

**Pharmacy HIT Collaborative Value Sets**  
Public Comment Requested  
May 2017

Thank you for your interest in the Pharmacy HIT (PHIT) Collaborative value sets. The PHIT Collaborative value sets are intended to drive standardization and adoption of clinical documentation across the pharmacy profession and industry.

Standardization creates a framework that, if adopted, allows healthcare stakeholders (e.g., patients, providers, payers, software vendors, state registries, quality organizations) to leverage data like all other major industries across the world. Two key use cases for pharmacy are sending and receiving data across health information exchange (HIE) networks to facilitate care continuity and reporting electronic clinical quality measures (eCQMs) to participate in value-based payment programs. However, stakeholders must implement standards specifications within software systems to realize these benefits in practice.

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**How to Provide Feedback**

The intent of this document is to obtain public feedback prior to releasing an updated version of the PHIT Collaborative value sets originally published in November 2016.<sup>1</sup> Reviewers are encouraged to submit comments to the Pharmacy HIT Collaborative via the online comment submission portal accessible at: <http://pharmacyhit.org/index.php/request-mtm-value-set>

The 30-day comment period will begin on May 15 and close June 15. All comments will be reviewed and considered prior to the next official publication of the PHIT Collaborative value sets.

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<sup>1</sup> Current versions of value sets are accessible from the Value Set Authority Center (VSAC): <https://vsac.nlm.nih.gov/#>

## Background

The Pharmacy HIT Collaborative value sets are built for incorporation into the Quality Data Model (QDM) and Consolidated Clinical-Document Architecture (C-CDA), current standards that support electronic Clinical Quality Measure (eCQM) reporting and health information exchange (HIE).

Future standards such as Fast Healthcare Interoperability Resources (FHIR) are still evolving, though some are currently being implemented in practice for certain use cases. The PHIT Collaborative value sets are intended to be robust and fit implementations based on current and future standards.

*Excerpt from Implementing SNOMED CT in Practice: A Beginners Guide.<sup>2</sup>*

SNOMED CT and other electronic standards make health information exchange (HIE) and electronic clinical quality measurement (eCQM) reporting possible. Value sets are a selection of codes used for documenting clinical information within health care software.

Instead of sifting through the 330,000+ codes that exist within SNOMED CT, a subset is developed to help vendors and frontline implementers know which codes to use within software fields for specific types of clinical documentation. An example of a value set is the Core Problem List.<sup>3</sup> When a provider identifies a disease, disorder, symptom, or similar issue, the provider picks from a list of problem codes, represented in the form of a value set that encompasses most problems that may be discovered during a patient encounter. If all providers are populating the patient problem list, picking from the same value set of codes, data can be sent and received seamlessly across health information exchanges using the standards adopted by certified vendor systems.

When reporting eCQMs to measure quality in value-based reimbursement programs, there must be a consistent way to calculate numerators and denominators. For example, if an eCQM measures the percentage of type 2 diabetes mellitus patients with a hemoglobin a1c below 9%, there must be a common problem code for type 2 diabetes mellitus that determines the number of patients in the denominator. Likewise, software systems must

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<sup>2</sup> Anderegg SV, Woods AJ. "Implementing SNOMED CT: A Beginners Guide." Pharmacy HIT Collaborative. May 27, 2016. <http://www.pharmacyhit.org/pdfs/workshop-documents/VSC-Post-2016-01.pdf>

<sup>3</sup> The CORE Problem List Subset of SNOMED CT®, retrieved from [https://www.nlm.nih.gov/research/umls/Snomed/core\\_subset.html](https://www.nlm.nih.gov/research/umls/Snomed/core_subset.html), accessed March 15, 2016.

also have a consistent way to determine which of these patients have had a hemoglobin A1c lab value below 9% within a specified number of months to determine how many patients will be counted in the numerator. The resulting ratio is how quality is quantified using clinical data.

Like the Core Problem List, pharmacy professionals need value sets for clinical documentation. For example, a list of codes for medication therapy problems (dose too low, additional therapy needed) and medication therapy interventions (increase dose, start new medication) are needed to document clinical findings and actions taken during patient care. This information can be exchanged or reported to calculate process and outcomes measures specific to pharmacy services.

### **Key Considerations**

- Reviewers are encouraged to consider the following elements when reviewing proposed changes to value sets:
  - Are these data points critical for patient care (e.g., required by law or payers, actionable, have analytical value)?
  - Are these data points appropriate to capture in patient care software or electronic health records?
- Reviewers are encouraged to submit general requests/comments, new code requests, new value set requests, and value set modification requests on the following:
  - Codes that are difficult to interpret or ambiguous
  - Codes that are not organized in the appropriate value set
- Reviewers are encouraged to focus specifically on the proposed changes to codes/value sets listed in the document. However, suggestions for codes or value sets that do not exist, but vital to capturing important elements of patient care are also welcomed.
- Value sets are being continuously developed and updated; this version of value sets is under consideration for the newest update which will be released at regular scheduled intervals by the Pharmacy HIT Collaborative.

## Legend

Symbol	Meaning	Notes
●	New value set	Value sets are created to expand the breadth/depth of documentation, support new use cases, and align with health IT standards
	Modified value set, codes	Value sets are modified to enhance documentation precision by adding or retiring codes
↕	Reorganized value set, codes	Value sets and codes may be reorganized to streamline documentation and align with updates to health IT standards
↻	Existing value set	Value sets can serve multiple purposes and be used to capture data in multiple areas
	In-progress value set	Value sets are constantly being constructed and vetted; while these value sets will not be published this cycle, sharing them allows the public to give feedback at the earliest stage

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**A. Findings Related to Medication Management**

SNOMED CT Concept
<b>1. Immunizations</b> 
Immunization status unknown (finding)
Not up to date with immunizations (finding)
Up-to-date with immunizations (finding)
<b>2. Health Literacy</b> 
Deficient knowledge (finding)
Deficient knowledge of disease process (finding)
Deficient knowledge of medication regimen (finding)
Deficient knowledge of therapeutic regimen (finding)
Inability to understand (finding) 
<b>3. Cultural Beliefs</b>
Cultural belief conflict (finding)
Religious belief and healthcare recommendation conflict (finding)
<b>4. Multiple Providers</b> 
Under care of multiple providers (finding)
Uses multiple pharmacies (finding) 
<b>5. Chronic Disease Present</b>
Chronic disease present (situation)
Multiple chronic diseases (situation)
One chronic disease (situation)
<b>6. Taking Medications for Chronic Disease</b>
Taking medication for chronic disease (finding)
Taking multiple medications for chronic disease (finding)
Taking one medication for chronic disease (finding)

<b>7. Body Mass Index</b>
Body mass index less than 20 (finding)
Body mass index 20-24 - normal (finding)
Body mass index 25-29 - overweight (finding)
Body mass index 30+ - obesity (finding)
Body mass index 40+ - severely obese (finding)
<b>8. Eating Habits ●</b>
Does not eat (finding) ↓↑
Eating habit unknown (finding) ↓↑
Eating normal (finding) ↓↑
Overeating (finding) ↓↑
Inadequate food diet (finding)
<b>9. Diet ✎</b>
Gluten-free diet (finding) ✎
Lactose-free diet (finding) ✎
Peanut-free diet (finding) ✎
Phenylalanine-free diet (finding) ✎
<b>10. Exercise</b>
Excessive exercise (finding)
Exercise above recommended level (finding)
Exercise below recommended level (finding)
Exercise physically impossible (finding)
Exercises regularly (finding)
Gets no exercise (finding)
<b>11. Tobacco Use ✎</b>
Ex-smoker (finding)
Heavy tobacco smoker (finding)
Light tobacco smoker (finding)
Never smoked tobacco (finding)
Occasional tobacco smoker (finding)
Smoker (finding)
Smokes tobacco daily (finding)
Tobacco smoking consumption unknown (finding)
Chews tobacco (finding) ✎
<b>12. Tobacco Exposure ●</b>
Exposed to tobacco smoke at home (finding)
Exposed to tobacco smoke at work (finding)
History of exposure to second hand smoke (situation)

No known exposure to tobacco smoke (finding)
<b>13. Alcohol Use</b> ✎
Alcohol consumption unknown (finding)
Alcohol intake exceeds recommended daily limit (finding)
Alcohol intake within recommended daily limit (finding)
Denies alcohol use (finding) ✎
<b>14. Caffeine Use</b>
Caffeine user (finding)
Excessive caffeine intake (finding)
<b>15. Illicit Drug Use</b> ✎
Illicit drug use (finding)
Illicit drug use unknown (finding)
History of recreational drug use (situation) ✎
<b>16. Life Events</b>
Divorce, life event (finding)
Finding of personal milestones (finding)
Gain of new family member, life event (finding)
Illegitimate pregnancy, life event (finding)
Impending marriage, life event (finding)
Life crisis, life event (finding)
Marital separation, life event (finding)
Offspring leaving home, life event (finding)
Recent marriage, life event (finding)
Retired, life event (finding)
<b>17. Transition of Care</b>
Transition from acute care to home-health care (finding)
Transition from acute care to hospice (finding)
Transition from acute care to long-term care (finding)
Transition from acute care to self-care (finding)
Transition from home-health care to acute care (finding)
Transition from home-health care to hospice (finding)
Transition from home-health care to long-term care (finding)
Transition from home-health care to self-care (finding)
Transition from hospice to acute care (finding)
Transition from hospice to home-health care (finding)
Transition from hospice to long-term care (finding)
Transition from hospice to self-care (finding)
Transition from long term care to self-care (finding)

Transition from long-term care to acute care (finding)
Transition from long-term care to home-health care (finding)
Transition from long-term care to hospice (finding)
Transition from self-care to acute care (finding)
Transition from self-care to home-health care (finding)
Transition from self-care to hospice (finding)
Transition from self-care to long term care (finding)
Transition of care (finding)

## B. Medication Therapy Problems

(aka Reasons for Interventions Related to Medication Regimen)

<b>SNOMED CT Concept</b>
<b>1. New or Additional Therapy Needed</b>
Additional medication required for additive effect (finding)
Additional medication required for synergistic effect (finding)
Additional medication therapy required (finding)
New medication therapy needed for condition (situation)
Preventive medication therapy needed (situation)
<b>2. Dose Too High</b>
Duration of medication therapy too long (finding)
Medication administered too rapidly (finding)
Medication dosage interval too short (finding)
Medication dose too high (finding)
Toxic adverse drug interaction with drug (disorder)
<b>3. Dose Too Low</b>
Active ingredient availability decreased due to interaction (finding)
Duration of medication therapy too short (finding)
Medication dosage interval too long (finding)
Medication dose too low (finding)
<b>4. Ineffective Therapy</b>
Drug formulation inappropriate (finding)
Improper storage of medication (finding)
Medication dosage form inappropriate (finding)
Medication not effective (finding)
More effective medication therapy available (finding)
<b>5. Unnecessary Therapy</b>

Alcohol abuse (disorder)
Drug abuse (disorder)
Drug treatment not indicated (situation)
Medication taken to treat adverse drug reaction (finding)
Medication therapy unnecessary (finding)
Multiple medications taken for condition appropriately treated with single medication therapy (finding)
Patient condition appropriate for non-medication therapy (finding)
Recreational drug user (finding)
Tobacco user (finding)
<b>6. Adverse Medication Events</b>
Adverse drug interaction (disorder)
Adverse drug interaction with alcohol (disorder)
Adverse drug interaction with drug (disorder)
Adverse drug interaction with food (disorder)
Adverse drug interaction with tobacco (disorder)
Adverse reaction to drug (disorder)
Allergic reaction to drug (disorder)
Medication administered too rapidly (finding)
Non-dose-related adverse reaction to medication (disorder)
Vaccines adverse reaction (disorder)
<b>7. Non-Adherence </b>
Improper medication administration technique (finding)
Medication overuse (finding)
Medication taken at higher dose than recommended (finding)
Medication taken at lower dose than recommended (finding)
Noncompliance with medication regimen (finding)
Patient forgets to take medication (finding)
Patient misunderstood treatment instructions (finding)
Patient on numerous drugs (finding)
Patient refuses to take medication (situation)
Patient unable to obtain medication (finding)
Suspected noncompliance with therapeutic regimen (situation)
Takes medication less frequently than recommended (finding)
Takes medication more frequently than recommended (finding)
Unable to self-administer medication (finding)
Unable to swallow (finding)
Uses less medication than prescribed (finding)

Discontinued medication without order (finding) 
<b>8. Cost-Related</b>
Cost effective medication alternatives available (finding)

**C. Referral Source**  

<b>SNOMED CT Concept</b>
Referred by doctor (finding)
Referred by health care professional (finding)
Referred by hospital doctor (finding)
Referred by member of Primary Health Care Team (finding)
Referred by nurse (finding)
Referred by nurse practitioner (finding)
Referred by payer (finding)
Referred by pharmacist (finding)
Referred by physician assistant (finding)
Referred by primary care physician (finding)
Referred by self (finding)
Referred by specialist physician (finding)
Referred by dentist (finding) 
Referred by emergency department nurse practitioner (finding) 
Referred by emergency department physician (finding) 
Referred by emergency department physician assistant (finding) 
Referred by family (finding) 
Referred by genetic counselor (finding) 
Referred by social worker (finding) 

**A. Assessments Related to Medication Management**

<b>SNOMED CT Concept</b>
<b>1. General Assessment</b>
Assessment of adverse drug reactions (procedure)
Assessment of compliance with medication regimen (procedure)
Assessment of cultural beliefs (procedure)
Fall risk assessment (procedure)
Functional assessment (procedure)
Health literacy assessment (procedure)
Immunization status screening (procedure)
Pain assessment (procedure)
<b>2. Assessment Using Assessment Scale</b>
Assessment using congestive heart failure, hypertension, age 2, diabetes mellitus, stroke 2 - vascular disease, age, sex category score (procedure)
Assessment using generalized anxiety disorder 7 item score (procedure)
Assessment using geriatric depression scale (procedure)
Assessment using geriatric depression scale short form (procedure)
Assessment using Mini-cog brief cognitive screening test (procedure)
Assessment using mini-mental state examination (procedure)
Assessment using National Institutes of Health stroke scale (procedure)
Assessment using visual analog pain scale (procedure)
Assessment using World Health Organization fracture risk assessment tool for osteoporotic fracture probability (procedure)
Depression screening using Patient Health Questionnaire Nine Item score (procedure)
Instrumental activities of daily living assessment (procedure)
Timed up and go mobility test (assessment scale)

## B. Interventions Related to Medication Management

<b>SNOMED CT Concept</b>
<b>1. Medication Reconciliation</b>
Medication reconciliation (procedure)
<b>2. Refill Synchronization</b>
Synchronization of repeat medication (procedure)
<b>3. Comprehensive Medication Review</b>
Comprehensive medication therapy review (procedure)
<b>4. Targeted Medication Review</b>
Allergy medication review (procedure)
Anticoagulation medication review (procedure)
Asthma medication review (procedure)
Cardiovascular disorder medication review (procedure)
Chronic obstructive lung disorder medication review (procedure)
Coronary heart disease medication review (procedure)
Depression medication review (procedure)
Diabetes medication review (procedure)
Dyslipidemia medication review (procedure)
Endocrine disorder medication review (procedure)
Gastrointestinal disorder medication review (procedure)
Geriatric syndrome medication review (procedure)
Gout medication review (procedure)
Heart failure medication review (procedure)
Hematologic disorder medication review (procedure)
Human immunodeficiency virus medication review (procedure)
Hypertension medication review (procedure)
Immunologic disorder medication review (procedure)
Infectious disease medication review (procedure)
Mental health medication review (procedure)
Metabolic disorder medication review (procedure)
Neurological disorder medication review (procedure)
Oncologic medication review (procedure)
Pain medication review (procedure)
Palliative care medication review (procedure)
Pregnancy and lactation medication review (procedure)
Pulmonary disorder medication review (procedure)
Renal disorder medication review (procedure)

Rheumatologic disorder medication review (procedure)
Smoking cessation medication review (procedure)
Targeted medication review (procedure)
Transplant medication review (procedure)
<b>5. Information Gathering ●</b>
Gathering of adverse drug event history (procedure)
Gathering of allergies history (procedure)
Gathering of current medication list (procedure)
Gathering of past medical history (procedure)
<b>6. Care Planning ●</b>
Development of care plan (procedure)
Development of medication care plan (procedure)
Development of medication care plan with patient (procedure)
Development of medication-related action plan (procedure)
Development of medication-related goals (procedure)
<b>7. Documentation ●</b>
Documentation of adverse drug event history (procedure) ✎
Documentation of current medications (procedure) ⬆
Documentation of past medical history (procedure) ✎
<b>8. Discussion ⬆✎</b>
Discussed with doctor (situation)
Discussed with carer (situation)
Discussed with patient (situation)
Discussion about refilling prescription (procedure) ✎
Medication care plan discussed with patient (situation) ✎
<b>9. Notification ✎</b>
Patient notified of eligibility for medication therapy management service (situation)
Short message service text message sent (situation) ✎
<b>10. Provision of Documents ✎</b>
Provision of medication list (procedure)
Provision of medication related action plan (procedure)
Medication reminder chart given (situation)
Medication care plan sent to dispensing pharmacist (situation) ✎
Medication care plan sent to hospital pharmacist (situation) ✎
Medication care plan sent to infusion pharmacist (situation) ✎
Medication care plan sent to patient (situation) ✎
Medication care plan sent to primary care pharmacist (situation) ✎

Medication care plan sent to primary care provider (situation) 
Provision of personal medication record (procedure) 
<b>11. Device or Equipment Fitting</b>
Fitting of arm sling (procedure)
Fitting of orthotic device (procedure)
Fitting of shoe (procedure)
Fitting of splint (procedure)
Fitting stoma bag (procedure)
Fitting/adjustment of crutches (procedure)

### C. Interventions Related to Medication Regimen

SNOMED CT Concept
<b>1. Continue Medication ●</b>
Renewal of prescription (procedure)
<b>2. Initiate Medication</b>
Dietary supplement started (situation)
Herbal supplement started (situation)
Medication commenced (situation)
Over-the-counter medication started (situation)
Prescription medication started (situation)
<b>3. Discontinue Medication</b>
Dietary supplement discontinued (situation)
Drug therapy discontinued (situation)
Herbal supplement discontinued (situation)
Over-the counter medication discontinued (situation)
Prescription medication discontinued (situation)
<b>4. Change Medication</b>
Medication change to generic (procedure)
Medication changed to therapeutic equivalent (situation)
Medication changed to therapeutic equivalent on formulary (situation)
Medication therapy changed (situation)
<b>5. Change Medication Dose</b>
Medication dose changed (situation)
Medication dose decreased (situation)
Medication dose increased (situation)
<b>6. Change Medication Dosing Interval</b>

Medication dosing interval changed (situation)
Medication dosing interval decreased (situation)
Medication dosing interval increased (situation)
<b>7. Change Medication Course</b>
Medication course changed (situation)
Medication course lengthened (situation)
Medication course shortened (situation)
<b>8. Change Medication Dosage Form</b>
Medication dosage form changed (situation)
<b>9. Monitoring ↓↑ </b>
Anesthetic agent monitoring (regime/therapy)
Anticoagulant drug monitoring (regime/therapy)
Blood glucose monitoring (regime/therapy)
Glucose measurement, blood, test strip (procedure)
Hemoglobin A1c measurement (procedure)
High risk drug monitoring (regime/therapy)
Hypertension monitoring (regime/therapy)
Lipid panel (procedure)
Medication monitoring (regime/therapy)
Monitoring of laboratory results (regime/therapy)
Monitoring physiological parameters (regime/therapy)
Neuromuscular blockade monitoring (regime/therapy)
Renal function monitoring (regime/therapy)
Train-of-four monitoring (regime/therapy)
Blood pressure taking (procedure) 
Monitoring adherence to medication regime (regime/therapy) 
Monitoring of international normalized ratio (regime/therapy) 
Pulse taking (procedure) 
Taking patient vital signs (procedure) 
Taking respiratory rate (procedure) 

#### D. Recommendations Related to Medication Regimen

<b>SNOMED CT Concept</b>
<b>1. Continue Medication</b>
Recommendation to continue a medication (procedure)
<b>2. Initiate Medication</b>
Recommendation to start dietary supplement (procedure)

Recommendation to start drug treatment (procedure)
Recommendation to start herbal supplement (procedure)
Recommendation to start over-the-counter medication (procedure)
Recommendation to start prescription medication (procedure)
<b>3. Discontinue Medication</b>
Recommendation to discontinue dietary supplement (procedure)
Recommendation to discontinue herbal supplement (procedure)
Recommendation to discontinue medication (procedure)
Recommendation to discontinue over-the-counter medication (procedure)
Recommendation to discontinue prescription medication (procedure)
<b>4. Change Medication</b>
Recommendation to change medication (procedure)
Recommendation to change medication to generic equivalent (procedure)
Recommendation to change medication to therapeutic equivalent (procedure)
Recommendation to change medication to therapeutic equivalent on formulary (procedure)
<b>5. Change Medication Dose</b>
Recommendation to change medication dose (procedure)
Recommendation to decrease medication dose (procedure)
Recommendation to increase medication dose (procedure)
<b>6. Change Medication Dosing Interval</b>
Recommendation to change medication dosing interval (procedure)
Recommendation to decrease medication dosing interval (procedure)
Recommendation to increase medication dosing interval (procedure)
<b>7. Change Medication Course</b>
Recommendation to change medication course (procedure)
Recommendation to lengthen medication course (procedure)
Recommendation to shorten medication course (procedure)
<b>8. Change Medication Dosage Form</b>
Recommendation to change medication dose form (procedure)
<b>9. Monitoring ↓↑ </b>
Recommendation to monitor laboratory results (procedure)
Recommendation to monitor physiologic parameters (procedure)
Recommendation to start medication monitoring (procedure) 

## E. Interventions Related to Education

<b>SNOMED CT Concept</b>
<b>1. Behavior Education</b>
Education about alcohol consumption (procedure)
Education about risk of fall (procedure)
Education about sleep hygiene behavior (procedure)
Exercise education (procedure)
Eye care education (procedure)
Foot care education (procedure)
Pregnancy and lactation education (procedure)
Smoking cessation education (procedure)
<b>2. Diet Education</b>
Celiac disease diet education (procedure)
Diabetes mellitus diet education (procedure)
Diet education (procedure)
Dietary education about fluid restriction (procedure)
Dietary education about vitamin intake (procedure)
Dietary education for constipation (procedure)
Dietary education for disorder (procedure)
Dietary education for eating disorder (procedure)
Dietary education for food intolerance (procedure)
Dietary education for hepatic disorder (procedure)
Dietary education for hyperlipidemia (procedure)
Dietary education for impaired glucose tolerance (procedure)
Dietary education for lipid disorder (procedure)
Dietary education for pancreatic disorder (procedure)
Dietary education for renal disorder (procedure)
Dietary education for weight gain (procedure)
Gluten-free diet education (procedure)
High protein diet education (procedure)
Lactose-free diet education (procedure)
Low carbohydrate diet education (procedure)
Low cholesterol diet education (procedure)
Low fat diet education (procedure)
Low salt diet education (procedure)
Osteoporosis dietary education (procedure)
Phenylalanine-free diet education (procedure)
Phenylketonuria diet education (procedure)
Pregnancy diet education (procedure)

Vitamin K dietary intake education (procedure)
Weight-reducing diet education (procedure)
<b>3. Medical Equipment &amp; Device Education</b>
Blood pressure taking education (procedure)
Medical equipment or device education (procedure)
<b>4. Immunization Education</b>
Immunization education (procedure)
<b>5. Diseases &amp; Disorders Education</b>
Allergy education (procedure)
Asthma education (procedure)
Cancer education (procedure)
Chronic disease process education (procedure)
Chronic obstructive pulmonary disorder education (procedure)
Coronary heart disease education (procedure)
Depression education (procedure)
Diabetic education (procedure)
Dyslipidemia education (procedure)
Education about cardiovascular disease (procedure)
Education about disorders requiring anticoagulation therapy (procedure)
Education about endocrine disorder (procedure)
Education about gastrointestinal disorder (procedure)
Education about hematologic disorder (procedure)
Education about immune disorder (procedure)
Education about infectious disease (procedure)
Education about metabolic disease (procedure)
Education about neurologic disorder (procedure)
Education about organ transplantation (procedure)
Education about respiratory disorder (procedure)
Gout education (procedure)
Heart failure education (procedure)
Human immunodeficiency virus education (procedure)
Hypertension education (procedure)
Hypoglycemia education (procedure)
Pain education (procedure)
Palliative care education (procedure)
Psychiatric disorder education (procedure)
Renal disorder education (procedure)
Rheumatology education (procedure)

6. Medication Education
Education about medication handling (procedure)
Education about medication intake during pregnancy (procedure)
Education about safe storage and management of medication (procedure)
Medication administration education (procedure)
Medication education (procedure)
Medication efficacy education (procedure)
Medication failure risk education (procedure)
Medication interaction education (procedure)
Medication interaction with food education (procedure)
Medication interaction with medication education (procedure)
Medication monitoring education (procedure)
Medication regimen compliance education (procedure)
Medication side effects education (procedure)
Over-the-counter medication education (procedure)
Prescribed medication education (procedure)
Route of medication administration education (procedure)

## F. Interventions Related to Administration

SNOMED CT Concept
1. Immunizations ↓↑ 
Administration of substance to produce immunity, either active or passive (procedure)
Haemophilus influenzae immunization (procedure)
Hepatitis A immunization (procedure)
Hepatitis B vaccination (procedure)
Influenza vaccination (procedure)
Measles-mumps-rubella vaccination (procedure)
Meningococcus vaccination (procedure)
Pneumococcal vaccination (procedure)
Tetanus, diphtheria and acellular pertussis vaccination (procedure)
Varicella vaccination (procedure)
Poliomyelitis vaccination (procedure) 
Rabies vaccination (procedure) 
Vaccination for human papillomavirus (procedure) 
Yellow fever vaccination (procedure) 
Tetanus and diphtheria vaccination (procedure) 

<b>2. Medications ●</b>
Injection of therapeutic agent (procedure)

**G. Interventions Related to Care Coordination ●**

<b>SNOMED CT Concept</b>
<b>1. Benefit Management ●</b>
Benefits investigation (procedure)
Enrollment in medication assistance program (procedure)
Enrollment into co-pay assistance program (procedure)
Insurance authorization (procedure)
<b>2. Communication Needs ↓↑</b>
Interpreter/translator services education, guidance, counseling (procedure)
<b>3. Consultations ↓↑</b>
Consultation with health care provider (procedure)
Consultation for transition of care (procedure)
Follow-up consultation (procedure)
Pharmacogenetic consultation (procedure)
Pharmacokinetic consultation (procedure)
Risk evaluation and mitigation strategy consultation (procedure)
<b>4. Referrals for Specific Services ↓↑ ✎</b>
Patient referral for drug addiction rehabilitation (procedure)
Referral for diagnostic investigation (procedure)
Referral for electrocardiogram (procedure)
Referral for warfarin monitoring (procedure)
Referral to diabetes structured education program (procedure)
Referral for laboratory tests (procedure) ✎
Referral for physical therapy (procedure) ✎
Referral to clinical trial (procedure) ✎
Patient referral for medical consultation (procedure) ✎
<b>5. Referrals to Other Providers ↓↑ ✎</b>
Patient referral (procedure)
Patient referral to dietitian (procedure)
Referral to emergency clinic (procedure)
Referral to pharmacist (procedure)
Referral to physician (procedure)
Referral to psychologist (procedure)
Referral to social worker (procedure)

Refer to member of primary health care team (procedure) 
Referral to different healthcare provider (procedure)
Referral to general practitioner (procedure) 
Referral to genetic counselor (procedure) 
Referral to health worker (procedure) 
Referral to nurse behavioral therapist (procedure) 
Referral to nurse case manager (procedure)
Referral to nurse practitioner (procedure) 
Referral to nutrition professional (procedure) 
Referral to occupational therapist (procedure)
Referral to physician assistant (procedure) 
Referral to care coordinator (procedure) 

## A. Allergy Substance &amp; Negation ✕

SNOMED CT Concept
<b>1. Allergy Negation ✕</b>
No known allergies (finding)
No known drug allergies (finding)
No known environmental allergies (finding)
No known food allergies (finding)
<b>2. Allergy Substance, Food ✕</b>
Milk (substance)
Egg protein (substance)
Fish (substance)
Shellfish (substance)
Tree nut (substance)
Peanut (substance)
Wheat (substance)
Soy bean (substance)
Gluten (substance)

## B. Allergy Type ●

SNOMED CT Concept
Allergy (qualifier value)
Intolerance (qualifier value)

## C. Allergy Category ✕

SNOMED CT Concept
Other (qualifier value)
Medication (qualifier value)
Food (qualifier value)
Environment (qualifier value)

## D. Allergy Manifestation ✕

SNOMED CT Concept
Eruption of skin (finding)

Wheal (finding)
Itching (finding)
Nasal congestion (finding)
Loose stool (finding)
Nausea (finding)
Vomiting (finding)
Pharyngeal swelling (finding)
Palpitations (finding)
Unconsciousness (finding)
Anxiousness (finding)
Sneezing (finding)
Difficulty breathing (finding)
Swelling (finding)
Flushes (finding)

**E. Allergy Severity ✕**

SNOMED CT Concept
Mild (qualifier value)
Moderate (qualifier value)
Severe (qualifier value)

**Encounters ●**

**A. Encounter Type ●**

SNOMED CT Concept
Annual wellness visit (procedure)
Encounter for symptom (procedure)
Encounter for problem (procedure)
Follow up encounter (procedure)
Telephone encounter (procedure)
Home visit (procedure)
Encounter by short message service text messaging (procedure)

**B. Encounter Class ✕**

SNOMED CT Concept
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Ambulatory (qualifier value)
Emergency (qualifier value)
Inpatient (qualifier value)
Outpatient (qualifier value)
Home (qualifier value)
Field (qualifier value)
Daytime (qualifier value)
Virtual (qualifier value)
Other (qualifier value)

**C. Encounter Status ✖**

<b>SNOMED CT Concept</b>
Cancelled (qualifier value)
In-progress (qualifier value)
Planned (qualifier value)
Arrived (qualifier value)
Finished (qualifier value)
Onleave (qualifier value)

**D. Encounter Reason ●**

<b>SNOMED CT Concept</b>
<b>1. General ●</b>
Medication regimen review (procedure)
Administration of substance to produce immunity, either active or passive (procedure)
Administration of drug or mendicant (procedure)
Patient education (procedure)
<b>2. Consultations ↻</b>
<b>3. Referrals for Specific Services ↻</b>
<b>4. Referrals to Other Providers ↻</b>
<b>5. Transition of Care ↻</b>
<b>6. General Assessment ↻</b>
<b>7. Assessment Using Assessment Scale ↻</b>
<b>8. Benefit Management ↻</b>
<b>9. Communication Needs ↻</b>
<b>10. Medication Reconciliation ↻</b>
<b>11. Refill Synchronization ↻</b>

<b>12. Comprehensive Medication Review ↻</b>
<b>13. Targeted Medication Review ↻</b>
<b>14. Device or Equipment Fitting ↻</b>

## Statuses

### A. Status of Problem/Condition ✕

SNOMED CT Concept
Active (qualifier value)
Resolved (qualifier value)
Relapse (qualifier value)
Remission (qualifier value)

### B. Status of Medication Therapy Problem ●

SNOMED CT Concept
Active (qualifier value)
Resolved (qualifier value) ✕

### C. Status of Intervention

SNOMED CT Concept
Change recommended (qualifier value)
Not performed (qualifier value)
Performed (qualifier value)
Refused (qualifier value)

### D. Status of Recommendation

SNOMED CT Concept
Medication therapy management recommendation accepted by prescriber (situation)
Medication therapy management recommendation refused by patient (situation)
Medication therapy management recommendation refused by prescriber (situation)
Recommendation accepted (situation)
Recommendation refused (situation)

### E. Status of Care Goal

SNOMED CT Concept
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Goal achieved (finding)
Goal not achieved (finding)

#### F. Status of Compliance/Adherence

SNOMED CT Concept
Compliant (qualifier value)
Non-compliant (qualifier value)
Partially compliant (qualifier value)

#### G. Status of Compliance/Adherence Ability

SNOMED CT Concept
Able to comply with treatment (finding)
Difficulty complying with treatment (finding)
Does comply with treatment (finding)
Noncompliance with treatment (finding)
Unable to comply with treatment (finding)

#### H. Status of Disease Control

SNOMED CT Concept
Disease condition determination, cured (finding)
Disease condition determination, moderately controlled (finding)
Disease condition determination, poorly controlled (finding)
Disease condition determination, uncontrolled (finding)
Disease condition determination, well controlled (finding)

#### I. Status of Patient Condition

SNOMED CT Concept
Patient condition resolved (finding)
Patient condition unchanged (finding)
Patient cured (finding)
Patient's condition improved (finding)
Patient's condition poor (finding)
Patient's condition satisfactory (finding)
Patient's condition stable (finding)
Patient's condition unstable (finding)

Patient's condition worsened (finding)

### A. Environment of Care

SNOMED CT Concept
Clinic (environment)
Home (environment)
Hospital (environment)
Hospital-based outpatient emergency care center (environment)
Intensive care unit (environment)
Medical or surgical floor (environment)
Pharmacy (environment)
Skilled nursing facility (environment)

### B. Occupation of Health Care Provider

SNOMED CT Concept
Dietitian (occupation)
Hospital pharmacist (occupation)
Nurse case manager (occupation)
Nurse practitioner (occupation)
Occupational therapist (occupation)
Pharmacist (occupation)
Physician (occupation)
Physician assistant (occupation)
Physiotherapist (occupation)
Primary care physician (occupation)
Professional nurse (occupation)
Resident physician (occupation)
Respiratory therapist (occupation)
Retail pharmacist (occupation)
Trainee pharmacist (occupation)