

Omaha System



Horizon Homecare™
&
Horizon Hospice™

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Empowering Healthcare

Horizon Homecare and Horizon Hospice v10.0 provides significant clinical functionality and include enhancements designed to provide real-time decision support on the laptop, improve the clinician's documentation workflow, and provide guideline analysis tools to enhance outcome management.

The changes contained in v10.0 position the clinical guideline (care plan or care path) to focus and "drive" the visit. This guideline functionality can support a multi-disciplinary approach to care and the incorporation of evidence-based and best practice approaches into your care delivery model. Navigational improvements in the release allow the clinician to move back and forth between assessment documentation and the guideline with "one click", better aligning the clinician's workflow with the documentation requirements of care. Clinician diagnoses, or problems, can be associated with specific interventions and outcome measures, creating improved consistency with the nursing process and enabling analysis of the care delivered at the population, patient and personnel level.

The guideline functionality is supported by guideline terms and guideline components. These terms and components can be developed in several ways:

- Term descriptions and components can be developed by your organization, derived from a standard content set such as NIC, NOC, or NANDA International, or through a third-party agreement with McKesson to license VNA First content.
- Your organization may use the taxonomy supplied in the Omaha System to modify the description of the guideline terms and establish the components.

The Omaha System

The Omaha System is a research-based, comprehensive and standardized taxonomy designed to enhance practice, documentation, and information management. It consists of three relational, reliable, and valid components: the Problem Classification Scheme, the Intervention Scheme, and the Problem Rating Scale for Outcomes. The components provide a structure to document client needs and strengths, describe multidisciplinary practitioner interventions, and measure client outcomes in a simple, yet comprehensive, manner.

(Martin, 2005)

If your organization plans to use the Omaha System taxonomy as the basis for developing and documenting guidelines with Horizon Homecare or Horizon Hospice, there are several important steps to consider in the adoption process. They include and are not limited to:

- Developing an agency-wide understanding of the Omaha System
- Developing staff education plans to address the use and benefits of the Omaha System
- Identifying six to ten medical/clinician diagnoses/problems common to your organization
- Completing set-up activities in Horizon Homecare or Horizon Hospice
- Putting the guidelines into practice
- Monitoring the effectiveness of the guidelines

Developing an agency-wide understanding of the Omaha System

Taking the time to understand adequately and incorporate the Omaha System taxonomy into your organization's practice is a critical step to successful adoption and the reliability of the data that you will use to analyze the quality and success of the patient care you deliver. For more information, see www.omahasystem.org.

Developing a staff education plan

Implementing guidelines and using the Omaha System are likely to represent a significant change for your organization. The project will require a cross-departmental team to ensure effective planning and execution. The team should include representation from Operations, Education, Quality Assurance, Information Technology, and Clinical Leadership. The team must develop a plan to familiarize staff with the Omaha System and how to use the system within Horizon Homecare and Horizon Hospice. Karen Martin, Martin Associates, is available to assist with your efforts, and McKesson ECSG Services offers service tracks specific to the guideline functionality.

Identifying medical/clinical diagnoses and problems

Selecting six to ten medical/clinician diagnoses, or problems, that represent the high volume, high risk/quality improvement efforts of your organization will likely provide coverage for 80% of the cases you serve. Initiating the project with this limited number of reference guidelines will support your organization's quality initiatives and provide a realistic number of reference guidelines for the patient care staff to assimilate during the implementation phase of the project. Horizon Homecare Insight and several of the standard reports in Horizon Homecare and Horizon Hospice, such as the Admission Statistics Report and the Revenue Visit Report, can help with this task.

Completing Set Up Activities in Horizon Homecare and Horizon Hospice

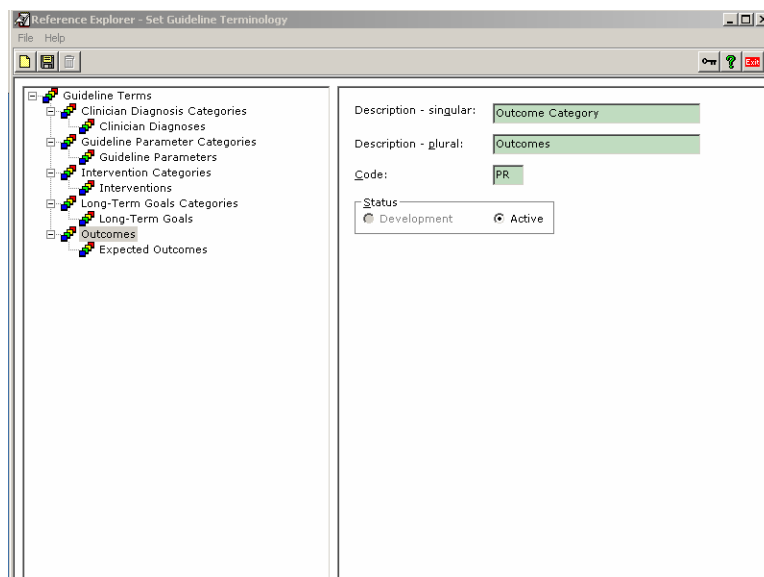
Modifying Guideline Terms

Begin by modifying the description of the guideline terms in Horizon Homecare and Horizon Hospice. **Do not add or delete the existing terms**, instead edit the descriptions to reflect the Omaha System taxonomy. Note that Guideline Parameter Categories, Guideline Parameters, Goal Category, and 485 Goals are not specific to the Omaha System and can be used at the discretion of the organization.

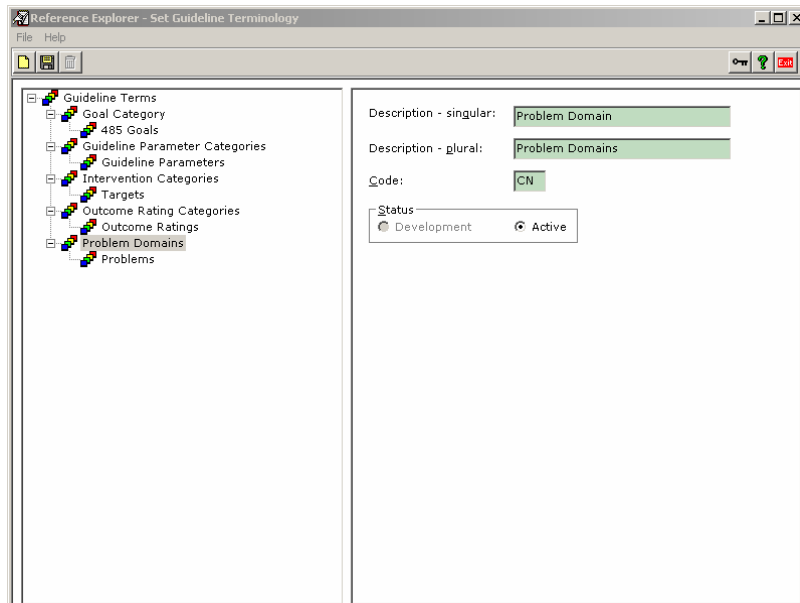
Before:

Current HHC Term Description	Omaha System Term Description
Clinician Diagnosis Categories	Problem Domains
Clinician Diagnoses	Problems
Intervention Categories	Intervention Categories
Interventions	Targets
Outcomes	Outcome Rating Categories
Expected Outcomes	Outcome Ratings
Long term goal categories	Goal Categories
Long term goals	485 Goals
Guideline parameter categories	Guideline parameter categories
Guideline parameters	Guideline parameters

Before:



After:



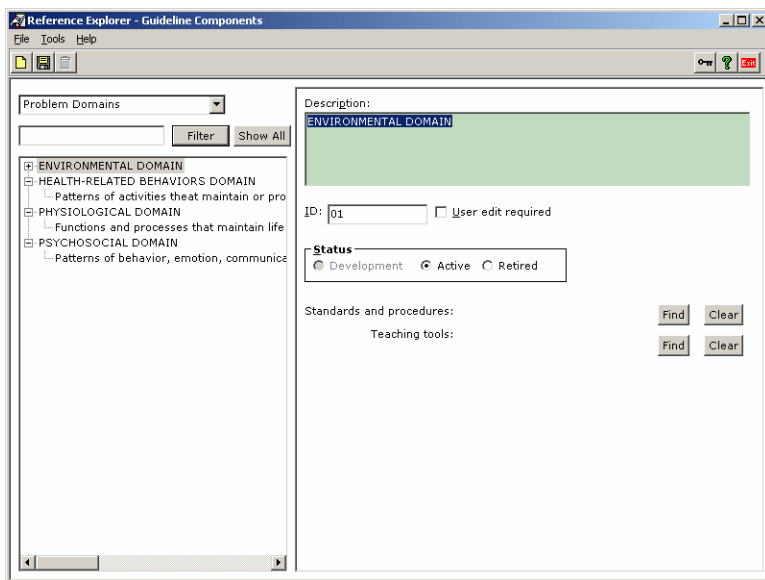
Building Guideline Components

Guideline components should be created under each of the guideline terms described in the step above.

Component - PROBLEM DOMAINS

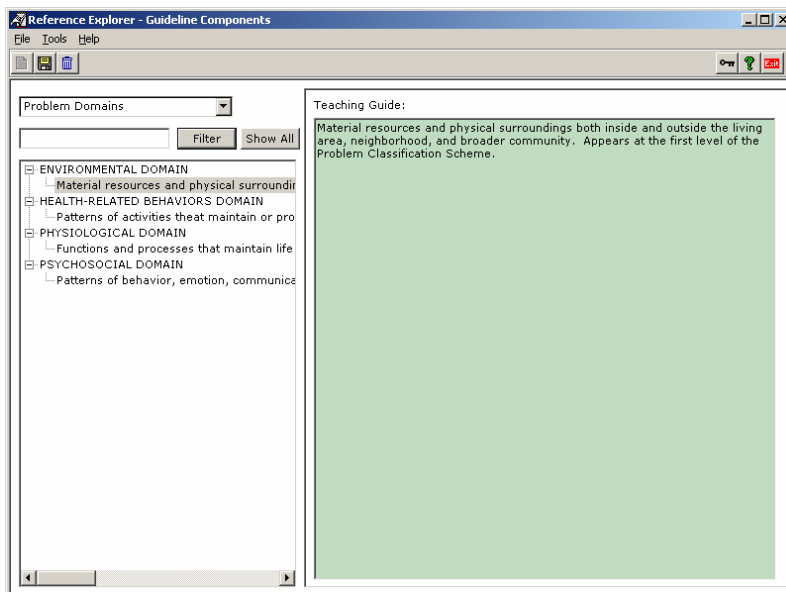
1. Definition - Four domains appear at the first level and represent priority areas of practitioner and client health-related concerns:
 - Environmental: Material resources and physical surroundings both inside and outside the living area, neighborhood and broader community
 - Psychosocial: Patterns of behavior, emotion, communication, relationships and development
 - Physiological: Functions and processes that maintain life
 - Health Related Behaviors: Patterns of activity that maintain or promote wellness, promote recovery and decrease the risk of disease
2. Each Domain should be entered as a component under the Problem Domain. Domains are the first level of the component terminology. The associated SNOMED code assigned to each domain per Appendix E of the Omaha System Book should be entered into the ID field of the guideline component. Example: SNOMED identifier 01 for the Environmental domain.

Example



3. The definition of the domains and its associated problems can be added as a teaching guide associated with the component. This can be used as a reference for clinicians at the point of care. Example of the teaching guide for the Environmental domain:
Environmental: Material resources and physical surroundings both inside and outside the living area, neighborhood and broader community. Problems in the Environmental Domain include: Income, Sanitation, Residence, Neighborhood/workplace safety
4. User editing should not apply at the domain level; therefore leave this flag blank.

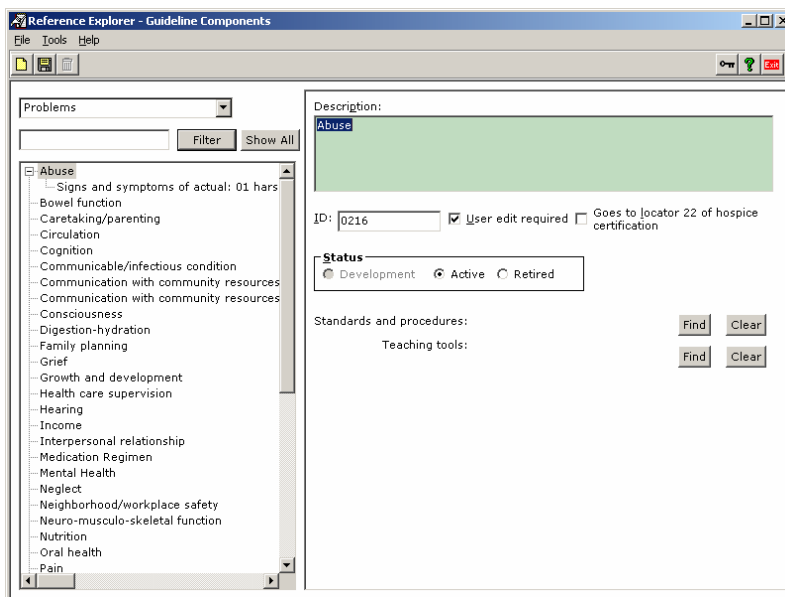
Example



Problems

1. Definition: Forty-two terms (concepts), referred to as client problems or areas of client needs and strengths. These appear at the second level in the guideline component hierarchy.
2. Each of the 42 problems should be entered as a guideline component under “Problems” and should be set up to require “user edit”.
3. The SNOMED identifiers specified in Appendix E of the Omaha System book should be entered as the ID for the component. Example: SNOMED identifier 01 for domain “Environmental” and SNOMED identifier 03 for the problem “Residence” should be entered as 0103 in the ID field.

Example

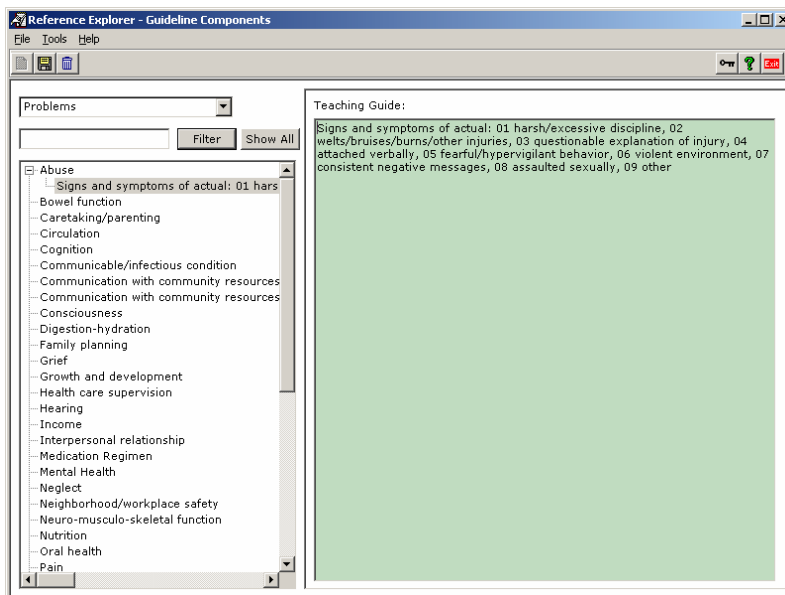


4. The signs and symptoms of Actual problems should be set up as a teaching guide for each problem component. This will provide a reference for the clinician at the point of care and allow “cut and paste” functionality for editing of the problem. This editing will allow individualization of the problem for the patient and enhance communication among clinicians. Example: Circulation - cramping/pain of extremities

Signs and Symptoms of Actual

- edema
- cramping/pain of extremities
- decreased pulses
- discoloration of skin/cyanosis
- temperature change in affected area
- varicosities
- syncopal episodes (fainting)/dizziness
- abnormal blood pressure reading
- pulse deficit
- irregular heart rate
- excessively rapid heart rate
- excessively slow heart rate
- anginal pain
- abnormal heart sounds/murmurs
- abnormal clotting
- abnormal cardiac laboratory results
- other

Example



This is an example of how the information will display in the care plan:

The screenshot shows a web browser window with the title "Clear of Explorer - [Problems - PT: Newman, Thomas Nelson - Adm: 00000027 - Yd: 09/28/2006 09:25 AM]". The browser's address bar shows "http://www.horizonhospice.com/". The page has a menu bar with "Cases", "Profile", "Meds", "Orders", "Outlines", "Visits", "Notes", "Events", and "Problems". The "Problems" section is active, displaying a list of four medical problems. Each problem entry includes a "Begin Date", a description, and a "Resolved" checkbox. The first three problems have "Note" and "Guide" buttons, while the fourth problem has only a "Guide" button. The fourth problem is highlighted in yellow.

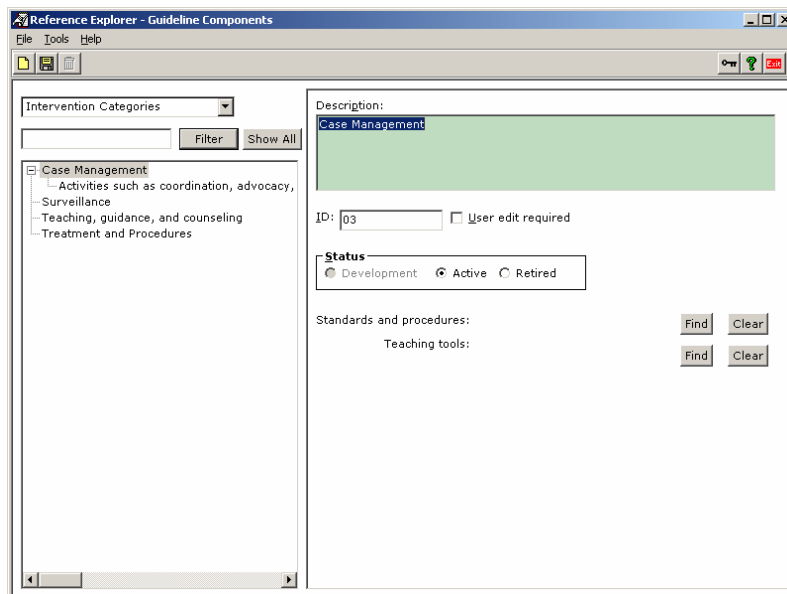
Begin Date	Description	Resolved
8/16/2006	Circulation patient is experiencing 2 - 3 plus pitting edema of both lower extremities particularly in the evenings	<input type="checkbox"/>
8/15/2006	Medication Regimen does not follow recommended dosage/schedule	<input type="checkbox"/>
8/16/2006	Nutrition - eating habits are poor related to culture	<input type="checkbox"/>
8/15/2006	Respiration - experiences significant shortness of breath with ambulation of 20 ft or more, or ascending more than 4 steps	<input type="checkbox"/>

Intervention Categories

1. **Definition:** The Scheme is a comprehensive, orderly, non-exhaustive, mutually exclusive taxonomy designed to address specific problems for diverse clients. It consists of three levels of professional actions or activities. Four broad categories of interventions appear at the first level. They are:

- **Teaching, Guidance, and Counseling:** Activities designed to provide information and materials, encourage action and responsibility for self-care and coping, and assist the individual, family or community to make decisions and solve problems
- **Treatments and Procedures:** Technical activities such as wound care, specimen collection, resistive exercises and medication prescriptions that are designed to prevent, decrease or alleviate signs and symptoms for the individual, family or community
- **Case Management:** Activities such as coordination, advocacy and referral that facilitate service delivery, promote assertiveness, guide the individual, family or community toward use of appropriate resources and improve communication among health and human service providers
- **Surveillance:** Activities such as detection, measurement, critical analysis and monitoring intended to identify the status of the individual, family or community's status in relation to a given condition or phenomenon.

Example



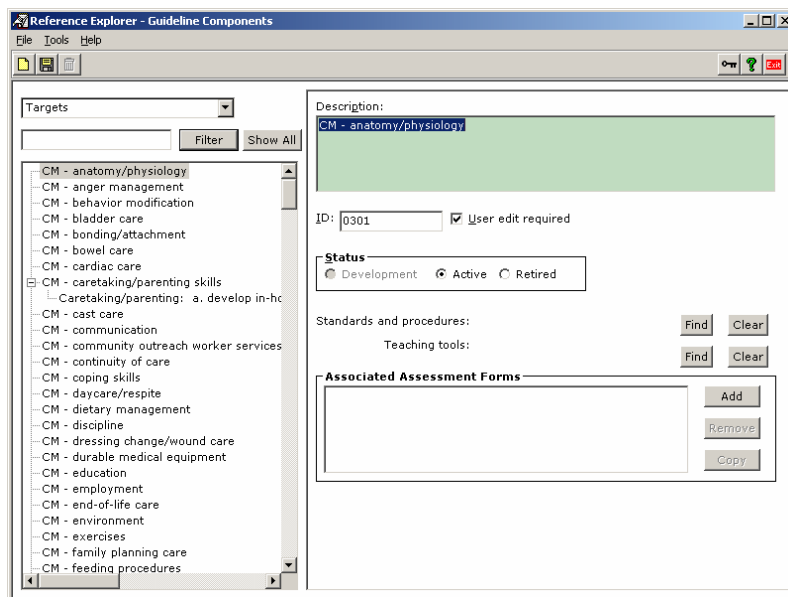
2. The intervention categories can include a teaching guide that defines the category and is used as a reference by the clinician.
3. The SNOMED identifiers included in Appendix E of The Omaha System book should be entered as a part of the component set-up. They are: 01 - Teaching, Guidance, and Counseling, 02 - Treatments and Procedures, 03 - Case Management, 04 – Surveillance.
4. Intervention Categories should not require “user edits” and the flag should be left blank.

Targets

1. **Definition:** An alphabetical list of 75 targets, or objects, of action and one “other”, for a total of 76 targets. These appear at the second level of the intervention scheme. Client-specific information generated by practitioners can be added to each target and is considered the third level of the intervention scheme.
2. Because the intervention scheme is the basis for planning and intervening, it enables practitioners to describe and communicate their practice, including improving or restoring health, decreasing deterioration or preventing illness.
3. The Omaha System has 76 targets that can be used within any one of the four intervention categories. As a result, the current Horizon Homecare or Horizon Hospice database structure requires that each target be entered four times. This is necessary so that when creating a guideline, the same target can be added to any one of the four intervention categories, when appropriate. Examples of the component description and SNOMED identifier are:
 - TGC safety 0146
 - TP safety 0246
 - CM safety 0346
 - SRV safety 0446
4. The Omaha System targets will be used to build a reference guideline to represent each of the 42 Omaha System Problems. These are defined in Appendix A of the Omaha System User Guide.
5. The “user edit required” flag should be set on the target components. This will support individualization and specificity to be assigned to the target.

See an example on the following page.

Example



Outcome Rating Categories

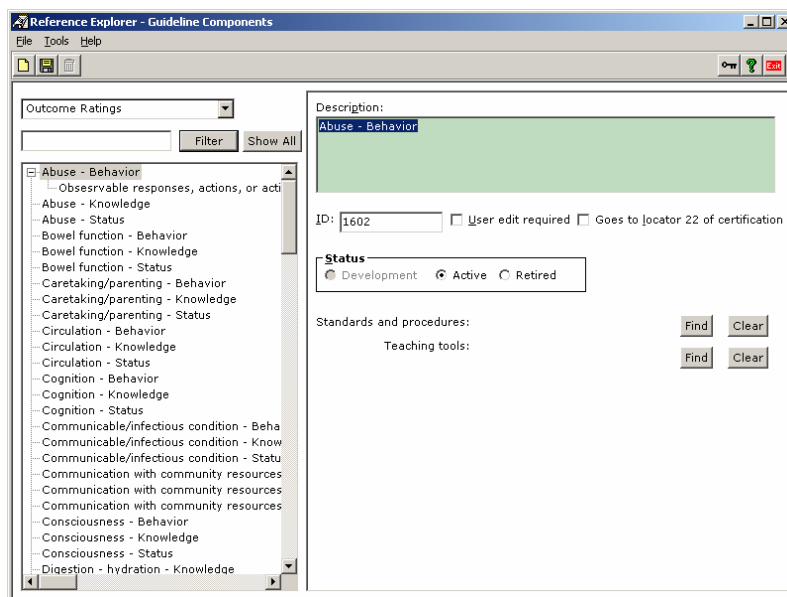
Definition: The scale consists of three five-point, Likert-type scales for measuring the entire range of severity for the concepts of knowledge, behavior and status. Each of the scales represents a continuum providing an evaluation framework for examining problem-specific client ratings at regular or predictable time points during their care. Suggested times include admission, specific interim points, such as recert or a significant change in condition, and discharge. The ratings are a guide for the practitioner as client care is planned and provided; the ratings offer a method to monitor client progress throughout the period of service. Using the Problem Rating Scale for Outcomes with the other two schemes of the Omaha System creates a comprehensive problem-solving model for practice, education, and research.

Concepts and Ratings of the Problem Rating Scale for Outcomes:

Concepts	1	2	3	4	5
Knowledge: Ability of the client to remember and interpret information	No knowledge	Minimal knowledge	Basic knowledge	Adequate knowledge	Superior knowledge
Behavior: Observable responses, actions, or activities of the client fitting the occasion or purpose	Not appropriate behavior	Rarely appropriate behavior	Inconsistently appropriate behavior	Usually appropriate behavior	Consistently appropriate behavior
Status: Condition of the client in relation to objective and subjective defining characteristics	Extreme signs/ symptoms	Severe signs/ symptoms	Moderate signs/ symptoms	Minimal signs/ symptoms	No signs/ symptoms

1. Due to the current database structure, each of the outcome rating components, Knowledge, Behavior and Status, will need to be created for each of the 42 problems. For example:
 - Pain will have the following outcomes ratings added:
 - * Pain Knowledge - 01
 - * Pain Behavior - 02
 - * Pain Status - 03
2. The “user edit” flag should be marked on each component. This will allow the clinician to “qualify” the reason for the rating.
3. The Likert Scales for Knowledge, Behavior, and Status will need to be set up in the Miscellaneous Codes as “variance type codes”. These can then be selected from within a visit to ‘rate’ the outcome and will be reported via the Guideline Analysis Report

Example



4. This is an example of documentation for the circulation problem and the KBS

For each problem included in the guideline or care plan the clinician will "rate" the problem as to patient K, B, S at regular intervals. The note section will allow documentation as to why the ratings have been documented

Visit Date	Note	Variance	SP	Tools	Guide
CURRENT:	Understands physiology of disease process and need for medication/diet adherence	Type: Basic Knowledge Reason: Action:			

Goals/485 Goals

- Goals can be created for each of the individual problems/DX guidelines at the organization’s discretion.
- The “user edit” flag should be set on the goal components to allow clinicians to individualize them as needed.
- The flags should be set to allow the goals to flow to the 485.

Guideline Parameters

- These specific types of parameters can be included in any guideline and can be edited by the clinician as the care plan is created. Examples could include:
 - Activity
 - Blood Pressure
 - Blood Glucose
 - PT/INR

Building the reference guidelines

- 42 Omaha System Problems
 - Build Problem groupings for each of the 42 Omaha System problems, using the Omaha System User’s Guide as a reference.
 - Add the Intervention categories and targets, and the Outcome rating categories and Outcome Ratings.
- 6 – 10 Agency Specific Reference Guidelines
 - Create reference guidelines for the high volume/high risk cases in your organization by grouping the relevant problems and their associated interventions and outcome ratings.
 - Associate standing physician orders to the reference guideline to reflect your organization’s practice patterns.

Putting guidelines into practice

Using guidelines to support your care delivery model and provide structure and form to your clinical documentation can assist your organization's move toward a care delivery model that encompasses both evidence-based and best practices. It can, however, represent a significant change for your organization and should not be taken lightly. Consideration should be given to planning and training activities that are respectful of your staff and the change process. Limiting the reference guidelines to a set of six to ten should improve adoption, but your staff will need to become familiar with the method of documentation, i.e. the Omaha System, and the presentation and functionality offered by Horizon Homecare and Horizon Hospice. As suggested earlier, a multi-disciplinary, cross-organizational team should be put in place to manage this project to help guarantee its success.

Monitoring guideline effectiveness

The Guideline Analysis Report is a new reporting tool offered with Horizon Homecare and Horizon Hospice. It is designed to help you analyze guideline use, compliance and outcomes at the population (guideline), patient and personnel level. Implementing a plan to monitor your guideline effectiveness will be an essential aspect of the implementation.

FAQ

Q: How do I handle the existing components and reference guidelines that are in the Horizon Homecare or Horizon Hospice database?

A: Components and reference guidelines can be "retired" in Horizon Homecare or Horizon Hospice. This prevents them from being used in future reference guideline development or from being assigned to a patient.

Q: If reference guidelines have been used in the past, what will happen to the history?

A: The history will be retained and any guideline that is currently active will remain active for that patient until it is completed or discontinued, despite the guideline being retired.

Q: Do our existing reference guidelines have to be retired?

A: No, but it is likely that you will want to create a transition to using the Omaha System for documentation of clinical activities and, therefore, will want to retire any guidelines or components that are not based on the Omaha System taxonomy.

Reference

Martin, KS. (2005). *The Omaha System: A Key to Practice, Documentation and Information Management* (2nd ed.) St. Louis: Elsevier.

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