


Translating Evidence-Based Obesity Guidelines into Clinical Practice

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Presenter Disclosures

Ingrid Attleson


(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

- No relationships to disclose



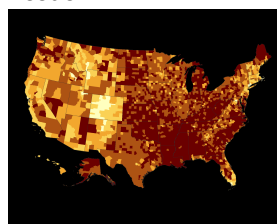
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Background

- Obesity is a critical issue.




2009 Age-Adjusted Estimates of the Percentage of Adults Who Are Obese

Centers for Disease Control and Prevention. National Diabetes Surveillance System. Available online at: <http://www.cdc.gov/diabetes/data/statistics/2009-2010-2011-NCDS-data.html>. Accessed 10/22/2013. Ogden CL, Carroll MD, Kit BK, Flegal DM. Prevalence of obesity in the United States, 2009-2010. *NCJRS data.html*. no. 82. Hyattsville, MD: National Center for Health Statistics; 2012. Colver AM, Trogiano G, Thompson, Cohen AN, and Odeh R. Annual Medical Specialty Distribution by Specialty: Age- and Sex-Specific Estimates. *Health Affairs* 2009;28(9):1452-1458.




Obesity Guidelines

- “Prevention and Management of Obesity for Adults”



Institute for Clinical Systems Improvement:
<https://www.icsi.org/>



Motivational Interviewing

- Evidence-based approach
- Overcoming barriers to addressing obesity

Armstrong M, Mottishaw TA, Rowley PC, Siga RJ, Campbell TS, Henneman BR. Motivational interviewing to improve weight loss in overweight and/or obese patients: a systematic review and meta-analysis of randomized controlled trials. *Obes Rev* 2013;15:269-275.

Chouinard D, Channon S. The potential for motivational interviewing to improve outcomes in the management of diabetes and obesity in pediatric and adult populations: a critical review. *Diabetes Obes Metab* 2013 Aug 6. doi: 10.1111/dom.12105. [Epub ahead of print].



Missed Opportunities

- Evidence-based obesity guidelines are not being fully implemented in clinical practice
- Patients are not receiving effective obesity assessment and counseling

Fella H, West DS, Bursac Z. Impact of USPSTF practice guidelines on clinician weight loss counseling as reported by obese patients. *Prim Med*. 2008;47:394-397.
 Abola A, Galloway DA, Khan LK, Gillespie C, Ford ES, Serrano MK, Aie. Healthcare professionals advising obese patients to lose weight? A trend analysis. *Metabolic*. 2007;16.



PartnerSHIP 4 Health



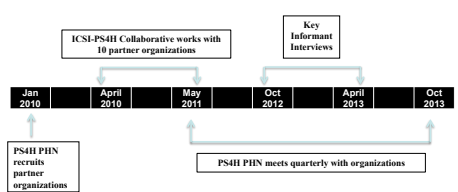

- Four Minnesota county health departments
 - Otter Tail
 - Becker
 - Clay
 - Wilkin



Otter Tail County
 Age-Adjusted % of Adults: 30.2
 Lower 95% CL: 25.2
 Upper 95% CL: 35.1




Intervention Timeline


Evaluation of Intervention Impact

- Community/Academic Partnership Award
 - Clinical and Translational Science Institute (CTSI)
 - University of MN School of Nursing
 - Otter Tail County Public Health Department
 - Minnesota Statewide Health Improvement Program (SHIP)
 - PartnerSHIP 4 Health (PS4H) - local SHIP grantee




Purpose

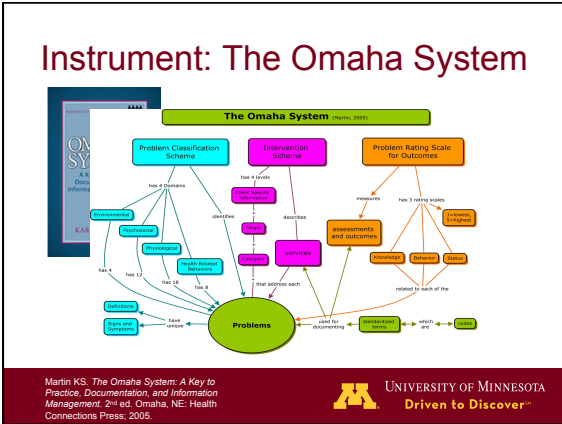
- To investigate the effects of the system-level intervention on translation of evidence-based guidelines into clinical practice using the Omaha System.



Specific Aims

1. Assess the impact of the intervention on clinician knowledge, behavior, and status relative to obesity guideline implementation using KBS ratings
2. Understand end-user perspectives on how and why the intervention impacted guideline use through analysis of key informant interviews
3. Evaluate the use of the Omaha System to measure system level outcomes





Instrument: The Omaha System

"Health care supervision: management of health care treatment plan by health care providers – inadequate treatment plan" (p.372-373)

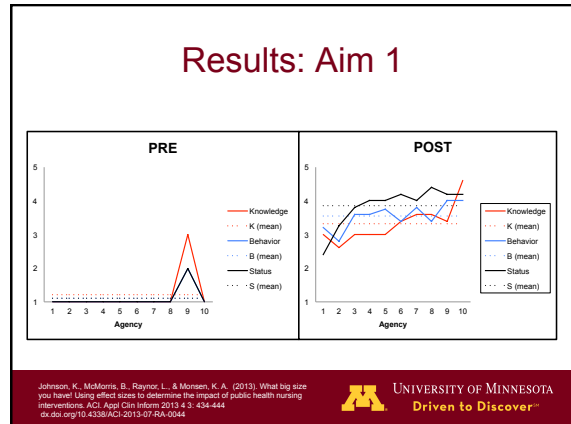
Scale	1	2	3	4	5
Knowledge	No knowledge	Minimal knowledge	Basic knowledge	Adequate knowledge	Superior knowledge
Behavior	Not appropriate behavior	Rarely appropriate behavior	Inconsistently appropriate behavior	Usually appropriate behavior	Consistently appropriate behavior
Status	Extreme signs/symptoms	Severe signs/symptoms	Moderate signs/symptoms	Minimal signs/symptoms	No signs/symptoms

Martin KS. *The Omaha System: A Key to Practice, Documentation, and Information Management*. 2nd ed. Omaha, NE: Health Connections Press; 2005.

- ### Aim 1
- Assessed 10 health care organizations
 - Primary care clinics
 - Migrant health service
 - Federally qualified health care center
 - County public health departments
 - PT/OT clinic
 - 70% rural
 - 60% publicly funded

- ### Aim 2
- Interviewed (n=39)
 - Administrators
 - Nurses
 - Nurse practitioners
 - Physicians
 - Physician's assistants
 - Registered dieticians
 - Physical and occupational therapists

- ### Aim 3
- Comparison of findings
 - Aim 1
 - Aim 2
 - Assess face validity and content validity
 - Interventions
 - Outcome measures



Results: Aim 1

- Average changes
 - Knowledge (knowledge related to the content of the clinical obesity guideline) = increase of 2.7
 - Behavior (the integrity of clinical obesity guideline use) = increase of 1.9
 - Status (frequency of clinical guideline use in appropriate encounters) = increase of 1.7



Results: Aim 2

- Themes
 - Practical assistance
 - Change ownership
 - Permeates organization
 - New Norm



Practical Assistance

"it's helped us stay on track, and it's helped us continue to be mindful of the process."



"I just believe that this gives work back, we can no longer "should" on our population - they have to want to do it."

Photo Source: Published by West, Lock, & Tyler of London (Public domain), via Wikimedia Commons.



Change Ownership

"it keeps it right up front for you... and you're not someone who's hearing it secondhand... you're hearing it right from the beginning... knowing how important this is."



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Permeates Organization

"we're really trying to walk the talk, and we're trying to be a clinical environment that promotes health and well-being for patients and staff."



Photo Source: U.S. Dept of Agriculture, via Wikimedia Commons, 2008.



New Norm

"it's something we can't ignore anymore"

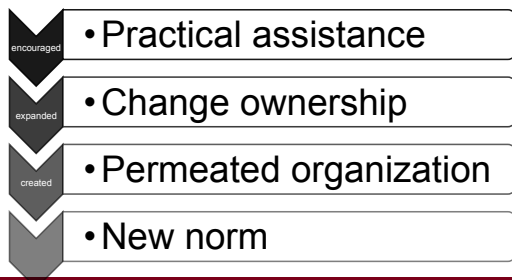


"the more we talk about it, and the more we do this, the easier it is."

Photo Source: By Axel Kristianson from Reykjavik, Iceland (Sunny Mountain) Uploaded by Axelkris [CC-BY 2.0] (http://commons.wikimedia.org/w/index.php?title=Sunny_Mountain_(Iceland)&oldid=127168870) via Wikimedia Commons (http://commons.wikimedia.org/wiki/File:Sunny_Mountain_(Iceland)&oldid=127168870) via Wikimedia Commons



Suggested Mechanism



Results: Aim 3

- Comparison of PHN and participant KBS ratings and the interview themes indicate that the Omaha System KBS ratings were consistent with changes noted by participants.

Limitations

- KBS:
 - Self-report and observational data
- Qualitative analysis:
 - Independent interviewer

Implications

- Local public health agencies in partnership with health care organizations can transform clinical obesity practice
- The Omaha System can be a useful metric for evaluating translation of evidence-based guidelines in health care delivery

Future Research Steps

- Assess the sustained impact of the guideline translation intervention over time
- Investigate participant perspectives on the suggested mechanism of the impact
- Explore the role of local public health in clinical guideline implementation promotion for other important public health issues

Summary

- Successful translation of obesity guidelines
- Omaha System is a useful measure at the system level
- New system change model suggested by participant themes

Thank you!

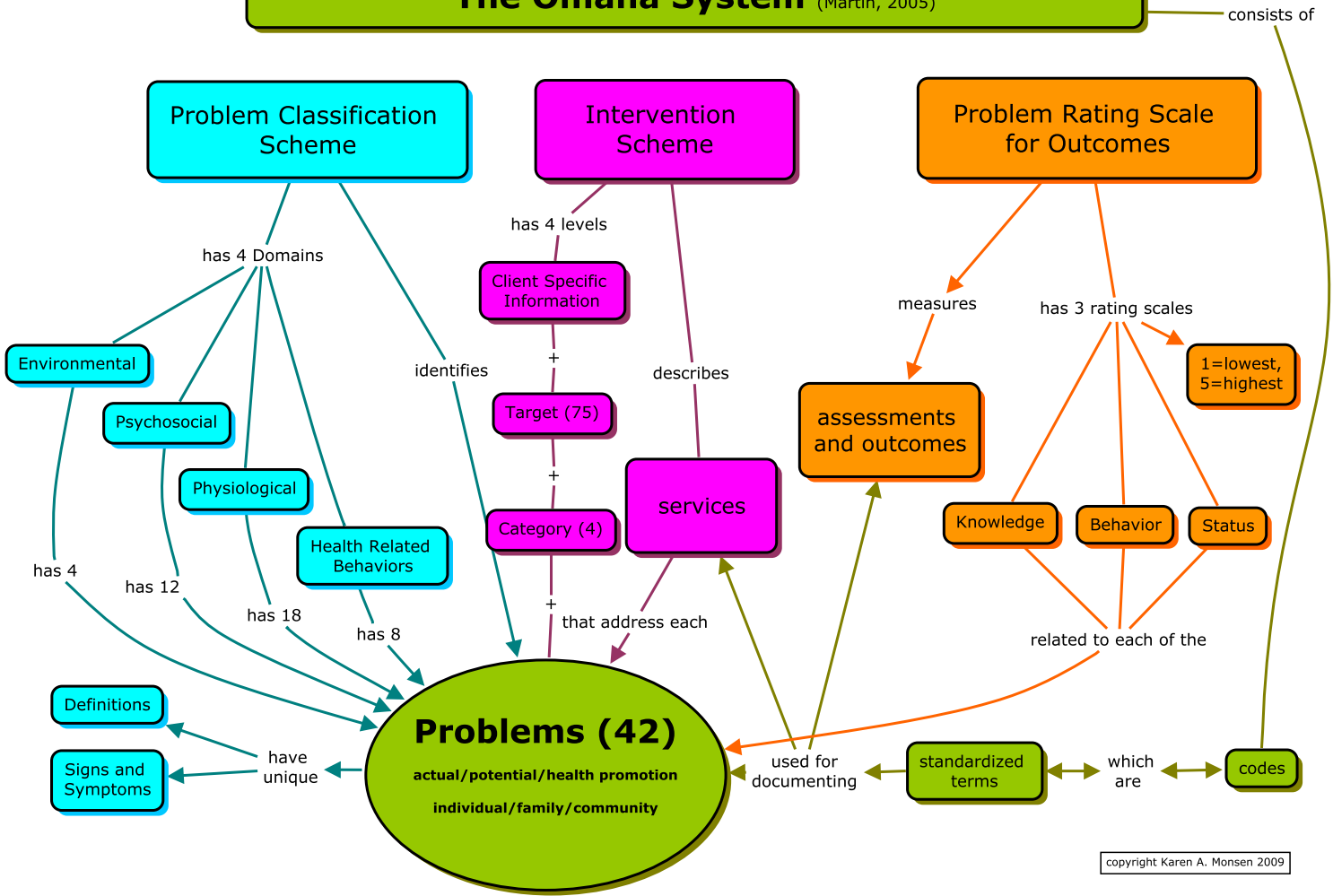
- Questions?
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Photo source: http://blogs.sitomas.edu/ph/offices/2012/09/Healthy_Minnesota.jpg

The Omaha System (Martin, 2005)



Health Care Supervision Care Plan

Category	Target	Care Description Note followed by PHDoc Answer Group
Surv	Screening Procedures	Evidence-based guideline (EBG) knowledge and practice: organizational/clinician surveys, chart audits, action plan, progress reports, patient surveys, other ^{1,5}
TGC	Screening Procedures	EBG knowledge and practice: organizational/clinician surveys, chart audits, action plan, progress reports, patient surveys, other ^{1,5}
TGC	Wellness	EBG information/resources/tools: face-to-face, webinar, conference call, consult, resources, tools, other ^{2,4}
Surv	Behavior Modification	EBG readiness to change: organizational readiness to change, other ³
TGC	Behavior Modification	EBG organizational change: culture of change, action plan, progress reports, explore supports, address barriers, other ⁴
TGC	Other Community Resources	EBG community resources: collaborative, mini-grant, motivational interviewing, CDSMP, I CAN Prevent Diabetes, MNHelp.info, other ⁴
CM	Other Community Resources	EBG community resources: collaborative, mini-grant, motivational interviewing, CDSMP, I CAN Prevent Diabetes, MNHelp.info, other ⁴