



Moving from ICD-9-CM Legacy to SNOMED CT Based Clinical Content

...an implementation in progress...

Nova Scotia – Physicians Manual Modernization Project

Robyn Kuropatwa, Kathy Giannangelo, Dennis Lee

Objectives

- Explain how the feasibility of proceeding with SNOMED CT implementation was assessed
- Share the approach used to clean and map legacy diagnoses and then build specialty specific subsets
- Describe the methods, tooling and documentation used to support review and audit
- Talk about lessons learned and the way forward

Nova Scotia & Medical Service Insurance Program

► Nova Scotia Characteristics

- Population - 940,000
 - Rural/Urban mix
- Physicians
 - 1,200 Family Practice physicians
 - 1,300 Specialists
 - Compensation models - fee for service, alternative payments (contract approach)

► Clinical Content – Recording EMR Use

- EMR Use - Mostly family practice physicians
- Paper Based - Academic physicians



Nova Scotia & Medical Service Insurance Program

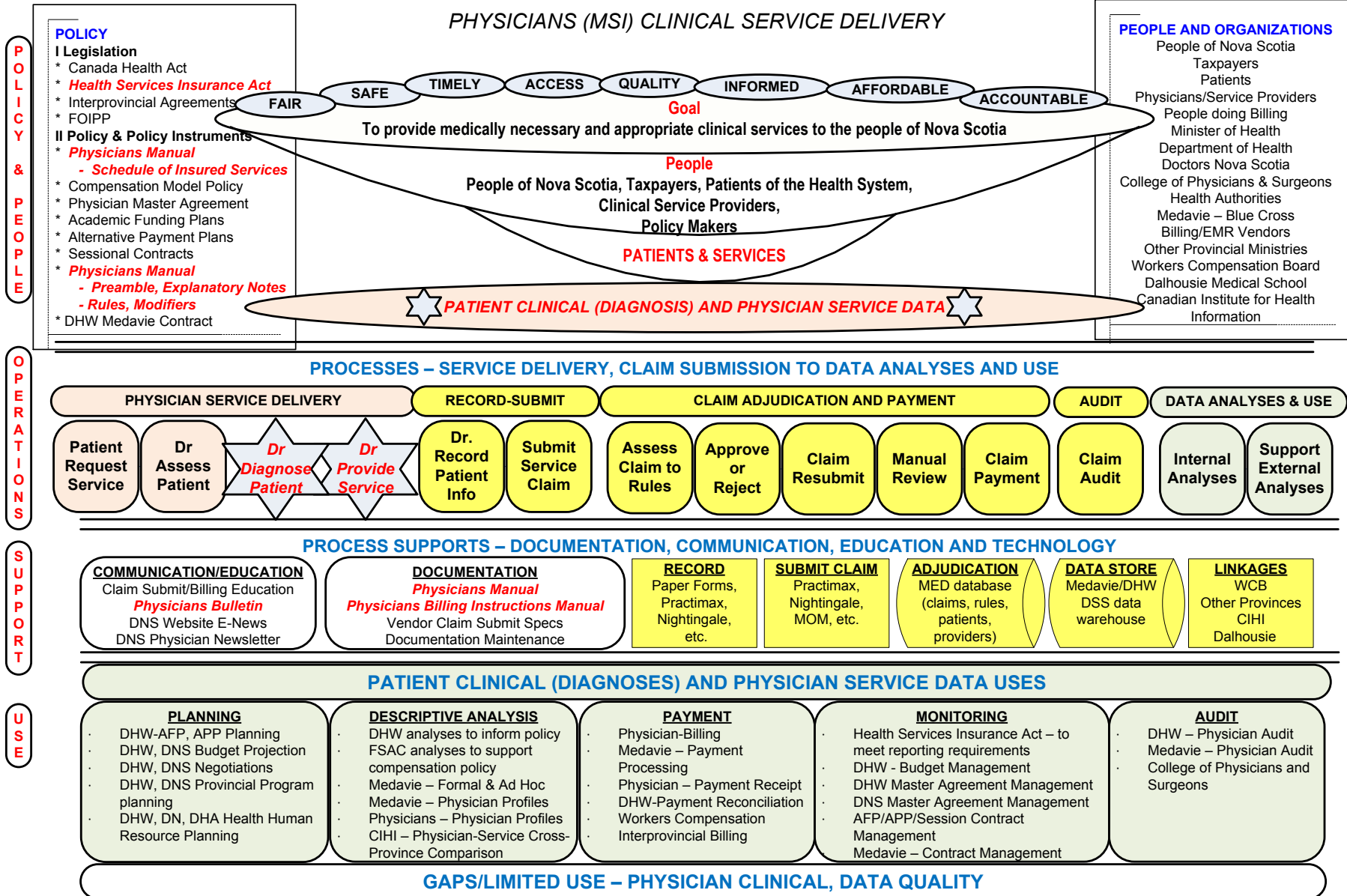
Medical Services Insurance Program

- Publicly funded program for physicians services for all people in Nova Scotia
- Physicians required to collect/submit diagnoses, health service and other information elements
- Mature program involving
 - Policy, People, Operations/Support, Data Use
- Department of Health responsible for program policy (include IM policy), funding, monitoring and accountability
- Physicians – Service delivery & reporting
- Data/claims processing – 3rd party vendor
- EMR – 3rd party vendors



Nova Scotia Medical Services Insurance Program – Current State

October 2012



NS PMMP Goals for Future to 2030

Forward Looking

To Implement

1. Modernize the Schedule of Insured Services for the people of NS
2. Establish and implement framework to accurately define clinical diagnosis and service descriptions
3. Prepare and sustain relevant and accurate supporting documentation
4. Update related policy and operational processes
5. Align required data and information flows to meet accountabilities and support clinicians and organizations
6. Retain current and increase future data and information use

Six Phases Spanning 2012 - 2017

Planning Through Implementation

- I. Project Scope and Map
- II. **Clinical Diagnosis and Services Reporting – Content Definition, Development and Documentation**
 - I. **Assessment of Feasibility**
 - II. **SNOMED CT and CPT Adoption – Decision**
 - III. **Clinical Term Cleaning, Mapping and Subsets**
- III. **Clinical and Service Content Use, Policy and Process Modification and IT Assessment of Requirements (including uses)**
- IV. Policy and Process Testing and IT modification
- V. Implementation of policy, processes and IT
- VI. Implementation Maintenance

Assessment of Feasibility & Diagnoses Cleaning, Mapping and Validation

Kathy Giannangelo

Assessment of Feasibility: Four Dimensions

- Technical
- Organizational
- Improved content
- Overall

SNOMED CT – Appraisal to Subsets

- ▶ SNOMED CT Adoption - Diagnoses
 - ▶ Diagnoses content broad appraisal
 - ▶ Cleaning and Mapping
 - ▶ Physician Validation
 - ▶ Specialty Specific Subset

Cleaning Diagnoses Descriptions

Diagnoses cleaned to support mapping to SNOMED CT

Approach:

- Identify diagnosis description
- Identify reputable source of ICD-9-CM description and code
 - Centers for Disease Control and Prevention, 2012 version
- Review each diagnosis description
- Create the cleaned diagnosis description

Cleaned Diagnoses Descriptions

| NS Description | CDC Description | Cleaned Description |
|-------------------------------------|---|--|
| Other convulsions | Other convulsions | Other convulsions |
| Ben neo pit gl/craniophar duct | Benign neoplasm of pituitary gland and craniopharyngeal duct | Benign neoplasm of pituitary gland and craniopharyngeal duct |
| Unspecified thyroiditis | Thyroiditis, unspecified | Thyroiditis, unspecified |
| Sprains and strains of ribs | Sprain of ribs | Sprains and strains of ribs |
| Oth br lacn/contus w op wnd nos | Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified state of consciousness | Other brain laceration and contusion, with open wound, unspecified |
| Other sympt nerv/musculoskel system | | Other symptoms of nervous and musculoskeletal system |

Why is Mapping Needed?

To provide a link between one terminology (ICD-9-CM) to another terminology (SNOMED CT) in order to retain the value of historical data

- ▶ Support auditing and analyses across years
- ▶ Enable continuation of current analyses

Combined Specialties and Subspecialties

- ▶ Surgery – 669
 - ▶ Cardiovascular/Thoracic Surgery – 112
 - ▶ Thoracic Surgery – 289
 - ▶ Vascular Surgery – 396
- ▶ Pathology – 890
 - ▶ Anatomical Pathology – 749
 - ▶ Haematological Pathology – 61
 - ▶ Neuropathology – 70
 - ▶ General Pathology – 260
- ▶ Genetics – 489
 - ▶ Human Genetics – 19
 - ▶ Medical Genetics – 483
- ▶ Neurology – 1483
 - ▶ Neurology – 1,400
 - ▶ Neurology Paediatric – 307
- ▶ Diagnostic Imaging - 1703
 - ▶ Diagnostic Radiology – 1704
 - ▶ Nuclear Medicine – 30
 - ▶ Diagnostic & Therapeutic Radiology – 30

Mapping Examples

- Single Pre-coordinated Concepts (9,540)
 - 230.2 - Carcinoma in situ of stomach
 - 92756002 | Carcinoma in situ of stomach (disorder) |
- Multiple Pre-coordinated Concepts (678)
 - 379.92 - Swelling or mass of eye
 - 300849006 | Mass of eye structure (finding) |
 - 45177002 | Swelling of structure of eye (finding) |
- Post-coordination (ongoing)
 - 170.5 - Malignant neoplasm of short bones of upper limb
 - 126571009 | Neoplasm of short bone of upper limb (disorder) | :
116676008 | Associated morphology (attribute) | =
367651003 | Malignant neoplasm of primary, secondary, or uncertain
origin (morphologic abnormality) |
- Not Mapped (30)
 - V68.2 - Request for expert evidence

SNOMED CT to ICD-9-CM Equivalency Map, July 31, 2013

- ▶ Number of records: 116,419
 - ▶ Unique number of ICD-9-CM codes: 11,610
 - ▶ Unique number of SNOMED CT concepts with map: 85,002
 - ▶ Unique number of SNOMED CT concepts without map: 18,376
- ▶ SNOMED CT source code to target map code correlation value
 - ▶ **Exact match** map from SNOMED CT source code to target code
 - ▶ **Broad to narrow** map from SNOMED CT source code to target code
 - ▶ **Narrow to broad** map from SNOMED CT source code to target code
 - ▶ **Partial overlap** between SNOMED CT source code and target code
 - ▶ SNOMED CT source code **not mappable** to target coding scheme
 - ▶ SNOMED CT source code to target map code correlation **not specified**

SNOMED CT to ICD-9-CM Equivalency Map, July 31, 2013

▶ What we used: 7,885 maps

- ▶ Unique SNOMED CT concepts: 7,882
- ▶ Unique ICD-9-CM codes: 7,590
- ▶ Correlation
 - ▶ Exact match: 6487
 - ▶ Narrow to broad: 1376
 - ▶ Broad to narrow: 19
 - ▶ Partial overlap: 3

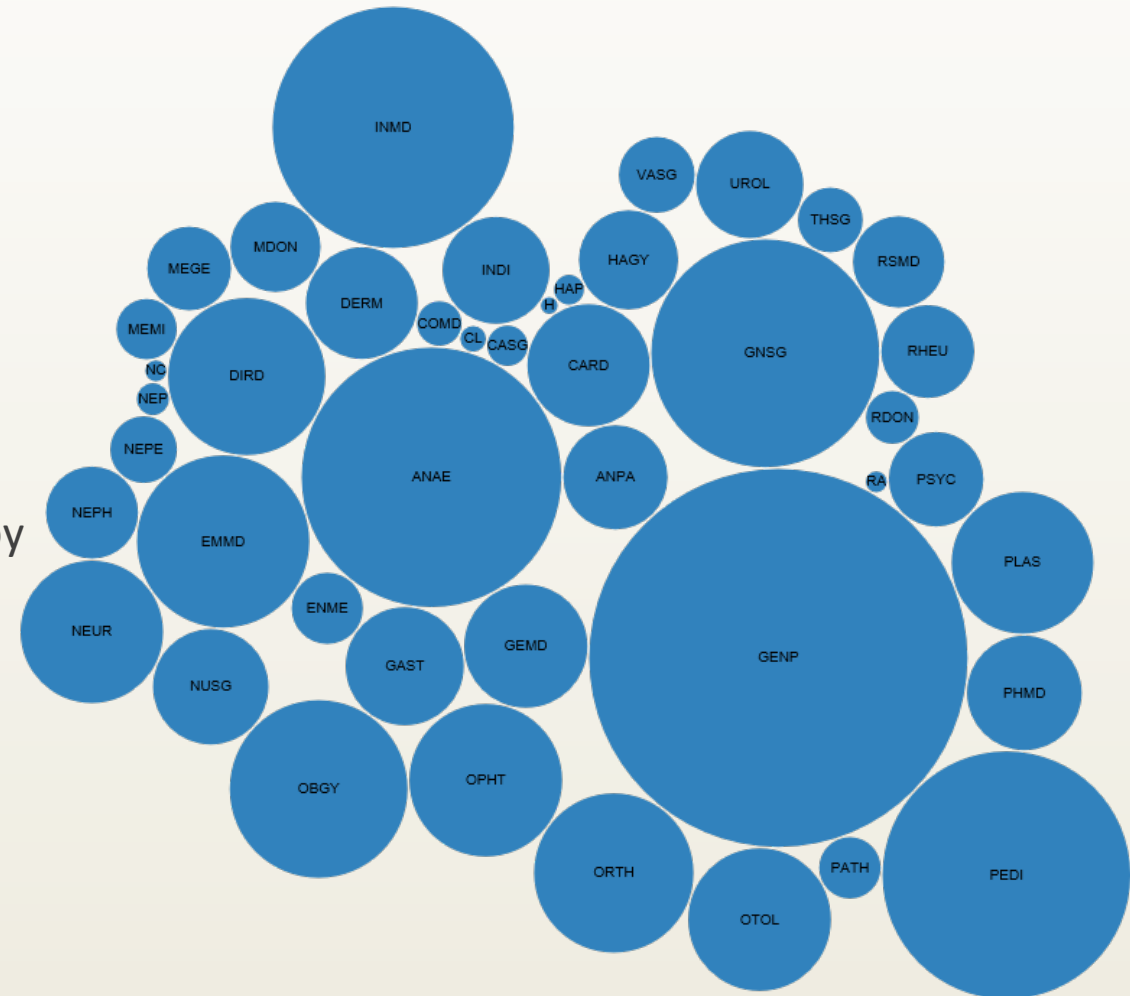
▶ What we did not use: 73,518 maps

- ▶ Unique SNOMED CT concepts: 64,046
- ▶ Unique ICD-9-CM codes: 6,935
- ▶ Correlation
 - ▶ Exact match: 10183
 - ▶ Narrow to broad: 62314
 - ▶ Broad to narrow: 788
 - ▶ Partial overlap: 233

Mapping and Validation Process

Mapping

- Extract historical clinical diagnoses (ICD-9-CM), ~10,341
- Map clinical diagnoses to SNOMED CT
 - Apply map between SNOMED CT and ICD-9-CM developed by the IHTSDO
 - Apply lexical matching (compare cleaned diagnoses descriptions to SNOMED CT descriptions)
 - Manual review and mapping



Mapping and Validation Process (Cont'd)

- Cycle 1: Physician Beacons Validation of Mapping
 - Validation sets of 500 clinical diagnoses
 - Per specialty
 - Beacons validate mappings
 - Clinical meaning index (CMI)
 - Clinical meaning is the same
 - Clinical meaning is somewhat the same
 - Clinical meaning is different
 - Unsure
 - Analyse results and respond
 - Beacons CMI lower than RKL CMI
 - Beacons have comments
 - Update map

Related Content - Rules

- ▶ Validation, adjudication and audit rules
- ▶ Analysis of business rule components
- ▶ Linking rules to policies, diagnoses and health services
- ▶ From new content to existing -> implications on rules

Reviewing Beacons Feedback

| Response to Beacons Feedback | Total |
|--|-------|
| Change required | 93 |
| Change not required - clinician does not use code | 21 |
| Change not required - clinician is unsure of code | 35 |
| Change not required - synonym exists | 121 |
| Change not required - definition is implicit | 22 |
| Change not required - suggested term is more/less specific | 4 |
| Change not required - clinician is making general comment or comment about ICD that does not affect the code | 214 |
| Change not required - term showed clinician is the same or almost exactly the same as source term | 60 |
| Change not required - other or unspecified | 16 |
| Change not required - mapping rule applies | 18 |
| Change not required - best SNOMED CT concept available assigned | 112 |

Building Specialty Specific Subsets Methods, Tooling and Documentation

Dennis Lee

Building Subsets

- ▶ Three Cycles
 - ▶ 1) Map Validation 2) Remove Redundant 3) Add Relevant
- ▶ Start with local terms – Map Validation Results
- ▶ Use other credible subsets as resources
- ▶ Adapt for Nova Scotia use
- ▶ Support with tools
- ▶ Physician involvement throughout

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- ▶ Terminology server
 - ▶ Search/Browse
 - ▶ SNOMED CT
 - ▶ ICD-9-CM
 - ▶ CPT
 - ▶ ...
 - ▶ Standardized tools
 - ▶ MyDatasets
 - ▶ MySubsets
 - ▶ Customised tools
 - ▶ Nova Scotia Validation
 - ▶ Nova Scotia Call Schedule

Cycle 1 - Mapping Datasets

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID FSN PT

View MyBatch

MyBatch

Encode Clinical Diagnoses Round #1

- MyTable:** Clinical Diagnoses (ICD-9-CM)
- MyDataset:** Nova Scotia

Statistics

| Description | Total | Percent |
|------------------------|-------|---------|
| Number of Terms | | 100.0% |
| Encoded | | |
| Not Encoded | | |

| Description | Encoded | Not Encoded |
|--------------|---------|-------------|
| 1 to 1000 | 1000 | 0 |
| 1001 to 2000 | 1000 | 0 |
| 2001 to 3000 | 1000 | 0 |
| 3001 to 4000 | 1000 | 0 |
| 4001 to 5000 | 998 | 2 |
| 5001 to 6000 | 995 | 5 |
| 6001 to 7000 | 996 | 4 |
| 7001 to 8000 | 991 | 9 |

Search Parameters

Sort By: Frequency

Encode Status: All

Encode Category: All

Flag:

Notes:

Code:

Name:

Hierarchy:

Multiple:

Total Results: 10341

Search

401.9 - Essential hypertension, unspecified

- Frequency: 1,755,099
- NS: ESSENTIAL HYPERTENSION UNSPEC
- CDC: Unspecified essential hypertension

[Return to top](#)

Encoding

Search:

| Del | SNOMED CT |
|--------------------------|------------------------|
| <input type="checkbox"/> | Essential hypertension |

Showing 1 to 1 of 1 entries

[Return to top](#)

Lexical Search Results

Search: Essential hypertension, Release Version: July 31, 2013

| Add | Description | Concept | Match Type |
|--------------------------|---|--|------------|
| <input type="checkbox"/> | Essential hypertension | Essential hypertension (disorder) | |
| <input type="checkbox"/> | Essential hypertension in obstetric context | Essential hypertension in obstetric context (disorder) | |

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Cycle 1 - Tracking Validation Progress

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID

Nova Scotia Validation

Specialties

Beacons

Clinical Diagnoses

Call Schedule

Clinical Diagnoses Cycle #1

Clinical Diagnoses Cycle #1 Results

Clinical Diagnoses Cycle #1 Analysis

Clinical Diagnoses Cycle #2

Clinical Diagnoses Cycle #3

Health Service Descriptions

Call Schedule

Steps #1 and 2: Validation & Identification

Step #3: Selection

Clinical Diagnoses Cycle #1

Search:

| # | Code | Specialty | Beacons | Number of Sets | Number of Terms | Sets Completed | Sets Pending | Sets Unassigned | Status |
|-----|------|-------------------------------|---------|----------------|-----------------|----------------|--------------|-----------------|------------|
| 1. | ANAE | Anaesthesia | 4 | 10 | 4651 | 5 | 1 | 4 | Unassigned |
| 2. | CARD | Cardiology | 1 | 3 | 1030 | 1 | 1 | 1 | Unassigned |
| 3. | CLIA | Clinical Immunology & Allergy | 1 | 1 | 45 | 1 | | | Completed |
| 4. | COMD | Community Medicine | 1 | 1 | 136 | | | | Unassigned |
| 5. | DERM | Dermatology | 2 | 2 | 861 | 1 | 1 | | Pending |
| 6. | EMMD | Emergency Medicine | 3 | 5 | 2047 | 1 | 1 | 3 | Unassigned |
| 7. | ENME | Endocrinology & Metabolism | | 1 | 349 | | | | No beacons |
| 8. | GAST | Gastroenterology | 1 | 2 | 962 | | | | Unassigned |
| 9. | GEMD | Geriatric Medicine | 1 | 3 | 1047 | 1 | | | Unassigned |
| 10. | GENP | General Practitioner | 13 | 20 | 9875 | 19 | 1 | | Pending |
| 11. | GNSG | General Surgery | 2 | 8 | 3584 | 2 | 2 | 4 | Unassigned |
| 12. | HAGY | Haematology | | 2 | 679 | | | | No beacons |
| 13. | INDI | Infectious Diseases | 1 | 2 | 788 | | 2 | | Pending |
| 14. | INMD | Internal Medicine | 1 | 9 | 4013 | 2 | | 7 | Unassigned |
| 15. | MDON | Medical Oncology | 1 | 2 | 560 | 1 | | | Unassigned |
| 16. | MEMI | Medical Microbiology | | 1 | 251 | | | | No beacons |
| 17. | NEPH | Nephrology | 2 | 2 | 584 | 2 | | | Completed |

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Cycle 1 - Tracking Validation Progress (cont)

| Nova Scotia Validation | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|------------------------------|---------|---------------------------------------|---------|-------------------------------|---------|--------|---------|---------------|---------|-------------|-------------|----------|-------|---------------|------------|----------|-----------|
| Clinical Diagnoses Cycle #1 Results | | | | | | | | | | | | | | | | | | | |
| Code | Specialty | Clinical meaning is the same | | Clinical meaning is somewhat the same | | Clinical meaning is different | | Unsure | | RKL < Beacons | | Total Terms | | Comments | | Beacon Status | RKL Review | | |
| | | Total | Percent | Total | Percent | Total | Percent | Total | Percent | Total | Percent | Completed | Outstanding | Total | Total | | Percent | Required | Completed |
| ANAE | Anaesthesia | 1,499 | 77.0% | 388 | 19.9% | 22 | 1.1% | 3 | 0.2% | 34 | 1.7% | 1,912 | 2,739 | 4,651 | 49 | 2.5% | | 53 | |
| CLIA | Clinical Immunology & Allergy | 32 | 68.1% | 9 | 19.1% | 2 | 4.3% | | | 4 | 8.5% | 43 | 2 | 45 | 3 | 6.4% | Completed | 5 | 5 |
| DERM | Dermatology | 238 | 67.4% | 55 | 15.6% | 23 | 6.5% | | | 37 | 10.5% | 316 | 545 | 861 | 2 | 0.6% | | 38 | |
| GEMD | Geriatric Medicine | 304 | 61.2% | 172 | 34.6% | | | 8 | 1.6% | 13 | 2.6% | 484 | 563 | 1,047 | 8 | 1.6% | | 13 | |
| GENP | General Practitioner | 5,893 | 67.5% | 1,837 | 21.0% | 317 | 3.6% | 60 | 0.7% | 623 | 7.1% | 8,107 | 1,768 | 9,875 | 385 | 4.4% | | 796 | 100 |
| GNSG | General Surgery | 707 | 70.6% | 233 | 23.3% | 15 | 1.5% | 6 | 0.6% | 41 | 4.1% | 961 | 2,623 | 3,584 | 28 | 2.8% | | 57 | |
| INMD | Internal Medicine | 773 | 77.9% | 186 | 18.8% | 9 | 0.9% | 1 | 0.1% | 23 | 2.3% | 969 | 3,044 | 4,013 | 16 | 1.6% | | 27 | |
| MDI | Diagnostic Imaging (Merged - DIRD/NCMD/RADI) | 1,233 | 74.9% | 278 | 16.9% | 39 | 2.4% | 17 | 1.0% | 80 | 4.9% | 1,391 | 312 | 1,703 | 94 | 5.7% | | 111 | |
| MDON | Medical Oncology | 408 | 81.0% | 47 | 9.3% | 15 | 3.0% | 4 | 0.8% | 30 | 6.0% | 474 | 86 | 560 | 59 | 11.7% | | 61 | |
| MPA | Pathology (Merged - ANPA/HAPA/NEPA/PATH) | 416 | 80.0% | 14 | 2.7% | 7 | 1.3% | 37 | 7.1% | 46 | 8.8% | 474 | 416 | 890 | 50 | 9.6% | | 53 | |
| MSG | Surgery (Merged - CASG/THSG/VASG) | 211 | 37.1% | 194 | 34.2% | 57 | 10.0% | 3 | 0.5% | 103 | 18.1% | 465 | 204 | 669 | 13 | 2.3% | | 107 | |
| NEPH | Nephrology | 470 | 81.9% | 50 | 8.7% | 22 | 3.8% | 4 | 0.7% | 28 | 4.9% | 546 | 38 | 584 | 26 | 4.5% | Completed | 33 | 33 |
| NIUSG | Neurosurgery | 394 | 82.3% | 72 | 15.0% | | | 1 | 0.2% | 12 | 2.5% | 467 | 452 | 919 | 3 | 0.6% | | 14 | |

Cycle 1 - Tracking Validation Progress (cont)

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID

Nova Scotia Validation

Specialties

Beacons

Clinical Diagnoses

Call Schedule

Clinical Diagnoses Cycle #1

Clinical Diagnoses Cycle #1 Results

Clinical Diagnoses Cycle #1 Analysis

Clinical Diagnoses Cycle #2

Clinical Diagnoses Cycle #3

Health Service Descriptions

Call Schedule

Steps #1 and 2: Validation & Identification

Step #3: Selection

Clinical Diagnoses Cycle #1 Analysis and Response

Specialty:

RKL CMI:

Beacon CMI:

Compare CMI:

Beacon Comments:

RKL Response:

Note: Parentheses indicates clinical meaning index (CMI) - (1) Clinical meaning is the same, (2) Clinical meaning is somewhat the same, (3) Clinical meaning is different, (4) Unsure. Bold term in SNOMED CT column indicates preferred term that was shown to beacons.

| No | ICD-9-CM (RKL CMI) | SNOMED CT | Beacon Specialty - (CMI) Comments |
|----|---|--|---|
| 1. | 235.0 - Neoplasm of uncertain behavior of salivary gland (1) | <ul style="list-style-type: none"> ▪ 189362009 Neoplasm of uncertain behavior of major salivary gland (disorder) <ul style="list-style-type: none"> ▪ Neoplasm of uncertain behavior of major salivary gland ▪ 949360009 Neoplasm of uncertain behavior of minor salivary gland (disorder) <ul style="list-style-type: none"> ▪ Neoplasm of uncertain behavior of minor salivary gland | <ul style="list-style-type: none"> ▪ OTOL - (3) salivary gland tumours can involve either 1. acinar or 2. ductal structures. should not be mixing general term ie gland with specific type ie duct <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> Change made <input type="text" value=""/> Original: 109826003 Neoplasm of uncertain behavior of salivary gland duct (disorder) KG: There are two possible maps for this: 189362009 Neoplasm of uncertain behavior of major salivary gland (disorder) or 949360009 Neoplasm of uncertain behavior of minor salivary gland (disorder) </div> |
| 2. | 237.5 - Neoplasm of uncertain behavior of brain and spinal {cord} (1) | <ul style="list-style-type: none"> ▪ 189484008 Neoplasm of uncertain behavior of brain and/or spinal cord (disorder) <ul style="list-style-type: none"> ▪ Neoplasm of uncertain behavior of brain and spinal cord | <ul style="list-style-type: none"> ▪ OTOL - (2) should it read brain " or " spinal cord ? <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> Change not required - term showed clinician is the same or almost exactly th <input type="text" value=""/> </div> |

Cycle 2/3 - SNOMED CT Subset Browser

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | MyMaps | Projects | Admin

SNOMED CT Subsets BETA

Subsets

Organisation:

Country:

Domain:

Showing: 214 of 214

Filter Results (Phrase Match)

- National Health Services**
Financial circumstances finding
- National Health Services**
Finding
- National Health Services**
Food allergen
- National Health Services**
Gastroenterology outpatient diagnosis
- National Health Services**
General physical wellbeing finding
- Canada Health Infoway**
HealthConcernCode
- Canada Health Infoway**
HealthConcernCodeSubsetCommonlyUsed
- National Health Services**
Height
- Canada Health Infoway**
HighestLevelEducationCode

Concepts

Status:

Content:

Effective Time:

Showing: 44654 of 44654

Filter Results (Phrase Match)

- 1+ pitting edema (finding)
- 1,3 Indandion poisoning (disorder)
- 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism (disorder)
- 10-30% body burnt (disorder)
- 10q partial trisomy syndrome (disorder)
- 11p partial monosomy syndrome (disorder)
- 11q partial trisomy syndrome (disorder)
- 12p partial trisomy syndrome (disorder)
- 12q partial trisomy syndrome (disorder)
- 13q partial monosomy syndrome (disorder)
- 14q partial trisomy syndrome (disorder)
- 15q partial trisomy syndrome (disorder)
- 17p partial trisomy syndrome (disorder)
- 18p partial monosomy syndrome (disorder)

Select All | Deselect All | Copy Selected to Clipboard (0)

HealthConcernCode

Organisation
Canada Health Infoway

Object Identifier
2.16.840.1.113883.2.20.3.278

Description
Represents the Client's relevant clinical problems, conditions, diagnoses, symptoms, findings and complaints, as interpreted by the provider.

Publish Date
2013-07-31

History
As not all subsets are distributed using the RF2 Simple RefSet specification (or were not correctly structured), some totals may be incorrect. Concepts activated included new concepts added to the subset or previously inactivated concepts in the subset being reactivated.

Search:

| Effective Time | Concepts Activated | Concepts Inactivated | Total Active Concepts | Total Inactive Concepts | Total Concepts | Total Records |
|----------------|--------------------|----------------------|-----------------------|-------------------------|----------------|---------------|
| 1. 20120531 | 44,086 | 0 | 44,086 | 0 | 44,086 | 44,086 |

Cycle 2/3 Subset Reports

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | MyMaps | Projects | Admin

View MySubset Report

MySubset Report

KP Compare

Description

MySubset

Nova Scotia Psychiatry (Beta)

MySubset Report Type

Comparison

Comparison MySubset

Kaiser Permanente Mental Health Problem List

Comparison Effective Time

20140131

Status

Completed

- Created On: 2014-09-19 10:16:25
- Processed On: 2014-09-19 10:16:25
- Completed On: 2014-09-19 11:16:25

Shared

Summary

| Description | Total | Notes |
|-------------------------|-------|--|
| Total Concepts | 1,481 | Total number of unique concepts across both subsets. |
| Source Concepts | 535 | Total number of concepts in Nova Scotia Psychiatry (Beta) subset. |
| Target Concepts | 1,203 | Total number of concepts in Kaiser Permanente Mental Health Problem List subset. |
| Concepts in Source Only | 278 | Number of concepts in Nova Scotia Psychiatry (Beta) subset only. |
| Concepts in Target Only | 946 | Number of concepts in Kaiser Permanente Mental Health Problem List subset only. |
| Concepts in Both | 257 | Number of concepts in both the Nova Scotia Psychiatry (Beta) and Kaiser Permanente Mental Health Problem List subsets. |

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International Edition and Extensions

| # | Concept Id | Fully Specified Name | Source Only | Both | Target Only | All | Diagram |
|----|------------|---|-------------|------|-------------|-------|---------|
| 1. | 123037004 | Body structure (body structure) | 0 | 0 | 0 | 0 | |
| 2. | 404684003 | Clinical finding (finding) | 261 | 254 | 678 | 1,193 | Diagram |
| 3. | 308916002 | Environment or geographical location (environment / location) | 0 | 0 | 0 | 0 | |
| 4. | 272379006 | Event (event) | 1 | 0 | 0 | 1 | |
| 5. | 363787002 | Observable entity (observable entity) | 0 | 0 | 0 | 0 | |
| 6. | 410607006 | Organism (organism) | 0 | 0 | 0 | 0 | |

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Cycle 2/3 Subset Management


Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID ● FSN ○ PT

MySubsets

Welcome to the MySubsets Toolkit!

This toolkit enables you to create SNOMED CT subsets and export them as SNOMED CT reference sets.

Subsets can be shared (via editing a subset) with other team members as edit or view only, and can be published on the main SNOMED CT subset page. Subsets that you have shared will have a  icon under the **Shared** column.

Reports can be generated for subsets and subsets can be exported in different formats. Click on the  icon next to the **MySubset Reports** and **MySubset Exports** pages.

Note: Some features are currently under construction..

MySubsets
List of all your subsets

MySubset Reports
List of subset reports you have generated

MySubset Exports
List of subset exports you have generated

Shared MySubsets

Search:

| # | MySubset | Shared By | Share | Report | Export | Delete | Edit | View |
|-----|---|------------|-------|--------|--------|--------|------|------|
| 1. | CORE Problem List Subset of SNOMED CT | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 2. | Nova Scotia Nephrology (Christine Dipchand) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 3. | Nova Scotia Nephrology (Demo) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 4. | Nova Scotia Nephrology (Tom Hewlett) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 5. | Nova Scotia Otolaryngology (Andrew Smith) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 6. | Nova Scotia Otolaryngology (Demo) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 7. | Nova Scotia Otolaryngology (Gerard MacDonald) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 8. | Nova Scotia Otolaryngology (Manohar Bance) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 9. | Nova Scotia Otolaryngology (Timothy Wallace) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 10. | Nova Scotia Plastic Surgery (Demo) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 11. | Nova Scotia Plastic Surgery (Jason Williams) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 12. | Nova Scotia Plastic Surgery (John Stein) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 13. | Nova Scotia Plastic Surgery (Michael Brennan) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 14. | Nova Scotia Plastic Surgery (Steven Morris) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 15. | Nova Scotia Psychiatry (Demo) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 16. | Nova Scotia Psychiatry (Nicholas Delva) | Dennis Lee | Share | Report | Export | Delete | Edit | View |
| 17. | Nova Scotia Psychiatry (Patricia Pearce) | Dennis Lee | Share | Report | Export | Delete | Edit | View |

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Cycle 2/3 Subset Editing

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID ● FSN ○ PT

Edit MySubset

MySubset

Nova Scotia Psychiatry (Demo)

Summary

| Description | Total |
|-----------------------|-------|
| Reviewed Completed | 24 |
| Review Incomplete | 1,185 |
| Concepts Included | 18 |
| Concepts Excluded | 1,191 |
| Descriptions Included | 37 |

Shared (Edit)

- Dennis Lee (A)
- Dennis Wellborn (A)
- Francis Lau (A)
- Jennifer Girard (A)
- Jennifer Jones (A)
- Kathy Giannangelo (A)
- Robyn Kuropatwa (A)
- Shirley Groenen (A)

Concepts

Source: Subset

Sort By: Frequency

Status: All

Flagged?: All

Notes?: All

Search

| # | ✓ ✗ | Concept | Description | Frequency | Notes | Flag | ⓘ |
|----|--|--|---|-----------|-------|-------------------------------------|---|
| 1. | <input checked="" type="radio"/> <input type="radio"/> | Depressive disorder (disorder) | <input checked="" type="checkbox"/> Depressive disorder <input checked="" type="checkbox"/> Depressed <input checked="" type="checkbox"/> Depression <input checked="" type="checkbox"/> Depressive episode <input checked="" type="checkbox"/> Depressive illness <input checked="" type="checkbox"/> Melancholia <input checked="" type="checkbox"/> Mood disorder of depressed type | 62,155 | | <input checked="" type="checkbox"/> | |
| 2. | <input type="radio"/> <input type="radio"/> | Uncomplicated senile dementia (disorder) | <input type="checkbox"/> Uncomplicated senile dementia | 38,335 | | <input type="checkbox"/> | |
| 3. | <input checked="" type="radio"/> <input type="radio"/> | Recurrent major depression (disorder) | <input checked="" type="checkbox"/> Recurrent major depression <input checked="" type="checkbox"/> Recurrent major depressive disorder | 31,174 | | <input type="checkbox"/> | |
| 4. | <input type="radio"/> <input type="radio"/> | Anxiety state (finding) | <input type="checkbox"/> Anxiety state | 29,211 | | <input type="checkbox"/> | |

Total Concepts: 1,209 [First](#) [Previous](#) Page 1 of 49 [Next](#) [Last](#)

Cycle 2/3 Subset Editing

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID FSN PT

Edit MySubset

MySubset

Nova Scotia Psy (Demo)

Summary

- Description**
- Reviewed Completed
- Review Incomplete
- Concepts Included
- Concepts Excluded
- Descriptions Included

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- Dennis Wellbo
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- Jennifer Girard
- Jennifer Jones
- Kathy Giannan
- Robyn Kuropat
- Shirley Groene

MySubsets: Subtype Concepts

Recurrent major depression (disorder)

Subtype Concepts (9)

1. Mild recurrent major depression (disorder)
2. Moderate recurrent major depression (disorder)
3. Recurrent major depression in complete remission (disorder)
4. Recurrent major depression in partial remission (disorder)
5. Recurrent major depression in remission (disorder)
6. Recurrent major depressive episodes, in full remission (disorder)
7. Recurrent major depressive episodes, moderate (disorder)
8. Severe recurrent major depression (disorder)
9. Severe recurrent major depression with psychotic features (disorder)

Supertype Concepts (2)

1. Depressive disorder (disorder)
2. Mood disorder (disorder)

Close

Search

Flag

Close

Total Concepts: 1,209 First Previous Page 1 of 49 Next Last

Cycle 2/3 Subset Editing

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- Shirley Groene

SNOMED CT

66344007|Recurrent major depression (disorder)|

- Descriptions
- Concept Definition
- Long Normal Form
- Hierarchy
- Defining Attribute(s) - Non Is-A
- Parent(s) Concept(s)
- Child(ren) Concept(s)
- Concept Reference(s)
- Map(s)

[Return to top](#)

Descriptions

Search:

| Description Id | Term | Type | Acceptability | Case Significance | Language Code | Active | Effective Time |
|----------------|---------------------------------------|----------------------|---------------|------------------------------------|---------------|--------|----------------|
| 805947019 | Recurrent major depression (disorder) | Fully specified name | Preferred | Initial character case insensitive | en | 1 | 20020131 |
| 110183011 | Recurrent major depression | Synonym | Preferred | Initial character case insensitive | en | 1 | 20020131 |
| 110186015 | Recurrent major depressive disorder | Synonym | Acceptable | Initial character case insensitive | en | 1 | 20020131 |

Showing 1 to 3 of 3 entries

[Close](#)

Total Concepts: 1,209 [First](#) [Previous](#) Page 1 of 49 [Next](#) [Last](#)

Cycle 2/3 Subset Editing

Home | SNOMED CT | ICD | CCI | CPT | LOINC | RxNorm | ATC | DPD | MeSH | HL7 | CPCSSN | MyDatasets | MySubsets | MyExtensions | Projects | Admin ID FSN PT

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| 4. | <input type="radio"/> <input type="radio"/> | Anxiety state (finding) | <input type="checkbox"/> Anxiety state | 29,211 | | <input type="checkbox"/> | |

Canada Health Infoway HealthConcernCode
 National Health Services Care planning health issues
 National Health Services Diagnosis
 National Health Services Finding
 Nova Scotia Psychiatry (Nicholas Delva)
 Nova Scotia Psychiatry (Philippa Moss)

Total Concepts: 1,209 [First](#) [Previous](#) Page 1 of 49 [Next](#) [Last](#)

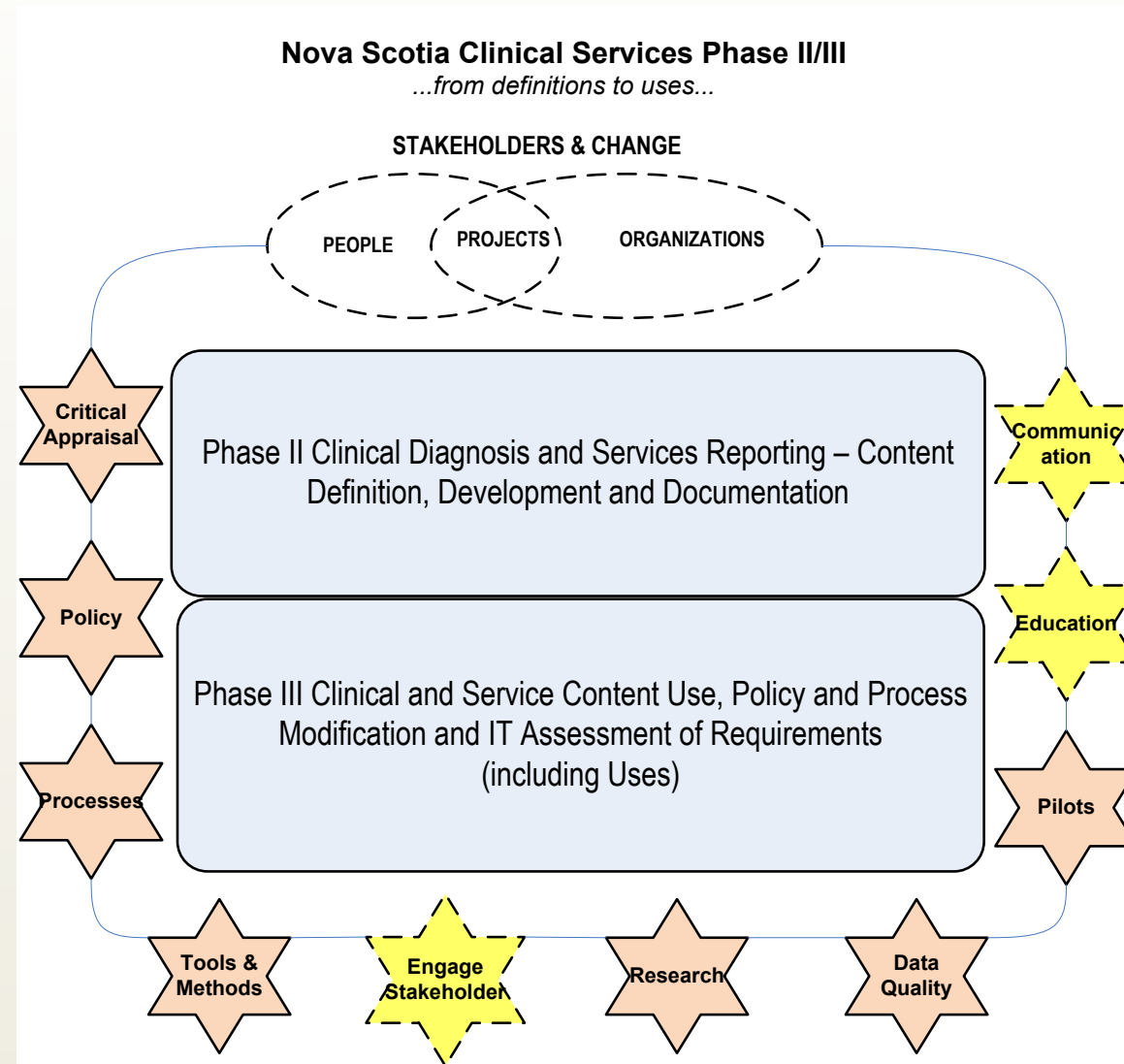
Lessons Learned and the Way Forward

Robyn Kuropatwa

Information Management First

- ▶ First do the information management work separate from the information technology – then define the intersection points
- ▶ Moving to standard terminologies/subsets in well-established programs with legacy information, processes and systems
 - ▶ Need to consider all components from definitions through to use
 - ▶ Diligence in understanding the old and proceeding with the new
 - ▶ Considering terminologies and related clinical term sets as provincial terminology assets with related/required supports/maintenance

Change Management – People and Processes



Layers of Documentation and Analyses

- Policy documents
- Project Methods and Approach
- Physician Engagement/Clinical Content Validation and Subset Development – need to be able to withstand long-term scrutiny
- Physician Claims - Data Analyses
 - Supports all project phases
 - Support all methods
 - Link Policy, information collected, system rules, explanatory codes
 - Old – New Cross-Walks

Approaches, Methods and Tooling

- ▶ Working through legacy
 - ▶ You have to consider the history at the same time you are building the future – it is not just reimbursement
 - ▶ Need to think from policy to use concurrently
- ▶ Approaches
- ▶ Methods
- ▶ Resource and Reference material
- ▶ Tooling
- ▶ Find, adapt, adopt – clinical specialty specific subsets

Over the Next 11 months

- Project Management
- Governance
- Change Management
- Program Policy
- Clinical Content – Specialty Specific Subsets (35)
- Information Management and Documentation (Subset Lifecycle)
- Data Uses

Questions and Thank You

- Questions



- Thank you for your time. It has been a pleasure.