

OMAHA SYSTEM GUIDELINE METADATA:

Name of the guideline:

Using the Omaha System Problem Rating Scale for Outcomes to Normalize Standardized Instruments

Description:

The purpose of making the results of this KBS Mapping project public is to provide interested users and stakeholders access to the information for use in their practice or studies.

Communities of practice within the state of MN, nationally, and internationally have driven the demand for standardized KBS coding practices. Early work on this includes the KBS Rating Scale Supplement Guide work done by the MN Omaha System Users Group, now known as the Omaha System Community of Practice. There has been a call for ongoing work to be done in this area to improve nursing practice and the documentation of that practice. The KBS mapping project was undertaken to explore the feasibility to include data from standardized assessment instruments and clinical guidelines and to suggest KBS ratings from them.

This work also has implications for research. Integrating KBS and structured assessment instruments and clinical guidelines will allow for the comparison of measures across time and the ability to show relationships between variables.

The KBS mapping project started in 2012 and continued through 2013 using an iterative mapping process with select informatics classes of the University of Minnesota's School of Nursing DNP students. In 2014, this work was compiled and after clinical expert review of the work, was refined to be ready for this initial publication. These have not been tested in practice and some of these instruments are proprietary tools.

Omaha System Problems: 29 of the 42 problems (69%) were identified through the mapping process. These 29 crossed all 4 domains of the problem classification scheme.

Caretaking/parenting

Circulation

Cognition

Communication with community resources

Consciousness

Digestion/hydration

Grief

Health care supervision

Income

Interpersonal relationship

Medication regimen
Mental health
Neighborhood/workplace safety
Neuro-musculo-skeletal function
Nutrition
Pain
Personal care
Physical activity
Residence
Respiration
Role change
Sanitation
Sexuality
Skin
Sleep and rest patterns
Social contact
Spirituality
Substance use
Vision

Population: Any users who utilize the applicable standardized assessment instruments and/or clinical guidelines in their nursing assessments and document these assessments using the Omaha System.

Diseases/Condition: 34 different standardized instruments and clinical guidelines

Addiction; Substance Abuse
Alcohol Withdrawal Assessment; MINDS Protocol
Anxiety and depression
BMI
Braden Q Scale; use in Pediatric patients <5 years
Braden Scale
Family Pain Questionnaire (FPQ)
Caregiver Burden Inventory
Caregiving burden Total score
Chronic Heart Failure
COPD
Geriatric Depression Scale
PHQ-9

Deterioration of condition using Early Warning Score

Diabetes

Dyspnea

Dyspnea; change in magnitude of effort

Dyspnea; change in magnitude of task

Dyspnea; magnitude of effort

Dyspnea; magnitude of task

Falls Risk

Functional Assessment; FAQ5

Homelessness

Hypertension

Insomnia; Athens Insomnia Scale (AIS)

Medication Adherence; Medication Adherence Survey

Medication Adherence; Medication Possession ratio

Medication Adherence; Possession ratio

Non-Verbal Pain Scale (CPOT)

Osteoporosis

Pain

Pain Rating Scale

Postpartum depression screening; Edinburgh Postnatal Depression Scale (EPDS)

Quality of Life Measurement; WHO Quality of Life-BREF (WHOQOL-BREF)

RGEI Subscale: Depression 6 items x5pts

RGEI subscale: Existential 6 items x 5pts

RGEI subscale: Guilt 3 items x 5pts

RGEI subscale: Physical distress 7 items x5pts

Severity of Illness

Youth Outcome Questionnaire - Self Report

Practice setting: Local public health departments; home health, community health, and case management providers

Levels of practice: Individual (client) level and Community (clinician) level interventions

Date of most recent guideline revision: April 8, 2015

Presented by: Tina Peters, MPH

Encoded date: April 8, 2015

Contributors: University of Minnesota School of Nursing faculty: Karen Monsen and Jehad Adwan; University of Minnesota School of Public Health Graduate student: Tina Peters;

University of Minnesota School of Nursing Graduate students. The majority of the mapping work was done in Population Health Informatics classes of the University of Minnesota's School of Nursing. Graduate students accomplished the normalization in an iterative mapping process that included literature review and repeated cycles of analysis before coming to an agreement on the final KBS mapping conventions. Clinical expert review of the compiled work was completed by University of Minnesota School of Public Health graduate student (Tina Peters) with over fifteen years' experience working in a local public health setting using the Omaha System. Responding to the clinical expert review were Jehad Adwan, Clinical Assistant Professor at the University of Minnesota's School of Nursing, to respond to my review and Karen Monsen, Associate Professor at the University of Minnesota's School of Nursing, Co-Director of the University of Minnesota's Center for Nursing Informatics, and Director of the Omaha System Partnership. LOINC codes added from the LOINC dictionary by Taylor Maki, student research assistant.

Source: Numerous standardized instruments.

Evidence: Evidence for standardized instruments are provided in references.

References (draft version):

Omaha System KBS Rating Supplement. Available:

http://omahasystemmn.org/booklet/OmahaSystemKBSRatingSupplement2010_8x11.pdf

Addiction Severity Index

BMI

Braden Q additional Criteria)

http://nursing.advanceweb.com/SharedResources/Downloads/2007/090107/NW/nng090107_p55table1.pdf

Braden Q Composite

Braden Scale Composite

Braden Scale is a validated tool to assess the risk of developing pressure ulcers. It includes measures of six domains: sensory preception and communication, moisture, activity, mobility, nutrition, and asking friction and shear.

CPOT Critical Care Pain Observation Tool

EWS Subbe, C., Kruger, M., Rutherford, P., Gemmel, L. (2001). Validation of a modified early warning score in medical admissions. *Oxford Journal of Medicine*, 94, 521-526.

Geriatric Depression Scale

Horn, S.D., Chachich, B., & Clopton, C. (1983). Measuring Severity of Illness: A Reliability Study. *Medical Care*. 21(7): 705-714.

Hospital Anxiety and Depression Scale Scoring Sheet

<http://lungfoundation.com.au/health-professionals/guidelines/stepwise-management-of-stable-copd/>

<http://www.fresno.ucsf.edu/pediatrics/downloads/edinburghscale.pdf>

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Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item

Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786.

K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression *N Engl J Med* vol. 347, No 3, July 18, 2002, 194-199 "

<http://www.fullcirclearcare.org/caregiverissues/health/burden.html>

<http://www.guideline.gov/content.aspx?id=34772>

<http://www.med.umich.edu/1info/FHP/practiceguides/depress/score.pdf> and
https://www.icsi.org/_asset/bw798b/ChronicPain.pdf for interpreting PHQ-9 scores

<http://www.nhlbi.nih.gov/guidelines/hypertension/express.pdf>

http://www.nzgg.org.nz/library_resources/16_diabetes_guidance_document

<http://www.uspreventiveservicestaskforce.org/uspstf10/osteoporosis/osteors.htm>

<http://www.uspreventiveservicestaskforce.org/uspstf11/fallsprevention/fallsprevrs.htm>

http://www.who.int/mental_health/media/68.pdf

https://www.icsi.org/_asset/bw798b/ChronicPain.pdf

Knowledge of and Barriers to Pain Management in Caregivers of Cancer Patients Receiving Homecare. *Cancer Nursing*, Issue: Volume 30(1), January/February 2007, pp 31-37

Lev, E., Munro, B. H., & McCorkle, R. (1993). A shortened version of an instrument measuring bereavement. *International Journal of Nursing Studies*, 30, 213-226.

Mahler, D.A., Weinberg, D.H., Wells, C.K., & Feinstein, A.R. (1984). The Measurement of Dyspnea: Contents, Interobserver Agreement, and Physiologic Correlates of Two New Clinical Indexes. *Chest* 85(4): 751-758.

Merkel, S.I., Voepel-Lewis, T., Shayevitz, J.R., & Malviya, S. (1997). The FLACC: A behavioral scale for scoring postoperative pain in young children. *Pediatric Nursing*, 23 (3), 293-297."

Medication Possession Ratio

Minds Protocol

Minneosta Omaha System Users Group

Minneosta Omaha System Users Group KBS Rating Guide Supplement

Modified Morse Fall Scale

Montgomery Asberg Depression Rating Scale (Scoring Sheet)

Morisky Medication Adherence Survey

Morse, J. (2006). The Modified Morse Fall Scale.

McFarlane-Klob H. Falls risk assessment, multitargeted interventions and the impact on hospital falls. *International Journal of Nursing Practice*, 10:199-206. *International Journal Of Nursing Practice*, 12(3), 174-175.

Overall Edinburgh Score

Pain Assessment Scale

Reed, P. (1987). Spirituality and well-being in terminally ill hospitalized adults. *Research in Nursing and health*, 10, 335-344.

Sedation Tool Kit Gélinas, C., Fillion, L., & Puntillo, K. A. (2009). Item selection and content validity of the Critical-Care Pain Observation Tool for non-verbal adults. *Journal of Advanced Nursing*, 65(1), 203-216. doi: 10.1111/j.1365-2648.2008.04847.x

Soldatos CR, Dikeos DG, Paparrigopoulos TJ. Athens Insomnia Scale: validation of an instrument based on ICD-10 criteria. *J Psychosom Res*. 2000 Jun;48(6):555-60. [Medline]

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7

TUG (Timed Up and Go Test)

Y-OQ SR

http://www.bradenscale.com/images/protocols_by_level_of_risk.pdf

<http://health.qld.gov.au/psq/pip/docs/braden.pdf>

<http://health.qld.gov.au/psq/pip/docs/braden.pdf>