet 12 hours after first tablet. Dispense 1 box containing 2 tablets. 1 refill now actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]	statementType: Precoordinated Expression 385644000 Requested (qualifier value) topic: Postcoordinated Expression [416118004 Administration (procedure)] ->(260686004 Method (attribute))>[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))>[Rx;259218 Levonorgestrel 0.75 MG Oral Tablet] unstructured[0]: Take first tablet as soon as possible after and within 72 hours of unprotected intercourse. Take second tablet 12 hours after first tablet. Dispense 1 box containing 2 tablets. 1 refill now requestedResult.lowerBound: 1 requestedResult.upperBound: 1 requestedResult.includeLowerBound: TRUE requestedResult.includeUpperBound: TRUE requestedResult.measureSemantic: Precoordinated Expression 421026006 Conventional release oral tablet (dose form) repetition[0].periodDuration.lowerBound: 1 repetition[0].periodDuration.upperBound: 84 repetition[0].periodDuration.includeLowerBound: TRUE repetition[0].periodDuration.includeUpperBound: TRUE repetition[0].periodDuration.resolution: 1 repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258702006 hour (qualifier value) repetition[0].eventFrequency.lowerBound: 12 repetition[0].eventFrequency.upperBound: 12 repetition[0].eventFrequency.includeLowerBound: TRUE repetition[0].eventFrequency.includeUpperBound: TRUE repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258702006 hour (qualifier value)
⊛ Levonorgestrel 1.5 mg tablet oral 1 time. Take as soon as possible after and within 72 hours of unprotected intercourse. Dispense 1 box containing 1 tablet. 1 refill now	

```

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Re-
    requested (qualifier value)|
    topic: Postcoordinated Expression [416118004 |Administration
    (procedure)] ->(260686004 |Method (attribute))->[129445006 |
    Administration - action (qualifier value)] ->(363701004 |Direct
    substance (attribute))->[Rx;483325 Levonorgestrel 1.5 MG
    Oral Tablet]
    unstructured[0]: Take as soon as possible after and within 72
    hours of unprotected intercourse. Dispense 1 box containing 1
    tablet. 1 refill now
    requestedResult.lowerBound: 1
    requestedResult.upperBound: 1
    requestedResult.includeLowerBound: TRUE
    requestedResult.includeUpperBound: TRUE
    requestedResult.measureSemantic: Precoordinated Expression
    421026006 |Conventional release oral tablet (dose form)|
    repetition[0].periodDuration.lowerBound: 1
    repetition[0].periodDuration.upperBound: 72
    repetition[0].periodDuration.includeLowerBound: TRUE
    repetition[0].periodDuration.includeUpperBound: TRUE
    repetition[0].periodDuration.resolution: 1
    repetition[0].periodDuration.measureSemantic: Precoordinated
    Expression 258702006 |hour (qualifier value)|
    repetition[0].eventFrequency.lowerBound: 1
    repetition[0].eventFrequency.upperBound: 1
    repetition[0].eventFrequency.includeLowerBound: TRUE
    repetition[0].eventFrequency.includeUpperBound: TRUE
    repetition[0].eventFrequency.measureSemantic: Precoordinat-
    ed Expression 246432004 |Number of occurrences (qualifier
    value)|

```

Chapter 6. Procedures

Select procedures from the following list. All procedures are priority of "now" unless otherwise specified.

☐ Essure permanent contraceptive device. Schedule for insertion now

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [410538000 |Scheduling (procedure)] ->(363702006 |Has focus (attribute))->[65200003 |Insertion of intrauterine contraceptive device (procedure)]

unstructured[0]: Essure permanent contraceptive device

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

☐ Contraceptive implant implantation

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Postcoordinated Expression [71861002 |Implantation (procedure)] ->(363699004 |Direct device (attribute))->[468312002 |Drug-eluting contraceptive implant (physical object)]

☐ Intrauterine device insertion

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 65200003 |Insertion of intrauterine contraceptive device (procedure)|

☐ Diaphragm fitting

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 275811000 |Diaphragm fit (procedure)|

☐ Cervical cap fitting

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 225251006 |Fitting of cervical cap (procedure)|

Chapter 7. Tabular List

Terminology Service Request (TSR) Mappings

Table 7.1. Terminology Versions

Name	Identifier	Version
SNOMED CT	2.16.840.1.113883.6.96	United States Edition 20180301

Table 7.2. Terminology References

System	Code	Display Text ^a	References ^b
SNOMED CT	104405006 Urine pregnancy test, by visual color comparison methods	Precoordinated Expression	1
SNOMED CT	104405006 Urine pregnancy test, by visual color comparison methods (procedure)	Precoordinated Expression	1
SNOMED CT	167037004 Measurement of serum total human chorionic gonadotropin (procedure)	Precoordinated Expression	1
SNOMED CT	171121004 Human immunodeficiency virus screening (procedure)	Precoordinated Expression	1
SNOMED CT	225251006 Fitting of cervical cap (procedure)	Precoordinated Expression	1
SNOMED CT	236886002 Hysterectomy (procedure)	Precoordinated Expression	1
SNOMED CT	246432004 Number of occurrences (qualifier value)	Precoordinated Expression	1
SNOMED CT	248152002 Female (finding)	Female	1
SNOMED CT	258702006 hour (qualifier value)	Precoordinated Expression	3
SNOMED CT	258703001 day (qualifier value)	Precoordinated Expression	19
SNOMED CT	258705008 week (qualifier value)	Precoordinated Expression	1
SNOMED CT	258706009 month (qualifier value)	Precoordinated Expression	1
SNOMED CT	258773002 Milliliter (qualifier value)	Precoordinated Expression	2
SNOMED CT	275811000 Diaphragm fit (procedure)	Precoordinated Expression	1

System	Code	Display Text ^a	References ^b
SNOMED CT	33022008 Hospital-based outpatient department (environment)	Outpatient	1
SNOMED CT	385292009 Vaginal dose form (dose form)	Precoordinated Expression	1
SNOMED CT	385644000 Requested (qualifier value)	Precoordinated Expression	29
SNOMED CT	398166005 Performed (qualifier value)	Precoordinated Expression	1
SNOMED CT	421026006 Conventional release oral tablet (dose form)	Precoordinated Expression	12
SNOMED CT	453231000124104 Primary care provider (occupation)	Primary Care	1
SNOMED CT	50811001 Routine (qualifier value)	Precoordinated Expression	12
SNOMED CT	65200003 Insertion of intrauterine contraceptive device (procedure)	Precoordinated Expression	2
SNOMED CT	76876009 Bilateral oophorectomy (procedure)	Precoordinated Expression	1
SNOMED CT	77543007 Ligation of fallopian tube (procedure)	Precoordinated Expression	1
SNOMED CT	[398381009 Neisseria gonorrhoeae nucleic acid assay (procedure)] ->(116686009 Has specimen (attribute))->[258520000 Vaginal swab (specimen)]	Postcoordinated Expression	1
SNOMED CT	[398452009 Chlamydia trachomatis nucleic acid assay (procedure)] ->(116686009 Has specimen (attribute))->[258520000 Vaginal swab (specimen)]	Postcoordinated Expression	1
SNOMED CT	[410538000 Scheduling (procedure)] ->(363702006 Has focus (attribute))->[65200003 Insertion of intrauterine contraceptive device (procedure)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] -	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	>(260686004 Method (attribute))->[129326001 Injection - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;1000153 1 ML medroxyPROGESTERone acetate 150 MG/ML Prefilled Syringe] ->(410675002 Route of administration (attribute))->[78421000 Intramuscular route (qualifier value)]		
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;198042 Norethindrone 0.35 MG Oral Tablet]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;198043 Mestranol 0.05 MG / Norethindrone 1 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;238019 Ethinyl Estradiol 0.03	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	MG / Levonorgestrel 0.15 MG Oral Tablet] ->(410675002 Route of administration (at- tribute))->[26643006 Oral route (qualifier value)]		
SNOMED CT	[416118004 Adminis- tration (procedure)] - >(260686004 Method (at- tribute))->[129445006 Administration - ac- tion (qualifier val- ue)] ->(363701004 Direct substance (at- tribute))->[Rx;240128 Ethinyl Estradiol 0.035 MG / norgestimate 0.25 MG Oral Tablet] ->(410675002 Route of administration (at- tribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Adminis- tration (procedure)] - >(260686004 Method (at- tribute))->[129445006 Administration - ac- tion (qualifier val- ue)] ->(363701004 Direct substance (at- tribute))->[Rx;240707 Desogestrel 0.15 MG / Ethinyl Estradiol 0.03 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier val- ue)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Adminis- tration (procedure)] - >(260686004 Method (at- tribute))->[129445006 Administration - ac- tion (qualifier val- ue)] ->(363701004 Direct substance (at- tribute))->[Rx;242297 Ethinyl Estradiol 0.02 MG / Levonorgestrel 0.1 MG Oral Tablet] - >(410675002 Route	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	of administration (at-tribute))->[26643006 Oral route (qualifier value)]		
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (at-tribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (at-tribute))->[Rx;259218 Levonorgestrel 0.75 MG Oral Tablet]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (at-tribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (at-tribute))->[Rx;483325 Levonorgestrel 1.5 MG Oral Tablet]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (at-tribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (at-tribute))->[Rx;748832 {6 (Ethinyl Estradiol 0.03 MG / Levonorgestrel 0.05 MG Oral Tablet) / 10 (Ethinyl Estradiol 0.03 MG / Levonorgestrel 0.125 MG Oral Tablet) / 5 (Ethinyl Estradiol 0.04 MG / Levonorgestrel 0.075 MG Oral Tablet) / 7 (Inert Ingredients 1 MG Oral Tablet) } Pack] ->(410675002 Route of administration (at-tribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] -	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	>(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;749761 {7 (Ethinyl Estradiol 0.01 MG Oral Tablet) / 84 (Ethinyl Estradiol 0.03 MG / Levonorgestrel 0.15 MG Oral Tablet) } Pack] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]		
SNOMED CT	[416118004 Administration (procedure)] - >(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;749784 {7 (Ethinyl Estradiol 0.035 MG / norgestimate 0.18 MG Oral Tablet) / 7 (Ethinyl Estradiol 0.035 MG / norgestimate 0.215 MG Oral Tablet) / 7 (Ethinyl Estradiol 0.035 MG / norgestimate 0.25 MG Oral Tablet) / 7 (Inert Ingredients 1 MG Oral Tablet) } Pack] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] - >(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;749852	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	{7 (Ethinyl Estradiol 0.035 MG / Norethindrone 0.5 MG Oral Tablet) / 7 (Ethinyl Estradiol 0.035 MG / Norethindrone 0.75 MG Oral Tablet) / 7 (Ethinyl Estradiol 0.035 MG / Norethindrone 1 MG Oral Tablet) / 7 (Inert Ingredients 1 MG Oral Tablet) } Pack] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]		
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[257867005 Insertion - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;1366334 Levonorgestrel 0.000583 MG/HR Intrauterine System]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[257867005 Insertion - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;1367436 21 DAY Ethinyl Estradiol 0.000625 MG/HR / Etonogestrel 0.005 MG/HR Vaginal Ring]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[257867005 Insertion - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;804156 Levonorgestrel 0.000833 MG/HR Intrauterine System]	Postcoordinated Expression	1
SNOMED CT	[71861002 Implantation (procedure)] -	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	>(260686004 Method (attribute))->[257867005 Insertion - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;389221 Etonogestrel 68 MG Drug Implant]		
SNOMED CT	[71861002 Implantation (procedure)] ->(363699004 Direct device (attribute))->[468312002 Drug-eluting contraceptive implant (physical object)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[105726004 Age AND/OR growth finding (finding)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[248152002 Female (finding)]	Postcoordinated Expression	2
SNOMED CT	[Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[76498008 Postmenopausal state (finding)]	Postcoordinated Expression	1
SNOMED CT	[Observation procedure (procedure)] ->(363702006 Has focus (attribute))-d5d1c4f4-5d27-4e48-94b9-866c5c08f163 Failure to conceive (finding)]	Postcoordinated Expression	1

^aIf a code is used multiple times in the KNART, only the display text of the first instance is shown.

^bCount of the number of times the given code system and code pair is used in the KNART.

Chapter 8. Behavior Symbols

Table 8.1. Group Organizational Behavior

Sym- bol	Name	Definition
▶	Sentence Group	A group of related alternative actions is a sentence group if the item referenced by the action is the same in all the actions, and each action simply constitutes a different variation on how to specify the details for that item. For example, two actions that could be in a SentenceGroup are "aspirin, 500 mg, 2 times per day" and "aspirin, 300 mg, 3 times per day". In both cases, aspirin is the item referenced by the action, and the two actions represent two different options for how aspirin might be ordered for the patient. Note that a SentenceGroup would almost always have an associated selection behavior of "AtMostOne", unless it's a required action, in which case, it would be "ExactlyOne".
▷	Logical Group	A group with this behavior logically groups its sub-elements, and may be shown as a visual group to the end user, but it is not required to do so.
➤	Visual Group	Any group marked with this behavior should be displayed as a visual group to the end user.

Table 8.2. Group Selection Behavior

Sym- bol	Name	Definition
□	Any	Any number of the items in the group may be chosen, from zero to all.
⦿	All	All the items in the group must be selected as a single unit.
⦿	AllOrNone	All the items in the group are meant to be chosen as a single unit: either all must be selected by the end user, or none may be selected.
○	ExactlyOne	The end user must choose one and only one of the selectable items in the group. The user may not choose none of the items in the group.
⬠	AtMostOne	The end user may choose zero or at most one of the items in the group.
⦿	OneOrMore	The end user must choose a minimum of one, and as many additional as desired.

Table 8.3. Required Behavior

Sym- bol	Name	Definition
◆	Must	An action with this behavior must be included in the actions processed by the end user; the end user may not choose not to include this action.

Sym- bol	Name	Definition
◇	Could	An action with this behavior may be included in the set of actions processed by the end user.
➤	MustUnlessDocumented	An action with this behavior must be included in the set of actions processed by the end user, unless the end user provides documentation as to why the action was not included.

Table 8.4. Precheck Behavior

Sym- bol	Name	Definition
▲	Yes	An action with this behavior is one of the most frequent actions that is, or should be, included by an end user, for the particular context in which the action occurs. The system displaying the action to the end user should consider "pre-checking" such an action as a convenience for the user.
▽	No	An action with this behavior is one of the less frequent actions included by the end user, for the particular context in which the action occurs. The system displaying the actions to the end user would typically not "pre-check" such an action.

Table 8.5. Cardinality Behavior

Sym- bol	Name	Definition
◆	Single	An action with this behavior may only be completed once.
❖	Multiple	An action with this behavior may be repeated multiple times.

Table 8.6. Item Flags

Sym- bol	Name	Definition
☞	fillIn	This item, in a list entry, allows the user to enter a fill in value that is not present in the set of presented choices.

Table 8.7. Read Only Behavior

Sym- bol	Name	Definition
☆	true	For a particular action or action group, specifies whether the elements are read only.

Appendix A. References

This appendix contains the list of related resources and supporting documents used in creating this KNART.

List of References

Related Resources

[CCWP] *Women's Health: Reproductive Health Clinical Content White Paper*

[CSD] *Women's Health: Reproductive Health Order Set Conceptual Structure Document*

[KVRpt] *Women's Health: Reproductive Health Order Set KNART Validation Report*

Supporting Evidence

[ACOG 2017] *American College of Obstetricians and Gynecologists Committee on Adolescent Health Care. Committee Opinion No 699: Adolescent Pregnancy, Contraception, and Sexual Activity. Obstet Gynecol. 2017;129(5):e142-e149 (link [https://doi.org/10.1097/AOG.0000000000002045])*

[ACOG 2014] *American College of Obstetricians and Gynecologists. ACOG Committee Opinion no. 598: Committee on Adolescent Health Care: The initial reproductive health visit. 2014;123(5):1143-1147 (link [https://doi.org/10.1097/01.AOG.0000446826.46833.c0])*

[Bayer 2002] *Bayer Pharma AG. Berlin. Essure: Permanent Birth Control. Germany: 2002. (link [https://doi.org/10.1016/j.nwh.2017.07.006])*

[NLM 2014] *U.S. National Library of Medicine. BREVICON- norethindrone and ethinyl estradiol; NORINYL- norethindrone and ethinyl estradiol; NORINYL- norethindrone and mestranol [Actavis Pharma, Inc.]. August 2014 (link [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=aaaf32ea-045b-436c-b125-767f95f4cf0e])*

[NLM 2017-1] *U.S. National Library of Medicine. IMPLANON- etonogestrel implant [Organon USA Inc.]. May 2017. (link [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=50ed7e31-b9b7-4f0a-8e36-91ed5af86b81])*

[NLM 2012-1] *U.S. National Library of Medicine. LUTERA- levonorgestrel and ethinyl estradiol [Watson Pharma, Inc.]. March 2012. (link [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=435f565c-771d-44ff-88b7-4e089767c25f])*

[NLM 2017-2] *U.S. National Library of Medicine. MEDROXYPROGESTERONE ACETATE- medroxyprogesterone acetate injection, suspension [Teva Parenteral Medicines, Inc.]. January 2017. (link [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=d279981c-e9e4-4989-bafb-1e184a6d3dd2])*

[NLM 2013-1] *U.S. National Library of Medicine. MIRENA- levonorgestrel intrauterine device [Bayer HealthCare Pharmaceuticals Inc.]. February 2013. (link [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=92231d6f-f4d8-43b0-aa95-f7cec1cc18c5])*

[NLM 2015-1] *U.S. National Library of Medicine. MONONESSA- norgestimate and ethinyl estradiol; TRINESSA- norgestimate and ethinyl estradiol [Actavis Pharma, Inc.]. December 2015. (link [https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=704ba4ae-edd0-4298-a399-03a49f8411c7])*

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- [NLM 2013-2] U.S. National Library of Medicine. *NECON 777- norethindrone and ethinyl estradiol [Watson Pharma Inc].* November 2013. (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=d-b3b28a4-15d3-43e0-bb65-e625300c452c>])
- [NLM 2012-2] U.S. National Library of Medicine. *NOR QD- norethindrone tablet [Watson Pharma, Inc.].* June 2012. (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=aa34bfca-06c3-4916-bb51-4bf-bfc0ee371j>])
- [NLM 2017-3] U.S. National Library of Medicine. *NUVARING- etonogestrel and ethinyl estradiol insert, extended release [Organon USA Inc.].* May 2017. (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=017343fb-86c4-45ab-9c47-52cc5b9f3a02j>])
- [NLM 2015-2] U.S. National Library of Medicine. *PARAGARD T 380A- copper intrauterine device [Teva Women's Health, Inc.].* August 2015. (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=2b009d-db-378e-40d8-a8d8-00211f10e06c>])
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