##### Home Care Storyboard for FHIR Clinical Connectathon

**Goal/Objective**:

The purpose of the home care storyboard is to illustrate the clinical documentation by care providers and communication flows between the patient, his or her care providers involved in home care services. This patient requires multiple discipline provision of home care services.

**Primary Actor**:

Patient’s Primary Home Health Nurse Case Manager – Nancy Nightingale RN

**Other Actors**:

Patient – Mrs. Eve Everywoman

Physical Therapist – Mr Active Works, RPT

Occupational Therapist – Ms. Helen Hand, OTR

Wound, Ostomy and Continence Nurse (WOCN) – Oscar Nunn, RN

Primary Care Physician (PCP) – Dr. Patricia Primary

Surgeon – Dr. Ian Dennis

**Assumptions**:

All actors have access to electronic systems/applications for documenting and exchanging health information

**Precondition**:

Patient Eve is discharged from the hospital after being diagnosed and treated for stroke. She is home bound, has a stage 3 decubitus ulcer and started on insulin therapy (NPH insulin) during this hospital admission. She has discharged orders for home health services to evaluate and treat. Per the discharge summary, Dr. Patricia Primary is the physician of record (i.e. certifying physician).

**Trigger(s)**:

Nurse Nightingale receives Hospital Discharge summary and Home Health orders from the hospital. She notifies Patient Eve of the day and time of her initial home health visit via the patient portal. She also calls Patient Eve to introduce herself and verbally confirm the visit time.

**Flow of Events**:

1. Nurse Nightingale reviews the discharge summary, creates the initial home health Care plan (HHCP) and sends it to Dr. Primary. Dr. Primary reviews and confirms the HHCP and returns it to Nurse Nightingale. Nurse Nightingale initiates Patient Eve home care services.
2. Documentation in EMR:
   * Discharge diagnosis – Stroke
   * Health Concerns – decrease mobility, decubitus ulcer
   * Home Health Orders – Skilled nursing, Physical therapy
     1. Nursing orders – wound care, patient education, medication management, evaluate home situation and evaluate caregiver participation.
     2. PT orders – evaluate and treat
   * Pertinent medication list
   * Follow-up plan (discharge, PCP and nursing) for the patient
   * Other pertinent orders and interventions – tests, referrals, etc
   * Observations – recent vital signs and pain measurements, recent lab results, skin integrity, patient symptoms, etc
3. Nurse Nightingale reviews the patient’s medical history and identifies that the patient’s decubitus ulcer care includes wet-dry-dressing changes BID with increase from stage 2 to stage 3. Nurse Nightingale notes the size of the ulcer and that hydrocolloid dressings have been tried. She also notes that Patient Eve was newly prescribed subcutaneous insulin (NPH) to be used at home.
4. Nurse Nightingale sees Patient Eve, completes initial home health assessment and formulates Patient Eve’s home health care plan which is reviewed and agreed to by Patient Eve and her caregiver. Initial assessment includes completion of the Braden Scale, pain scale assessment, and the Outcome and Assessment Information set.

The HHCP includes the following:

* + **Health Concern/Problem 1**: Potential for decreasing skin integrity

**Goal 1**: Prevent additional decubitus ulcers from occurring

**Interventions**:

* + 1. Teach patient/caregiver techniques for positioning while in bed
    2. Activity: OOB to chair as tolerated, ambulation with cane at tolerated
    3. Diet: maintain diabetic diet
  + **Health Concern/Problem 2**: Decubitus ulcer

**Goal 2**: Improve wound healing

**Interventions**:

* + 1. Continue saline wet-to-dry dressing changes BID
    2. Measure wound weekly
    3. Assess wound daily for decreasing tissue integrity
    4. Assess caregiver willingness and ability to learn how to perform patient dressing changes
  + **Health Concern/Problem 3**: Potential for falls

**Goal 3**: Patient remains free of falls/injury prevention

**Interventions**:

* + 1. Teach patient/caregiver fall risk prevention
    2. Update home health PT about fall risk education provided

**Alternate Flow:**

PT specific Care Plan

* + **Health Concern/Problem 4**: Medication management

**Goal 4**: Patient independent with insulin self-administration

**Interventions**:

* + 1. Assess caregiver readiness to learn
    2. Educate patient/caregiver about insulin use
       1. side effects
       2. administration techniques
       3. Signs and symptoms of hypoglycaemia and treatment of hypoglycemia
    3. Monitor patient blood glucose
    4. Evaluate /educate patient/caregiver about self-glucose testing
  + **Health Concern/Problem 5**: Self Care Deficit

**Goal 5**: Identify resources to assist the patient with optimizing autonomy and independence with ADLs

**Interventions**:

* + 1. Provide home health aide services to assist with ADLs
    2. Refer for home health occupational therapy (OT)

**Alternate Flow:**

OT specific Care Plan

* + **Health concern/Problem 6**: Knowledge Deficit – Patient/Caregiver teaching; Health education

**Goal 6**: Patient/caregiver verbalizes understanding of taught content and/or performs taught skills (Insulin administration, wound care)

**Interventions**:

* + 1. Determine who will be the learner (patient or caregiver)
    2. Assess readiness and ability to learn
    3. Provide clear, thorough explanations and demonstrations
    4. Ensure that required supplies or equipment are available

1. Nurse Nightingale updates the care plan, signs it and sends it to Dr. Primary for review and acceptance. Dr. Primary sends Nurse Nightingale the accepted care plan.
2. As time progresses, Patient Eve decubitus ulcer worsens with noted increase in size and changes in colour and scent. Nurse Nightingale documents wound changes and provides referral for WOCN services (Nurse Nunn) to evaluate wound.
3. Nurse Nunn assesses Patient Eve’s decubitus ulcer and recommends wound vac therapy and a surgery consult for wound debridement. Nurse documents her findings.
   * Order for wound vac therapy is sent to Dr. Primary for approval as well as the request for surgery consult. Supported documentation is provided to Dr. Primary.
   * Dr. Primary approves wound vac therapy and refers Patient Eve for surgery consultation.
4. Nurse Nightingale initiates Wound vac therapy and updates Patient Eve’s care plan to reflect the change in wound care management.
5. Patient Eve decubitus is debrided by Dr. Dennis. Dr. Dennis post-consultation notes and orders are sent to Nurse Nightingale and to Dr. Primary. Orders include continuation of wound vac therapy as well as home IV antibiotic therapy (Vancomycin 1g IV Q12hrs X 5days).
6. Nurse Nightingale initiates home IV therapy and notes that Patient Eve is complaining of nausea post Vancomycin administration. She recommends an over-the-counter anti-emetic and lemon tea for Patient Eve to take and notifies Dr. Dennis.
7. Nurse Nightingale updates Patient Eve’s care plan and forwards the HHCP to Dr. Dennis and Dr. Primary, clearly indicating orders for each respective provider, for review and acceptance.

Post Condition(s):

1. Home Health EMR updated with
   1. Wound observations (location, size, colour, etc)and therapies (wet-to-dry dressings, wound vac, surgical debridement)
   2. Diabetes medication management
   3. Blood glucose results (lab and glucometer results)
   4. All health concerns
   5. Patient/caregiver education
   6. Medication administered and patient tolerances
   7. Referrals
   8. Care team members participation
2. Diabetes care plan that includes
   1. Health concerns
   2. Health goals
   3. Interventions to achieve goals
3. Wound care plan that includes
   1. Health concerns
   2. Health goals
   3. Interventions to achieve goals
4. Medication management care plan
   1. Health concerns
   2. Health goals
   3. Interventions to achieve goals
5. Self-care deficit care plan
   1. Health concerns
   2. Health goals
   3. Interventions to achieve goals
6. Patient/Caregiver education care plan
   1. Health concerns
   2. Health goals
   3. Interventions to achieve goals
7. Referral requests to relevant care providers (OT, Ostomy Nurse). The referral content include:
   1. Health concern
   2. Reason for the referral
   3. Relevant observations
   4. Medication regimen
   5. Relevant current care plans
8. Medication orders/administration
9. Copy of care plan(s) is generated for the patient/caregiver