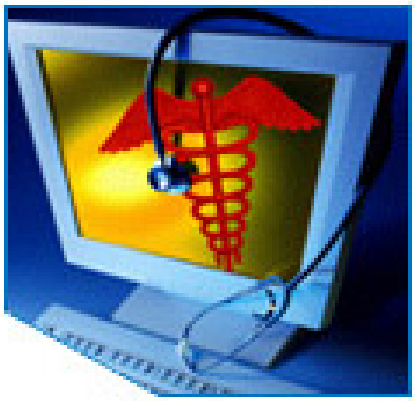
UC2: Chronic Disease Management



September 17, 2005
V1.0

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Revision History

Version Number	Description of Change	Name of Author	Date Published
V1.0	Initial Draft	Lori Fourquet	9/16/2005
V1.1	Initial Draft into ONCHIT UC Template	Julie Holtzople	9/16/2005

Overview of the Use Case

Description:

The Chronic Disease Management Use Case is intended to represent the long-term high level, comprehensive, components and general processes involved in the care of patients with chronic conditions requiring routine monitoring and intervention. This includes those defined by the IOM such as Diabetes and Cancer patients/survivors. Within this high level use case there are fundamental information sharing and communications required for routine care and the optimal implementation of clinical practice guidelines. Because patient care for chronic disease requires information exchange among a broad range of practitioners, diagnostic services, and pharmacies, the use case and scenarios primarily describe information movement.

Use Case Scope:

This use case is focused on enabling community care. This will describe process and mechanisms for the wide variety of information exchanges and communications. The specific information content to be transferred will be based upon existing information exchange standards defined by the SDOs, such as: HL-7, DICOM, NCPDP, ASTM, and ISO. Definition of information format and content for this use case is out of scope, except for the communication to the appropriate SDO of a need for such information standard (i.e. quality of life indicators). This use case will describe the information exchanges needed for direct patient care, as well as peripheral and supporting processes.

Phase I of the project will be focused on direct patient care management scenarios, including provision access to patient medical summaries to the provider stakeholders within the community, and communication of clinical information exchanges/orders.

Phase II will address supporting processes such as related clinical trials, epidemiology (quality, outcomes, efficacy measurement) and clinical practice guideline assessment.

Strategic Healthcare Improvement Goals:

This use case is focused on providing long term care for patients with chronic disease across multiple provider settings. It is expected that the successful implementation of this use case will:

- Improve the quality of life
- Improve patient health status
- Improve the quality of care, addressing the IOM Priority chronic conditions and measurements
- Improve the early detection of complicating conditions
- Reduce costs of care through community service channeling

- Improve preventive care and on-going screening
- Improve the efficacy of care and cost cost/quality analysis over time
- Enable new medicine approaches (i.e. patient education)
- Improve specialty-based values, which will vary by disease

Expected Outcomes:

Enabling system interoperability for chronic disease management is expected to:

- Accomplish the strategic healthcare goals described above
- Improve the quality of life for patients with chronic disease
- Improve the feedback loop between the patient and care providers
- Improve patient safety
- Improves quality of practice
- Reduce clinical errors
- Reduce duplication, resulting in cost savings
- Reduce the cost of healthcare
- Reduce utilization of the expensive parts of the system Improve the efficiency of the healthcare process
- Increase patient involvement in their care
- Enable the aggregation of data to address the discovery and improvement of processes, data driven decision support, public health policies, and clinical practice guidelines
- Affect Medico-legal impact of reduced missed opportunities, and improved capabilities for risk management strategy
- Reduce lawsuits

Stakeholders:

The following is a list of the stakeholders for this use case:

1. Patient Care Providers
    a. Primary Care Physician and supporting staff
    b. Primary Care Clinics and supporting staff
    c. Laboratory providers
    d. Pharmacists and supporting staff
    e. Radiologists and supporting staff
    f. Healthcare specialists
    g. Ancillary practitioners (e.g. Home care, Therapists)
    h. Hospital and Emergency providers and supporting staff
2. Public Health:
    a. Tumor Registry
    b. Public Health Registries/Source data
3. Pharmaceutical Industry:
    a. Clinical trials

   b. post-marketing surveillance
   c. Drug efficacy
   d. Capture of adverse drug events
4. Quality/Patient Safety:
   a. Clinical practice guidelines
   b. Opportunities for intervention
   c. Compliance monitoring
   d. HEDIS
5. Patient:
   a. Personal Health Record/Journaling (problems, allergy, meds, hx, lab data series, glucose/exercise/weight measures, specialty data monitoring over time)
6. Information Management Systems including those involved in:
   a. Document/Information Sharing systems
   b. Information Transfer (e-Prescribing, Referral, Lab, public health, medical summary transfers)
   c. Hosp/ED visits/discharges
   d. Immunization tracking
   e. Prescriptions for information
   f. Decision support
   g. Scheduling
   h. patient communications
   i. reminders/recall
   j. Social service management
   k. Education
   l. Nutrition
   m. Support groups
   n. Information updates,
   o. Case Management – preventive care,
   p. billing/eligibility/cost information and transaction systems
   q. Security systems (Privacy protection of patient records, Multiple Provider authentication/access control, Policy mapping)

Interoperability Scenarios include in <<Use Case Name Here>>:

The following scenarios will be part of this use case:

	ID Number	Name
Scenario I	UC2S1	Diabetic Patient Management Scenario
Scenario II	UC2S2	Cancer Patient Management Scenario
Scenario III	UC2S3	Practitioner Access to Patient Medical Summary (from Primary care, specialist, Lab, Emergency Department/Acute Care, home care, Physical Therapy, Long Term Care)
Scenario IV	UC2S4	Patient Referral (to Patient Medical Summary delivery to (Primary care, specialist, Lab, Emergency Department/Acute Care, home care, Physical Therapy, Long Term Care)
Scenario V	UC2S5	Electronic Transfer of Patient Assessment and Clinical Orders (lab, prescription, specialist reports, radiology, follow-up, treatment)
Scenario VI	UC2S6	Scheduling for routine and assessment care (appointment request, schedule, reminders)
Scenario VII	UC2S7	Public Health Report Submission (e.g. Tumor Registry, Public Health Registry Source Data)
Scenario VIII	UC2S8	Clinical Trials
Scenario IX	UC2S9	Post-marketing surveillance
Scenario X	UC2S10	Drug efficacy
Scenario XI	UC2S11	Capture of adverse drug events
Scenario XII	UC2S12	Quality/Patient Safety - Clinical practice guidelines
Scenario XIII	UC2S13	Quality/Patient Safety - Opportunities for intervention
Scenario XIV	UC2S14	Quality/Patient Safety - Compliance monitoring
Scenario XV	UC2S15	Quality/Patient Safety – HEDIS
Scenario XVI	UC2S16	Integration of Personal Health Records/Journals

Year 1 Scope:

The following scenarios will have completed implementation guidelines published during Year 1:

1. UC4S1 – Diabetic Patient Management Scenario
2. UC4S2 – Cancer Patient Management Scenario
3. UC4S3 – Practitioner Access to Patient Medical Summary
4. UC4S4 – Patient Referral
5. UC4S5 – Electronic Transfer of Patient Assessment and Clinical Orders