

# Exploring SDOH Tools and Implications for Care Planning

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# Abstract

- A user story was developed within the Big Data Nursing Science Social Determinants of Health workgroup. The user story template for housing insecurity will be presented along with the modifications made to accommodate the use of the Omaha System. Five Omaha System problems and 32 Omaha System interventions (category/target/care description) were identified and coded to SNOMED. This session will display the completed work and review the steps taken to identify appropriate Omaha problems and interventions and how to code these concepts to standardized terminologies.

# Objectives

- Review the Big Data Nursing Science Social Determinants of Health (SDOH) workgroup history and deliverables
- Understand the evolution of a User Story
- Understand the need to modify the standard user story for SDOH purposes
- Learn about SNOMED for coding Omaha category/target/care descriptions

# Big Data Nursing Science SDOH

- Big Data Nursing Science began in 2013 as an invitation only meeting of national leaders in nursing, healthcare and informatics
- Develop a national agenda to advance BDNS
  - Standards and terminologies
  - Policies
  - Education
  - Practice
  - Research
  - Workgroups (2015)
- <https://www.nursing.umn.edu/centers/center-nursing-informatics/news-events/2018-nursing-knowledge-big-data-science-conference-0>

# SDOH Workgroup

- Began after 2015 meeting
  - Lead by Susan Hull (Cincinnati Children's) and Erin Maughan (NASN)
- 2017-2018
  - Develop a user story
  - Map across multiple recommendations for SDOH data collection
    - IOM, PRAPARE, CMS
  - Develop tool kit

# User Story

- User story as a new concept versus Use case
  - User story defines the problem from the individual level
  - Use case defines steps needed to take to meet a goal, most commonly used in the system's behavior
- Developed in the Nursing Value work group by Lisa Moon
- Intention was to use for inpatient stories - pain
- Need to modify when applied to community measures and recommended standardized public health terminology (Omaha System)

# First User Story Template

Nursing Value User Story (Adapted from Hathaway, Thomas & Angela. Writing Effective User Stories, BA-Experts. 2013.)					
Statement of Issue:					
Working Draft User Story	The <b>VALUE</b> of X, when delivered by nurse ( <b>ROLE</b> ) , results in <b>ESSENTIAL NURSING ACTIONS</b> (1 - many) that lead to desired <b>OUTCOME</b> and produces <b>QUALITY METRIC</b>				
Assumptions	Patient complexity, acuity and level of cognitive function increases variability of safety outcome; When systematically applied the nursing process provides a mechanism to assess and manage patient variability				
Assumptions	Nursing actions described are not at the task level; Nursing actions go beyond tasks and move into the nursing process, a place where nursing value resides in patient outcomes				
User Story Features	Item Response	Variable	Proxy / Direct Measure	Data Model	Considerations
Value					
Role					
Nursing Assessment					
Essential Nursing Action(s) Value Set					
Essential Nursing Action					
Essential Nursing Action					
Essential Nursing Action					
Outcome					
Quality Metric					
Evidence Based Practice					
Analytic Model					
Cost / Finance					
Business Intelligence					
Predictors					

# User Story for Housing Instability

- Include 5 Omaha System Problems
  - Income
  - Mental Health
  - Substance Use
  - Communication with Community Resources
  - Residence
- Signs and Symptoms
- Interventions (Target/Category/Care description)
- Knowledge Behavior Status ratings



# Omaha System Community of Practice

- Mapping of IOM SDOH core measures to Omaha Problems
- Coding the SDOH interventions (category/target/care description)
  - SNOMED contains inconsistencies that make it a less valuable resource
- Coding Omaha System KBS ratings using LOINC
- Omaha System Community of Practice actively support the development and review of guidelines
- User story can be developed into a guideline
  - No required format
  - Required metadata information completed

# User Story and Metadata form

- ..\Big Data\Social Behavior Determinants\SDOH user story 4 Omaha problems with s s interventions KBS from OS guidelines 20180506.xlsx
- ..\Big Data\Social Behavior Determinants\OMAHA SYSTEM GUIDELINE METADATA housing instability.docx