

Request for Information for an Electronic Medical Records System

DEPARTMENT OF CHILDREN AND FAMILIES

The Department of Children and Families (DCF), is the State agency responsible for, among other things, child welfare, public assistance, and mental health and substance abuse services. Through this RFI, DCF is requesting information on vendors who are capable of providing off-the-shelf software that will provide DCF's mental health treatment facilities and community mental health providers with an integrated records, pharmacy, and lab system to ensure clients and end-users receive the benefits of integrated services. DCF desires a web-based system that integrates information across administrative, financial, and clinical departments, helping DCF's mental health treatment facilities and community mental health providers to function more effectively. DCF desires a solution that ensures client information is always accurate and up-to-date, and administrators have immediate access to the clinical and financial reports they need. DCF also desires a solution that meets HIPAA security and confidentiality/privacy standards, including parameters that restrict access to client data for each user within the organization to only the information they require to perform the job responsibilities with the client. DCF desires a system that can interface with all MS SQL systems to permit Data Transformation Service packages from one system to another to allow the hospitals to use currently implemented databases without duplicating data entries. **DCF is looking for a software solution, not an ongoing service.**

THIS IS NOT A SOLICITATION FOR PROPOSALS. Pursuant to s. 287.012 (21) F.S., DCF is requesting information from qualified vendors concerning certain commodities and services. Please note that under Chapter 287.012 (21) F.S., responses to this request for information are not offers and may not be accepted by DCF to form a binding contract.

DESIRED RESPONSE

In general, DCF desires an electronic behavioral management system that accomplishes the following business functions. More specific, detailed requirements are provided in Exhibit A attached to this Request for Information.

1. The software should collect and update demographic information, family contact data, insurance coverage, diagnostic codes, etc. The assignment of rooms and beds should be handled by the software to eliminate errors. Direct enrollment into outpatient and residential programs and services should be included in the software's overall capabilities.
2. The software should collect and report patient information as well as data for State and federal reporting requirements.
3. The software should handle billing as well as accounts receivable. Claims should be generated electronically, and all billing account information should be accessible from one central screen. Benefits tracking should calculate and update "days remaining" information for co-insurance and Lifetime Reserve days.
4. The software should capture client-specific risk factors such as incidents, behaviors, stress contributors, and supports, in order to monitor a client's level of risk. Non-client-related events should also be captured and the system should incorporate a follow-up review process in order to ensure appropriate notifications are performed. The software should be capable of sending automatic alerts to the treatment team, case manager, and supervisory personnel on any critical items that require intervention.
5. The software should collect and maintain guardianship, legal, and forensic (court commitments) information. Staff should be able to track court-ordered data such as medications, treatments, restraining orders, and privileges, as well as notification information for guardianship, court

- contacts, and duty-to-protect contacts. The software should also capture and maintain legal assignments including legal status, criminal charges, and guardianship type. The software should support staff's need to monitor court appearance dates, reviews, and renewals.
6. The software should allow staff to view information from a single episode of care or for the entire medical record. The software should provide view of an entire spectrum of care, however.
 7. The software should provide care providers with entry of orders from a single screen along with access to patient information and test results, with appropriate security authorization. One entry should be able to create a group of orders for multiple departments. Series orders should be capable of being generated, within limits.
 8. The software should support interdisciplinary Plans of Care required for a patient-focused care delivery system. The software should provide for the comprehensive coordination of a client's care across an entire provider agency. The software should provide the care coordinator with functionality for caseload management, enrollments, waitlist management, treatment planning, and assessments.
 9. The software should facilitate documenting of functional assessments, the processing of individual service plans for treatment, and the enrollment into identified programs. Care coordinators should be able to identify program specialties, such as a certain language, to best meet the needs of the client.

Instructions for Responses

DCF requests that vendor submittals briefly and clearly describe the proposed off-the-shelf software, outline implementation steps and responsibilities, and comment on the expected performance, robustness, and estimated cost of the proposed software solution. This RFI contains all of the information required to submit a response. Responses have the following formatting requirements:

1. A one page cover sheet that identifies the title, organization(s), Vendor's technical and administrative points of contact - including names, addresses, phone and fax numbers, and email addresses of all co-authors, etc;
2. A substantive, focused, one-half page executive summary;
3. A description (limited to 5 pages in minimum 12 point Arial font, appropriate for single-sided, single-spaced, 8.5 by 11 inch paper, with 1-inch margins) of the proposed off-the-shelf software and suggested implementation approach(es), including;
 - a. Describe the how the proposed off-the-shelf solution satisfies each of the requirements identified in Exhibit A. Include in this description a relevant overview of the customization needed for the proposed off-the-shelf solution to robustly perform the functions listed in Exhibit A.
 - b. Provide an estimate of the time and effort required the proposed solution can be delivered.
 - c. Describe the programming language(s) used to develop the system.
 - d. Describe the proposed system's database reporting tools.
 - e. Describe the security system used by the proposed system.
 - f. Describe other clinical systems the proposed solution been interfaced to? (Provide names of interfaced systems.) Does the proposed system comply with Health Level 7 (HL7) interface standards for importing and exporting data to and from other systems? Describe, in general terms, the interface functionality.
 - f. Give a brief description of the evolution of the proposed software. Include the date of the first installed site and major developments which have occurred (e.g. new versions, new modules, specific features). Describe any previous ownership, if appropriate.
 - g. Provide any cost information for the software and the implementation services. The vendor is not required to provide specific prices for any solutions proposed. These estimated costs asked for as part of this RFI will assist DCF in developing our initial strategy, planning and requesting budget for this technology solution in future legislative budget requests. DCF is particularly interested in costs of licenses, renewals, and upgrades.

- h. Identify other state, county or municipal governmental entities where they have performed similar services and delivered the proposed software consistent with the content of this RFI. Provide a summary of the services provided and results achieved. Experience with the federal government may also be included.
 - i. Describe the vendor's required systems operating environment required, including the operating system, data base management system, programming language(s), etc., to install and use the software solution proposed, including the hardware requirements needed to operate the solution described in response to this RFI.
 - j. Describe the process for ensuring routine software updates would be generally available to DCF in order to maintain current functionality.
 - k. Describe the vendor's quality assurance program for developing solutions similar to the one proposed in this RFI. For example, how does the vendor handle problems with its customer's use of the software solution?
 - l. What is the vendor's recommendation for the timeframe required to make the software solution functional for DCF?
 - m. Are there any specific areas of concern, not mentioned above, that the vendor would like to see addressed in a solicitation resulting from this RFI?
 - n. Identify the nature and amount of DCF resources (including staff) needed from any date of initiation of the project to implementation of the technology.
4. A list of experience in delivering the proposed off-the-shelf software (any significant claims or reports of success must be accompanied by references, and reference material MUST be attached) including;
- a. What other state, county or municipal governmental entities are currently using the proposed software?
 - b. Describe the vendor's specific experience and expertise as a company and staff specifically in performing the implementation services contemplated in the RFI and identify whether services are provided by subcontractors or employees of the vendor. Provide the subcontractor's name, contact person, location of home office and location of any Florida offices. Also, provide a description of the staffing levels that would be proposed to perform any agreement for implementation services.
5. Refer to the Exhibit A – Minimum and Desirable Functional System Specifications. Assign one of the following Availability Codes to each item:
- A – Feature is available and installed
 - B – Feature is available but not yet installed
 - D – Feature is currently under development (indicate anticipated date of availability)
 - N – Feature is not available
6. Optionally, a single overview briefing chart graphically depicting the proposed software solution environment.

DCF desires a concise response which conforms to the specifications in this section. Vendors are requested to provide in Microsoft Word format one electronic copy of their submission to the attention of David Shepard, Department of Children and Families at David_Shepard@dcf.state.fl.us. **All responses are due on May 10, 2010.** DCF will not pay for any information requested nor be liable for any costs incurred by the vendor. For economy of presentation, special bindings, colored displays, promotional materials and the like are not required but if they are presented, DCF will not be responsible for this cost.

Demonstrations

DCF, in its sole discretion, may request responding vendors to perform demonstrations of their capabilities to DCF staff. DCF will initiate requests for demonstrations and will determine the form of the demonstrations.

Ownership

All responses become the property of DCF upon receipt and will not be returned to the Vendor once opened. DCF shall have the right to use any and all ideas or adaptations of ideas contained in any Request for Information response received and such material may be used in the development of future Request for Proposals (RFPs) or Request for Quotations (RFQs).

Confidentiality

All information obtained from the vendor shall become the property of DCF upon receipt and will not be returned. DCF cannot guarantee that it will not be compelled to disclose all or part of any response as a public record under the Florida Sunshine Law. Trade secret information is not required by this Request for Information and should not be included in the submittal. Vendors needing confidential treatment for any trade secret information they furnish must clearly identify that in their respective responses. All information received in response to this RFI that is marked trade secret will be handled in accordance with applicable law.

Questions

Interested vendors may submit questions by email to david_shepard@dcf.state.fl.us. Answers will be posted on the vendor bid system. Vendors should not call or directly contact anyone in DCF for information about this Request for Information other than Mr. Shepard.

Disclaimer

This RFI is issued solely for information and planning purposes and does not constitute a procurement solicitation. Responses to this notice are not offers and cannot be accepted by DCF or the State of Florida to form a binding contract.

Vendors will not be notified of the result of the review nor will copies of it be posted to any website or physical location.

Vendors to this RFI shall not be deemed to be an advisor or consultant to DCF or as having provided input to the specifications of any ensuing solicitation. DCF will evaluate the information presented and determine any subsequent course of action. Further action, if any, will occur through any procurement method available, which may consist of an RFQ or competitive solicitation for licenses, services, training, etc, and any responding vendors to this RFI may be considered for selection.

EXHIBIT A

Minimum and Desirable Functional System Specifications

A) Minimum Functional System Specifications

1. General System Requirements

- 1.1. Provide support for both in-patient and out-patient clients
- 1.2. Provide on-line access to all active patients or patients discharged within 10 years for all information
- 1.3. Provide for allowing archival information to be re-loaded into the system for on-line inquiry and report production or patient returns to the treatment facilities.
- 1.4. Ability to safeguard all clinical information against loss and assure accessibility (downtime, backup procedures)
- 1.5. Online, ongoing training system for rotation of end-users
- 1.6. Online HELP
- 1.7. Support HL7 interface standards
- 1.8. Provide the ability to store medical record from birth to death on archival system (i.e. tape, optical disk; including optical scanning of old charts)
- 1.9. Provide rapid access and retrieval - less than two second response time or better
- 1.10. Support reporting of all ORYX measures to NRI to meet JCAHO requirements
- 1.11. Must be a web-based system using a Windows or Linux server based application
- 1.12. Must have the capability to accommodate long term psychiatric treatment facilities with over 1000 beds
- 1.13. Must have the capacity to support at least 1000 or more concurrent users
- 1.14. Must authenticate to LDAP (Lightweight Directory Authentication Protocol) and Active Directory
- 1.15. Must be compatible with IE7
- 1.16. Provide for updates to ICD10/DSM5 for diagnostic coding
- 1.17. Must use .NET C# programming language
- 1.18. Must use MS SQL 2005 database or above
- 1.19. Must allow Department programmers to modify application or add modules for specific requirements that are not part of the system.
- 1.20. Must interface with existing systems (i.e., pharmacy, labs, dietary and other internal applications)
- 1.21. Must interface with external behavioral health systems (ie., community systems/continuum of care)
- 1.22. Must have data exporting capabilities for reporting and data exchange
- 1.23. Must have the capability to interface (bi-directionally) with mobile computing devices
- 1.24. Must have electronic signature capability for both facility staff and patients
- 1.25. Must comply with Department, State and Federal data security policies
- 1.26. Voice recognition capability (desired)

2. Medical Records

2.1. General Requirements

Provide all patient access methods as identified in ADT and Encounter Management specifications

Note: all MPI Reconciliation functionality is included in the section for 'Encounter Management'

2.1.1. Other ADT Support on nursing unit

- 2.1.1.1. Ability to transfer patient to another bed, another unit (wards), leave of absence.
- 2.1.1.2. Ability to 'Discharge' patient from bed when he/she actually leaves the unit

2.1.2. Clinical Data Repository

- 2.1.2.1. Provide views/displays of multiple data types/information in all modalities including:
- 2.1.2.2. Text
- 2.1.2.3. Graphics
- 2.1.2.4. Document Images (for archived documents)
- 2.1.2.5. Patient-related photographs
- 2.1.2.6. Provide support for multiple users
- 2.1.2.7. Provide link between data repository, CPOE, Order/Results, and documentation modules (including MAR)
- 2.1.2.8. Ability to display same patient 'Header information' at the top of the screen, with all the pertinent patient info as on the active visit clinical records for documentation, CPOE, Order Entry, etc.
- 2.1.2.9. Availability to retain results from Order Entry/Results Reporting and all departmental systems in the repository. Display all results and flag abnormalities. Provide for flexible access by:

- 2.1.2.9.1. Department performing service
- 2.1.2.9.2. Service performed (test, procedure, etc.)
- 2.1.2.9.3. Ordering physician
- 2.1.2.9.4. Ordering service
- 2.1.2.9.5. Significant result indication
- 2.1.2.9.6. Other user defined parameters
- 2.1.2.10. Ability to retain documentation from all departments, including on-line charting, transcribed reports, and scanned documents in the repository. Provide flexible access to specific charting documents:
 - 2.1.2.10.1. Vital signs
 - 2.1.2.10.2. Input /Output
 - 2.1.2.10.3. Other flow sheet
 - 2.1.2.10.4. Assessments
 - 2.1.2.10.5. Progress notes
 - 2.1.2.10.6. Multi-Disciplinary notes
- 2.1.2.11. Ability to flag abnormalities between results and documentation items (i.e. Lab result, med order, with assessment finding)
- 2.1.2.12. Ability to support repository access for:
 - 2.1.2.12.1. Inpatients
 - 2.1.2.12.2. Observation patients on the unit
 - 2.1.2.12.3. Outpatients- in multiple care areas
- 2.1.2.13. Ability to access patient clinical and demographic information in the repository by the following methods (or in any combination):
 - 2.1.2.13.1. Patient location (i.e. unit Census list)
 - 2.1.2.13.2. Patient name (alphabetically with a minimum of one letter entry)
 - 2.1.2.13.3. Patient name (phonetically)
 - 2.1.2.13.4. Patient Identification number
- 2.1.2.14. Ability to define/default patient access methods by user type (i.e. Physician and Nursing might use Nursing unit Census list, Ancillary Dept. name/account number, etc.)
- 2.1.2.15. Ability to access to patient information via multiple types of devices:
 - 2.1.2.15.1. Nurse station and offices
 - 2.1.2.15.2. Lab and Pharmacy Systems
- 2.1.2.16. Allows for monthly review of medication and treatments from physician offices for long term patients
- 2.1.2.17. Ability to print screens or generate reports from the Repository views, selected on the following data, but not limited to:
 - 2.1.2.17.1. Patient age
 - 2.1.2.17.2. Visit location
 - 2.1.2.17.3. Doctor
 - 2.1.2.17.4. Date from and to
 - 2.1.2.17.5. Diagnosis

2.1.3. Data Searching-Reporting

- 2.1.3.1. Besides patient-specific data, ability to provide 'aggregate' data (i.e. searching for all patients of a certain diagnosis admitted within a range of dates)
- 2.1.3.2. Ability to 'drill-down' into specific patient data once search yields a list of appropriate patients
- 2.1.3.3. Ability to search and report using Boolean Logic (i.e., and, or, not, greater than, less than, etc.)
- 2.1.3.4. Ability to search text by whole, part, and including wild characters
- 2.1.3.5. Ability to search for both coded entry and free text items from any field in any record

2.1.4. Multi-Disciplinary

2.1.4.1. General Requirements

- 2.1.4.1.1. Ability to provide a non-technical report-writer for all clinical applications
- 2.1.4.1.2. Ability to access documentation in chronological or reverse chronological order as determined by the user
- 2.1.4.1.3. Ability to search for record by:
 - 2.1.4.1.3.1. Specific date/time
 - 2.1.4.1.3.2. Type of note
 - 2.1.4.1.3.3. User class or specific user
- 2.1.4.1.4. Ability to 'filter' record reviews by:
 - 2.1.4.1.4.1. Specific date/time
 - 2.1.4.1.4.2. Type of note

- 2.1.4.1.4.3. Diagnosis/problem code
- 2.1.4.1.4.4. Physician
- 2.1.4.1.4.5. Staff member
- 2.1.4.1.5. Ability to support care delivery and documentation for:
 - 2.1.4.1.5.1. Inpatients
 - 2.1.4.1.5.2. Observation patients on the unit
- 2.1.4.1.6. Ability to define/default patient access methods by user type (i.e. Nursing uses unit Census list, Clinical departments choose by identification number, etc.)
- 2.1.4.1.7. Ability to access patient clinical and demographic information by the following methods (or in any combination):
 - 2.1.4.1.7.1. Patient location (i.e. unit Census list)
 - 2.1.4.1.7.2. Patient name (alphabetically with a minimum of one letter entry)
 - 2.1.4.1.7.3. Patient name (phonetically)
 - 2.1.4.1.7.4. Patient Identification number
- 2.1.4.1.8. Ability to have patient header information display (at the top-of-screen) with pertinent patient information (such as Pt. ID and location, allergies, admission diagnosis, key clinical indicators (i.e. diabetic), special instructions, and other user-defined fields)
- 2.1.4.1.9. Ability to record the date/time that an activity/ intervention occurred through automatic date/time stamp at the point of entry
- 2.1.4.1.10. Ability to filter/audit pick list utilization in maintenance/set-up, so that low-use entries can be eliminated from user-choices
- 2.1.4.1.11. Ability to control pick-list responses by exploding hierarchy/tree windows of entry selections (i.e. in assessment - select breath sounds: if "abnormal" was selected, choose rales/rhonchi/wheezes, etc. then prompt for location, then prompt for other data. But if 'normal' was selected, that would be the final entry)

2.1.4.2. Patient Charting Support

- 2.1.4.2.1. Provide flexible, inter-disciplinary documentation tools with a mix of structured and unstructured (free-text) data collection in numerous formats to support Nursing and all other Clinical departments such as: Social Work, Rehab, Nutritional Consults, etc. as well as Psychiatry, Psychology and Medicine
- 2.1.4.2.2. Ability to view prior documentation records while creating a new note
- 2.1.4.2.3. Ability to copy forward data from one record to new record within the same episode of care
- 2.1.4.2.4. Ability to copy forward data from one record to new record from a previous episode of care, such as medication histories, problem list, patient treatments, etc.
- 2.1.4.2.5. Ability to chart via different charting tools/formats, with menu-type selections including:
 - 2.1.4.2.5.1. Assessment Forms - provide multiple, flexible formats for both admission and ongoing assessments. Various type of forms needed include: ROC- Report of Contact, Progress Notes - Flow Sheets: i.e. Restraint Use Sheets, Seclusion Checklists, Diabetic Sheets, Vital signs (w/Pulse Ox), Input & Output Sheets, etc.
 - 2.1.4.2.5.2. Structured Text charting with both formatted data entry (via drop-down pick list) populating a pre-defined narrative, as well as allowing free text entry for Procedures or Progress Notes
 - 2.1.4.2.5.3. Selection of pre-defined phrases (via drop-down pick list) to express a complete charting entry for Clinical Notes
 - 2.1.4.2.5.4. Exception Charting
 - 2.1.4.2.5.5. Charting against the Treatment Plan outcomes
 - 2.1.4.2.5.6. Documentation of Patient/Family Education performed
- 2.1.4.2.6. Ability to provide outcomes-oriented documentation
- 2.1.4.2.7. Ability for multiple versions/titles of the above forms and documentation types per unit - i.e. Multiple Assessment forms (Admission, etc.), multiple Flow Sheets, multiple Structured Text templates (Nsg, S/W Rehab, etc.). Nursing-specific (Report of Contact); Physician; Psychiatrist-specific (Multi-Disciplinary Assessment; Adm DataBase, Discharge Release Order;
- 2.1.4.2.8. Provide content for standard, templated data elements and forms for all the above formats; allowing user modification
- 2.1.4.2.9. Ability to populate documentation system with easy insertion of key clinical data from other sources (i.e. Flow Sheets, physician discharge summary documentation) to include:
 - 2.1.4.2.9.1. Vital signs from charting
 - 2.1.4.2.9.2. Lab results from results reporting
 - 2.1.4.2.9.3. Current Medications from MAR

- 2.1.4.2.10. Automatically calculate needs based on established protocols
- 2.1.4.2.11. Ability to link/invoke charting entries in the documentation application as prompted by the individual patient's Integrated Treatment Plan and by patient type (inpatient vs. outpatient status)
- 2.1.4.2.12. Allows for immediate notification of all ADT transactions so charting can begin
- 2.1.4.2.13. Allows charting entries to be made for a specified (user-defined) amount time after discharge/transfer to another unit or patient discharge/expiration
- 2.1.4.2.14. Support the ability to produce a patient oriented discharge chart through the selective compilation of relevant clinical information
- 2.1.4.2.15. The ability to provide on-line access to documentation that acknowledges that patient consents are obtained (i.e., on-line responses Y/N to questions)
- 2.1.4.2.16. Automatic statistic tracking (and/or charge capture) capability at the time of documentation for equipment utilized for patient care
- 2.1.4.2.17. The ability for the entry of care documentation addendum to any charting entry by authorized users
- 2.1.4.2.18. Ability to interface with:
 - 2.1.4.2.18.1. Medics Pharmacy
 - 2.1.4.2.18.2. ClinLab Laboratory System
- 2.1.4.3. Inquiry/Data Retrieval/ Report Printing
 - 2.1.4.3.1. Ability to aggregate ordering and documentation data for the creation of benchmarks and treatment plans
 - 2.1.4.3.2. Ability to view/print patient care summary data, including ability to customize print-formats with data that includes:
 - 2.1.4.3.2.1. Admission assessment and ongoing updates
 - 2.1.4.3.2.2. Vital signs (tabular and graphical)
 - 2.1.4.3.2.3. Daily and cumulative I and O (tabular and graphical)
 - 2.1.4.3.2.4. User-defined comparisons between various data elements including meds, and lab results
 - 2.1.4.3.2.5. Notes and treatments
 - 2.1.4.3.2.6. Flow sheets and work lists
 - 2.1.4.3.2.7. Graphic displays and reports
 - 2.1.4.3.2.8. Shift to shift report summary
 - 2.1.4.3.3. Ability to print summary data (by type and grand total) automatically:
 - 2.1.4.3.3.1. On demand
 - 2.1.4.3.3.2. User defined time frames
 - 2.1.4.3.4. Ability to produce NEFSH-defined census worksheets. The hospital can determine:
 - 2.1.4.3.4.1. Sorts
 - 2.1.4.3.4.2. Team designation
 - 2.1.4.3.4.3. Generation times
 - 2.1.4.3.4.4. Format
 - 2.1.4.3.5. Availability of a report writer/generator so that all appropriate data elements in the application can be reported or extracted ad hoc per HCO specifications
 - 2.1.4.3.6. Ability to display both individual and summary data (i.e. in I and O) in graphic displays and reports
 - 2.1.4.3.7. Ability to print on demand patient care plans by unit or by patient that include patient demographic information and scheduled activities
 - 2.1.4.3.8. Ability to define and print nursing forms (i.e., pre-procedure checklist, discharge teaching instructions)
 - 2.1.4.3.9. Ability to provide summary report of unit statistics (census, acuity, patient mix)
 - 2.1.4.3.10. Ability to provide summary reports of nursing activity completed for quality of care audits
 - 2.1.4.3.11. Ability to provide variance reports based on care documentation and daily activity requirements
 - 2.1.4.3.12. Ability to access and report on all necessary patient information across departments (allergies, assessment information, etc.)
 - 2.1.4.3.13. Allow managers access to selected clinical documentation data on their staff to note which employees are not complying with standards

2.1.4.4. Clinical Documentation - Provider

In addition to providing the feature/functionality identified in the Multi-Disciplinary Clinical Documentation, there are some unique charting requirements for the Psychiatric, Psychology, and

Medical Office staff and other 'LIPs' (Licensed Independent Practitioners, such as Nurse Practitioners)

2.1.4.4.1. General Requirements

- 2.1.4.4.1.1. Ability to perform medical spell checker
- 2.1.4.4.1.2. Ability to provide automated production of large blocks of text (user defined) (This feature eliminates repetitive paperwork)
- 2.1.4.4.1.3. User-specific templates of text with the ability to insert key data elements as indicated
- 2.1.4.4.1.4. Provide flexible documentation formats capable of allowing both structured and non-structured data in the following formats:
 - 2.1.4.4.1.4.1.1. MDAs - Multi-Disciplinary Assessment at 24 Hr
 - 2.1.4.4.1.4.1.2. Admission Database Documentation at 72 Hr
 - 2.1.4.4.1.4.1.3. History and physicals
 - 2.1.4.4.1.4.1.4. Discharge Release Order Documentation
 - 2.1.4.4.1.4.1.5. Assessment Risk for Violence Forms
 - 2.1.4.4.1.4.1.6. Assessment Risk for Suicide Forms
 - 2.1.4.4.1.4.1.7. Prescriptions
 - 2.1.4.4.1.4.1.8. Patient handouts
 - 2.1.4.4.1.4.1.9. Letters
- 2.1.4.4.1.5. Ability for the encounter-progress note to indicate duration of encounter
- 2.1.4.4.1.6. Ability for the encounter-progress note to indicate follow-up plans
- 2.1.4.4.1.7. Ability for the encounter-progress note be problem-oriented:
 - 2.1.4.4.1.7.1. Linked to diagnosis
 - 2.1.4.4.1.7.2. Linked to problem number/statement
 - 2.1.4.4.1.7.3. Electronic Signature
- 2.1.4.4.1.8. Ability for physician sign-off after review
- 2.1.4.4.1.9. Ability to facilitate/ensure timely review

2.2. Admission – Discharge – Transfer on-line functions:

- 2.2.1. Support pre-admission capability that can automatically default to the admission function
- 2.2.2. Ability to search for patient by name, social security, medical record #, date of birth, address, phone #, AKA/alias
- 2.2.3. Ability to prompt for all codes (insurance company, financial class, etc.)
- 2.2.4. Ability to prompt and accept valid zip codes
- 2.2.5. Ability to query on patient demographics and group by insurer, financial class, zip code, age, gender, primary physician, and other elements as needed
- 2.2.6. Ability to add Medicare (and all parts of Medicare, i.e. Part D) as secondary payer questionnaire stored/printed/available for view
- 2.2.7. Ability to populate fields w/information by patient type (in patient, out patient-Report of Contact (ROC), etc) financial class, insurance code, etc.
- 2.2.8. Ability to support placement of patients into user-defined programs (OUT PATIENT Services) and units (in patient)
- 2.2.9. Ability to maintain database of patient demographic, guarantor, and insurance information for retrieval during registration
- 2.2.10. Ability to maintain history of patient's current and previous insurance records
- 2.2.11. Ability to copy data from preceding registration
- 2.2.12. Ability to support pop-up windows/picklists of valid prompts/ responses for ease of data collection
- 2.2.13. Ability for Health Care Organization-defined registration screens
- 2.2.14. Ability to provide quick registration function for the Admissions Office
- 2.2.15. Integrated with the Medical Records for such information as previous visits, diagnoses/procedures and Patient Identification number
- 2.2.16. Ability to change registration for patients who leave without receiving treatment so that the visit is terminated
- 2.2.17. Ability to provide detailed charge inquiry to review the accumulated charges for an active patient account
- 2.2.18. Ability to provide integration with ADT/Registration system to create registration utilizing data maintained in patient history file without re-entering data
- 2.2.19. Ability to support registration for 'Jane/John Doe' patients for ROC Assessments, as well as 'Jane/John Doe' admission to NEFSH
- 2.2.20. Ability to provide patient history file inquiry feature to determine if patient is on file via a name or number inquiry, in combination with birth-date and/or maiden-name:

- 2.2.20.1. Name changes--cross references
- 2.2.20.2. Exact, not exact, soundex name
- 2.2.21. Ability to provide easy switching of patient type from out patient-ROC to Inpatient or vice-versa
- 2.2.22. Ability to produce customized census reports on a scheduled and demand basis utilizing any elements of the registration form including diagnosis that Health Care Organization may select
- 2.2.23. Numerous formats (i.e. for daily report, physician rounds, dietary/privilege lists, etc.)
- 2.2.24. Ability to provide a daily report, with monthly and year-to-date summaries
- 2.2.25. Ability to produce labels on demand
- 2.2.26. Ability to support hospital billing of psychiatric and psychological physician services, associated with APC, DRG, CPT
- 2.2.27. Ability for admission's personnel to change patient location
- 2.2.28. Ability to maintain information for all patients on leave while still holding the bed for the patient. Leave data should automatically transfer to billing system
- 2.2.29. Ability to support search for patient records by:
 - 2.2.29.1. Account number/encounter-invoice number
 - 2.2.29.2. Name
 - 2.2.29.3. Partial patient name
 - 2.2.29.4. SSN
 - 2.2.29.5. Chart Number/Medical Record Number
 - 2.2.29.6. AKA/Alias
- 2.2.30. Ability to support automatic duplicate patient record checking using name, birthday, SSN, patient ID #, etc.
- 2.2.31. Ability to link multiple accounts, such as to one guarantor or for family billing
- 2.2.32. Ability for group or employer accounts (i.e. for employee physicals) for consolidated statements
- 2.2.33. Maintain patient data including name, date of birth, sex, address, home phone number, work phone number, referral source, guarantor/subscriber, relationship to guarantor, guardian/next of kin, signature on file indicator, provider, medical profile, diagnosis, comments, user defined data field
- 2.2.34. Maintain patient employment data including guarantor employer name, guarantor employer address and phone information, spouse employer name, spouse employer address and phone information
- 2.2.35. Maintain primary insurance data including company name, group number, group name, policy type, insured's member ID, SSN, insured's birthday, relationship to insured (i.e. self, spouse), coverage start date and coverage expiration date
- 2.2.36. Ability to classify insurance company plans into financial classes for tracking and reporting purposes
- 2.2.37. Ability for patient to have multiple financial classes based on billing scenario
- 2.2.38. Maintain at least six insurance records per patient
- 2.2.39. Support entry and storage of medical record data
- 2.2.40. Support user-defined patient information templates consisting of at least 50 user-defined fields
- 2.2.41. Allow user to define edit controls for fields (i.e. dates, alphanumeric, numeric)
- 2.2.42. Allow user to define tables of valid entries for these fields
- 2.2.43. Allow user to define codes, default entries for these fields
- 2.2.44. Allow user to specify which fields must be validated by a master file table (i.e. ICD-9CM codes, DSM IV codes, etc.)
- 2.2.45. Allow user to define help messages for the fields
- 2.2.46. Maintain audit trail (i.e. user ID, date/time) for any changes made to patient record
- 2.2.47. Support free-text message
- 2.2.48. Print patient account list with:
 - 2.2.48.1. Patient name
 - 2.2.48.2. Account status
 - 2.2.48.3. Insurance
 - 2.2.48.4. Employer
- 2.2.49. Account aging - Days in accounts receivable
- 2.2.50. Allow sorting of account lists by:
 - 2.2.50.1. Account number
 - 2.2.50.2. Medical record #
 - 2.2.50.3. Patient name
 - 2.2.50.4. Parent name
 - 2.2.50.5. Employer
 - 2.2.50.6. Insurance company
- 2.2.51. Print patient birthday list
- 2.2.52. Print new patient list

2.3. Coding

- 2.3.1. Ability to code both inpatient and outpatient record. Supports ICD-9-CM, DSM IV, DRG's with yearly updates
- 2.3.2. Utilizes imbedded Encoder software
- 2.3.3. Inherent in the system
- 2.3.4. Ability to 'hot key' between the MR Coding screen and the Encoder
- 2.3.5. Utilizes AXIS Diagnostic Codes w/DSM IV Codes, ICD-9-CM, DSM IV Crosswalk
- 2.3.6. Ability to offer/support electronic codes, matched to text data (existing and future):
 - 2.3.6.1. ICD-9-CM
 - 2.3.6.2. CPT
 - 2.3.6.3. ICD-10
 - 2.3.6.4. DSM IV
 - 2.3.6.5. DRG
 - 2.3.6.6. Future ability to apply codes to findings, medications, outcomes
 - 2.3.6.7. Ability to apply specific data to codes
- 2.3.7. Available user definable thesaurus (i.e., cold = URI = upper respiratory infection)
- 2.3.8. Ability to prompt users to complete/ increase documentation based on E and M Coding
- 2.3.9. Informs user that if 'xxxxx' is added, the resulting code for this visit would be '99214'
- 2.3.10. Corrects user if they have under-documented for the code entered (i.e. you've coded '99213', but your documentation only substantiates a '99212' code)
- 2.3.11. Ability to integrate controlled data dictionary or standard nomenclature of clinical terms
- 2.3.12. Provide for time duration assist in coding functions
- 2.3.13. Ability to record who does the coding and charting
- 2.3.14. Ability to prompt users to complete unfinished documents
- 2.3.15. Ability for the encounter-progress note to indicate visit type (i.e., Tele-Psych vs. Pioneer Gero-Psych unit, etc.)
- 2.3.16. Ability for the encounter-progress note to indicate facility type, location, and site of encounter
- 2.3.17. Ability for the encounter-progress note to indicate procedures performed and planned
- 2.3.18. Ability for the encounter-progress note to become a charging mechanism

2.4. Encounter Management

2.4.1. General Requirements

- 2.4.1.1. Ability for the Master Patient Index/History to retain data regarding all HCO entities (i.e., inpatient, outpatient, etc.) including the following information, detailed and summary screen format:
 - 2.4.1.1.1. Encounter management number
 - 2.4.1.1.2. Additional user-defined number
 - 2.4.1.1.3. Patient name
 - 2.4.1.1.4. Alias (multiple fields)
 - 2.4.1.1.5. Maiden name
 - 2.4.1.1.6. Medical record number per entity visited
 - 2.4.1.1.7. Financial account number per entity visited
 - 2.4.1.1.8. Social security number (multiple fields)
 - 2.4.1.1.9. Complete address 1
 - 2.4.1.1.10. Complete address 2
 - 2.4.1.1.11. Complete address 3
 - 2.4.1.1.12. Date of birth
 - 2.4.1.1.13. Separate guardian, conservators and case manager name with contact information
 - 2.4.1.1.14. Unlimited allergies
 - 2.4.1.1.15. Unlimited dates of previous admissions/discharges.
 - 2.4.1.1.16. Physicians' names and identification numbers (National Provider Number and UPIN number)
 - 2.4.1.1.17. Medical insurance information (primary and secondary payors)
 - 2.4.1.1.18. Insurance subscribers information, including subscriber's date of birth (HIPAA requirement)
 - 2.4.1.1.19. Multiple guarantors (note any limitation)
 - 2.4.1.1.20. Expiration indicator
 - 2.4.1.1.21. Occupation/place of employment w/contact information
 - 2.4.1.1.22. Infections
 - 2.4.1.1.23. Immunizations status (type - date)
 - 2.4.1.1.24. Race

- 2.4.1.1.25. Marital status
- 2.4.1.1.26. Admit/visit time
- 2.4.1.1.27. Patient type
- 2.4.1.1.28. Financial class
- 2.4.1.1.29. Hospital service
- 2.4.1.1.30. Sex
- 2.4.1.1.31. Religion
- 2.4.1.1.32. Emergency contact
- 2.4.1.1.33. Advanced directives (User defined)
- 2.4.1.1.34. Diabetic
- 2.4.1.1.35. User defined fields (indicate maximum number)
- 2.4.1.1.36. Diagnosis of previous admission (or link to prior record)
- 2.4.1.1.37. Patient preferred name
- 2.4.1.1.38. Notice of privacy practices
- 2.4.1.1.39. Restriction on use and disclosure of information (both code and comment fields)
- 2.4.1.1.40. Confidential communication (both code and comment fields) notice of risk factors and significant events (potential for violence) may link to patient problem list for more detail.
- 2.4.1.1.41. Patient number in other entities
- 2.4.1.1.42. Language spoken
- 2.4.1.1.43. Home telephone
- 2.4.1.1.44. Cellular telephone
- 2.4.1.1.45. Work telephone
- 2.4.1.1.46. Pager
- 2.4.1.1.47. E-mail address
- 2.4.1.1.48. Relatives (allow multiple including ability to flag the one w/nearest location)
- 2.4.1.1.49. Relatives' contact information w/contact phone and address for each (allow multiple including ability to flag the one w/nearest location)
- 2.4.1.1.50. Mother's maiden name
- 2.4.1.1.51. Father's name
- 2.4.1.2. Ability to sort information in a variety of ways (i.e. chronologic, reverse chronological order, etc.)
- 2.4.1.3. Ability to sort information in database in different ways.
- 2.4.1.4. Ability to supply a single, universal identifying number for each patient seen at any entity in the healthcare enterprise (i.e. NEFSH, CBHC)
- 2.4.1.5. Ability to add new patients to the Master Patient Index via registration and scheduling processes.
- 2.4.1.6. Support suspected duplicate Master Patient Index record reporting with tools to merge and delete records as appropriate
- 2.4.1.7. Provide merge capability for two records for same person (i.e. duplicates, erroneous registration)
- 2.4.1.8. Provide capability to un-merge records incorrectly linked
- 2.4.1.9. Provide audit trails of all the above actions
- 2.4.1.10. Ability to store individual encounter information at the Encounter Management level
- 2.4.1.11. Ability for the system to provide on-line inquiry and retrieval capabilities for the Master Patient Index /History for an unlimited number of years
- 2.4.1.12. Ability for the system to automatically update the Master Patient Index /History based upon entry/update of data during registration functions (online-real time)
- 2.4.1.13. Provides unlimited storage of episodic/ encounter information
- 2.4.1.14. Registration functions have ability to automatically access Master Patient Index / History for user verification of previously assigned medical record numbers
- 2.4.1.15. Ability for the system to automatically assign Master Patient Index numbers and also allow manual assignment of Master Patient Index numbers
- 2.4.1.16. Ability for the system to report indicating patients with multiple medical record numbers
- 2.4.1.17. Ability for the system to produce a user defined report of unused medical record numbers (i.e., entering current number and scanning backward)
- 2.4.1.18. Ability to write ad-hoc reports on all database fields with a standard report writer application
- 2.4.1.19. Ability to search on the following data fields or a combination thereof:
 - 2.4.1.19.1. Patient name (alphabetically with a minimum of one letter entered)
 - 2.4.1.19.2. Patient name (phonetically)
 - 2.4.1.19.3. Patient Identification number
 - 2.4.1.19.4. Patient birth date
 - 2.4.1.19.5. Social security number

- 2.4.1.19.6. Patient account number
- 2.4.1.19.7. Sex
- 2.4.1.19.8. Discharge date
- 2.4.1.19.9. Alternate name or alias
- 2.4.1.20. Ability to cross-reference of the following:
 - 2.4.1.20.1. Patient name(s)
 - 2.4.1.20.2. Patient Identification number(s)
 - 2.4.1.20.3. Social security number
 - 2.4.1.20.4. Alias Name
 - 2.4.1.20.5. Maiden name
 - 2.4.1.20.6. Date of birth
 - 2.4.1.20.7. Patient account number
- 2.4.1.21. Ability to make user defined changes to the Master Patient Index /History globally to all associated visit records
- 2.4.1.22. Ability to make on-line update by Medical Records of Master Patient Index /History information
- 2.4.1.23. Ability to allow authorized personnel to merge two medical record numbers while the patient is in an admitted status
- 2.4.1.24. Ability to provide a cross-reference when two medical record numbers are merged (online and report)
- 2.4.1.25. Ability to allow authorized personnel to transfer an account (one visit) from one medical record number to another
- 2.4.1.26. Ability to allow authorized personnel to "unmerge" two erroneously merged medical record numbers
- 2.4.1.27. Ability to provide report of canceled admissions/ pre-admissions, registrations/pre-registrations
- 2.4.1.28. Ability to produce a report of new medical record numbers assigned
- 2.4.1.29. Ability to add/update individual episodes/encounters directly to the Master Patient Index /History file, as defined by NEFSH
- 2.4.1.30. Ability to flag expired patients in Master Patient Index - creates an expired patient registry
- 2.4.1.31. Ability to list repeating outpatients as only one line item per episode
- 2.4.1.32. Ability to provide on-line warning/alerts prior to assignment of potential duplicate
- 2.4.1.33. Ability to provide sufficient available identification as to accurately enable the identification of a prior registration thereby eliminating duplicate Master Patient Index number assignment including:
 - 2.4.1.33.1. Master Patient Index
 - 2.4.1.33.2. Patient name
 - 2.4.1.33.3. Alternate name(s)
 - 2.4.1.33.4. Date of birth
 - 2.4.1.33.5. Sex
 - 2.4.1.33.6. Last activity date and location
 - 2.4.1.33.7. Patient address(es)
 - 2.4.1.33.8. Name suffix (title)
 - 2.4.1.33.9. Social security number
 - 2.4.1.33.10. Mother's maiden name
 - 2.4.1.33.11. Marital status
 - 2.4.1.33.12. Race
- 2.4.1.34. Ability to prompt registrars or other users to proceed through all mandatory steps before assigning a Patient Identification number
- 2.4.1.35. Ability to generate the next new Encounter Management number if no previous registration occurred and no previous number exists for the patient and any entity within NEFSH
- 2.4.1.36. Ability to produce Encounter Management Report: Missing Information Report - a listing of all patient in the MPI which have specified patient identification and "tie-breaking" information missing
- 2.4.1.37. Ability to produce Encounter Management Report: suspected duplicate numbers - daily lists identifying information concerning two patient identification MPI numbers which may represent the same patient

2.4.2. Encounter Management

- 2.4.2.1. Ability to pre-register a patient for clinics or hospitals

- 2.4.2.2. Ability to register a patient with collection and on-line editing of demographic and financial information
- 2.4.2.3. Support health plan eligibility verification (Medicare, etc.)
- 2.4.2.4. Ability to interface with the MPI System
- 2.4.2.5. Provide pre-registration feature to create a patient record with all the required information to admit a patient to a hospital
- 2.4.2.6. Ability to query pre-registration data in medical records department from any location
- 2.4.2.7. Provide attending, resident, consulting and referring physician information
- 2.4.2.8. Provide patient history file inquiry feature to determine if patient is on file via a name or number inquiry, in combination with birth date and/or maiden-name:
 - 2.4.2.8.1. Name changes--cross references
 - 2.4.2.8.2. Patient Identification number
 - 2.4.2.8.3. Social security number
- 2.4.2.9. Ability to provide a daily report, with monthly and year-to-date summary totals, which reports registrations as scheduled, or urgent
- 2.4.2.10. Ability to pre-register patient information from multiple locations
- 2.4.2.11. Ability to input patient demographic and financial information, on-line, into the system
- 2.4.2.12. Provide "quick" emergency registration
- 2.4.2.13. Provide patient history and update feature to determine if patient was previously seen within a facility, access by name, number, and other demographics
- 2.4.2.14. Ability to provide on-line inquiry into the MPI

3. Business Office

3.1. General Requirements

- 3.1.1. Reports of receivables, aging and payment summaries should be available
- 3.1.2. Generate statements, transaction details and other reports for the banking and billing modules
- 3.1.3. The ability to create reports from anything billed or received in any way, to show billed and paid by third party, patient, encounter, by physician, or other personnel, date, etc.

3.2. Patient History/Accounts Receivable:

- 3.2.1. Patient history capabilities:
- 3.2.2. Charge, payment and adjustment history stored and displayed by line item
- 3.2.3. Payments and adjustments identified to charge line
- 3.2.4. Ability to purge based on date of service, paid items by date
- 3.2.5. Ability to store online 36 months paid accounts, unpaid accounts stored until paid
- 3.2.6. Service provider stored for each charge
- 3.2.7. Ability query on unpaid charge lines by provider
- 3.2.8. Ability query on unpaid charge lines by insurer
- 3.2.9. Ability query on unpaid charge lines by financial class
- 3.2.10. Ability to print ledgers of account activity on demand
- 3.2.11. Ability to print ledger of account activity within date parameters
- 3.2.12. Ability to query on procedure codes/diagnosis from charge history
- 3.2.13. Ability to age to 120 days
- 3.2.14. Provide automated on-line Collection Functions (i.e. worklists, tickler files) to assist in scheduling follow-up collection actions, and collection activity documentation
- 3.2.15. Ability to process and print refund checks for patients
- 3.2.16. Ability to assess and report on finance charges

3.3. Patient Billing/Procedure Entry

- 3.3.1. Cycle statements
- 3.3.2. Open item statements
- 3.3.3. Selection of patient accounts for statements based on financial class
- 3.3.4. Messaging on statements
- 3.3.5. Credit account reporting
- 3.3.6. Automatic adjudication by payor
- 3.3.7. Ability to post payments/adjustments to charge lines
- 3.3.8. Online fee schedule
- 3.3.9. Ability to integrate collection accounts to collection software
- 3.3.10. Ability to bill duplicate outpatient Medicare charges under the hospital provider #
- 3.3.11. Validation and lookup on CPTs/ICDs
- 3.3.12. Comments at invoice level
- 3.3.13. System stores and monitors effective insurance coverage dates

- 3.3.14. Support on-line entry and posting of procedures and charges
- 3.3.15. Support entry and processing of multiple procedures per diagnosis and multiple diagnoses per procedures
- 3.3.16. Ability to enter alpha-numeric codes in transaction entry
- 3.3.17. Support time and unit billing
- 3.3.18. Support automatic entry of appointment scheduling information into charge entry
- 3.3.19. Ability to look-up information when entering charges without having to exit the charge screen:
 - 3.3.19.1. Patient information
 - 3.3.19.2. Doctor numbers
 - 3.3.19.3. Insurance companies
 - 3.3.19.4. Procedure codes
 - 3.3.19.5. Diagnosis codes
- 3.3.20. Automatically calculate and display the patient responsibility from within the procedure entry screen
- 3.3.21. Ability to suspend processing of hospital-related charges until the patient is released from the hospital.
- 3.3.22. Ability to enter multiple providers on an encounter (i.e. different provider for each service code.)
- 3.3.23. Ability to bill for mid-level services and tracking
- 3.3.24. Ability to print transactions register by:
 - 3.3.24.1. Account range
 - 3.3.24.2. Date range
 - 3.3.24.3. Batch numbers
 - 3.3.24.4. Transaction type
- 3.3.25. Ability to duplicate fields during charge entry
- 3.3.26. Ability to combine multiple procedures using a single service code (i.e. group code) by % or dollars for each individual code - bundle costs
- 3.3.27. Ability to maintain a user-defined 'standard' time by procedure for productivity reporting and use by the scheduling system
- 3.3.28. Ability to track non-billable services or visits (i.e. if patient is on treatment plan)
- 3.3.29. Maintain multiple fee schedules for different providers and insurance plans
- 3.3.30. Support pricing for:
 - 3.3.30.1. Standard service code
 - 3.3.30.2. Procedure
 - 3.3.30.3. Modifier
 - 3.3.30.4. Alternative fee
 - 3.3.30.5. Minimum fee
- 3.3.31. Support discount and co-payment amounts in fee schedules
- 3.3.32. Ability to set fees as a percent of standard
- 3.3.33. Ability to specify effective dates for future price changes
- 3.3.34. Ability to override fee schedules by provider, location, or both
- 3.3.35. Support automatic (i.e. batch) fee schedule updates by a user-defined percentage and by department or group
- 3.3.36. Ability to round percentage price changes to the nearest whole dollar
- 3.3.37. Support procedure code fees based on:
 - 3.3.37.1. Percent of charges
 - 3.3.37.2. Flat fee
 - 3.3.37.3. Capitation
- 3.3.38. Conversion factors x Relative Value Units (RVU)
- 3.3.39. Print Billing forms using current CMS inpatient and outpatient billing forms
- 3.3.40. Print patient insurance forms
- 3.3.41. Support editing and holding of bill generation pending completion of specific (i.e. user-defined) data elements.
- 3.3.42. Ability to rebill accounts and track status of rebilling
- 3.3.43. Maintain provider master file including:
 - 3.3.43.1. Name, ID code
 - 3.3.43.2. Address
 - 3.3.43.3. Home phone, cellular phone, pager
 - 3.3.43.4. SSN
 - 3.3.43.5. Type (i.e. physician, nurse, therapist)
 - 3.3.43.6. Tax ID and license
- 3.3.44. Maintain employer master file including:
 - 3.3.44.1. ID code

- 3.3.44.2. Employer name
- 3.3.44.3. Address
- 3.3.44.4. Phone
- 3.3.44.5. Contact
- 3.3.44.6. Insurer number
- 3.3.44.7. Type (i.e. insurance company, self insured)
- 3.3.44.8. Tax ID and license
- 3.3.45. Print patient statements including:
 - 3.3.45.1. Patient data
 - 3.3.45.2. Account aging
 - 3.3.45.3. Treatment plans
 - 3.3.45.4. Collection messages
- 3.3.46. Ability to print statements in zip code order on:
 - 3.3.46.1. Pre-printed forms
 - 3.3.46.2. Data mailers
 - 3.3.46.3. Plan paper
- 3.3.47. Ability to print statements based on:
 - 3.3.47.1. Range of accounts
 - 3.3.47.2. User-defined billing cycle
 - 3.3.47.3. Minimum billing amounts
 - 3.3.47.4. Expected insurance benefit
- 3.3.48. Ability to control message that prints in the body of the statement (i.e. insurance filed)
- 3.3.49. Print user-defined delinquency messages on statement if applicable
- 3.3.50. Ability to print on-demand using current CMS forms
- 3.3.51. Ability to change insurance carrier on an encounter / date of service for refilling
- 3.3.52. Support automatic secondary billing after payment from primary insurance carrier, range of insurance companies, range of patients or accounts, activity in a user-defined date range, support secondary billing with manual initiation
- 3.3.53. Ability to generate secondary bills for balance of charges to secondary insurance company and patient or guarantor
- 3.3.54. Ability to modify the major fields on CMS forms
- 3.3.55. Support electronic claims submission (ECS) to Medicare, Medicaid, and commercial insurance carriers
- 3.3.56. Guarantee that ECS process complies with all CMS regulations
- 3.3.57. Support pre-submission editing and holding of claims before ECS pending completions of specific user-defined data.
- 3.3.58. Support ECS connection to electronic service providers or intermediaries
- 3.3.59. Support ECS direct modem connection to large carriers
- 3.3.60. Automatically monitor transmitted claims and status (i.e. accepted or rejected)

3.4. Payment Posting

- 3.4.1. Support on-line entry and posting of payments at time of service
- 3.4.2. Provide cash receipt batch controls including batch number, batch total, number of items, etc.
- 3.4.3. Support posting of payments to individual charges, multiple charges, an encounter (i.e. all charges on a day), and multiple denial codes by line-item
- 3.4.4. Ability to post payments in proportion to charges and to oldest charges first (FIFO)
- 3.4.5. Ability to automatically compare insurance payments to benefits
- 3.4.6. Automatically calculate the approved amount, post payment, and perform write-off for Medicare payments
- 3.4.7. Support electronic remittance processing including payment posting and response via modem, magnetic media (i.e. disk), and electronic Explanation of Benefits (EOB)
- 3.4.8. Automatically verify payments with benefits in electronic remittance processing
- 3.4.9. Print electronic remittance audit report of payments, over- and under-payments, etc.
- 3.4.10. Automatically process write-off, payment allocations and responsibility transfers when electronic remittances are processed
- 3.4.11. Print a daily balance report showing total charges, payments and adjustments entered by batch

3.5. Insurance Processing /Provider Claims

- 3.5.1. Insurance claim processing:
- 3.5.2. CMS forms on demand and in batch
- 3.5.3. CMS forms electronically transmitted
- 3.5.4. CMS forms electronically remitted and posted line item to account

- 3.5.5. Automatic secondary filing
- 3.5.6. Ability to electronically transmit secondary claims w/primary payor information
- 3.5.7. Ability to select from claim ICDs to charge line
- 3.5.8. Production counts on claims filed by clerk
- 3.5.9. Aging of claims
- 3.5.10. Control reports on outstanding claims
- 3.5.11. Claim editing module
- 3.5.12. Vendor to provide most-current format for Federal and State regulation compliance for all billing forms
- 3.5.13. Process capitated service provider claims
- 3.5.14. Process fee-for-service provider claims
- 3.5.15. Automatically assign and maintain unique claim ID number for each claim
- 3.5.16. Automatically adjudicate claims based on specific parameters of benefit options, including:
 - 3.5.16.1. Coverage
 - 3.5.16.2. Co-payments
 - 3.5.16.3. Annual or lifetime benefit limits
- 3.5.17. Ability to store generic denial codes
- 3.5.18. Support different fee schedules for different providers
- 3.5.19. Check for and prevent processing of duplicate claim (i.e. if services were provided with overlapping service dates)
- 3.5.20. Ability to automatically suspend claims if:
 - 3.5.20.1. Member eligibility and termination dates are expired
 - 3.5.20.2. Authorized amount of units have been exceeded
 - 3.5.20.3. Procedures are not covered services
 - 3.5.20.4. The authorization is expired or not on file
 - 3.5.20.5. Claim date is not within provider contract beginning and ending dates
- 3.5.21. Automatically check for potential COB (Coordination of Benefits) and hold claim for review
- 3.5.22. Support claims and capitation check printing and processing functions
- 3.5.23. Ability to send Healthcare Claims in a HIPAA compliant format directly to the payor

3.6. Eligibility/Authorization

- 3.6.1. Maintain master file of health plans and payors including specific benefit options used in the adjudication and payment of provider claims
- 3.6.2. Maintain specific coverage for each service at the procedure code level
- 3.6.3. Support a variety of benefit structures (i.e. variable co-payments) based on combinations of parameters:
 - 3.6.3.1. Diagnosis
 - 3.6.3.2. Place of service
 - 3.6.3.3. Age
 - 3.6.3.4. Sex
 - 3.6.3.5. YTD benefits
 - 3.6.3.6. Provider and requesting provider
- 3.6.4. Ability to load eligibility and coverage data from insurance providers via magnetic media (i.e. tape, floppy disk) and via electronic transfer
- 3.6.5. Support EDI (Electronic Data Interchange) interface for inquiry into patient's pre-authorization status and eligibility from insurance provider's system or third party network
- 3.6.6. Ability to enter and edit eligibility and coverage data manually
- 3.6.7. Ability to identify adds, deletes, and changes after new eligibility data is loaded
- 3.6.8. Provide on-line inquiry into member data including:
 - 3.6.8.1. Eligibility status
 - 3.6.8.2. Plan assignment
 - 3.6.8.3. Benefits and historical coverage records
- 3.6.9. Allow unlimited number of changes to member info used in the claim adjudication and capitation payment processes
- 3.6.10. Store total history of changes to member info used in claim adjudication and capitation payment processes
- 3.6.11. Store history of member eligibility changes including:
 - 3.6.11.1. Selection of primary care physician
 - 3.6.11.2. Health plan changes
 - 3.6.11.3. Health plan benefit option changes
 - 3.6.11.4. termination and re-enrollment
- 3.6.12. Automatically update member's benefits used (i.e. visits, days, co-payments) to assure current data is used in claim adjudication process

- 3.6.13. Support entry of free-text comments to be associated with member eligibility and authorization records
- 3.6.14. Ability to globally change eligibility data (i.e. change primary care physicians or health plan benefit options for a selected group of members) with minimal data entry
- 3.6.15. Support entry and tracking of detailed service authorizations at the procedure code level
- 3.6.16. Support entry and tracking of high level service authorizations (i.e. total dollar value or units of service)
- 3.6.17. Ability to enter expiration dates and pricing in authorization records
- 3.6.18. Automatically assign and maintain unique ID number for each authorization
- 3.6.19. Support at least 20 lines of detailed procedure coding for each authorization
- 3.6.20. Automatically validate member eligibility and termination dates when processing authorizations
- 3.6.21. Automatically check provider contract beginning and ending dates and display warning if edit check fails
- 3.6.22. Support automatic comparison of authorized procedures with patient's covered benefits
- 3.6.23. Track member yearly and lifetime benefit limits by procedure and warn user when utilized benefits approach or exceed limits
- 3.6.24. Provide automatic approval features that eliminate or reduce operator involvement in the adjudication of authorization and referral requests
- 3.6.25. Support user-defined automatic approval rules used in authorization processing based on combinations of:
 - 3.6.25.1. Diagnosis
 - 3.6.25.2. Place of service
 - 3.6.25.3. Age
 - 3.6.25.4. Sex
 - 3.6.25.5. YTD benefits
 - 3.6.25.6. Requesting provider
- 3.6.26. Print user-defined:
 - 3.6.26.1. Authorization letters
 - 3.6.26.2. Denial letters

4. Clinical

4.1. Computerized Provider Order Entry

4.1.1. General Requirements

- 4.1.1.1. Ability to build upon the order transcription capability of the Order Entry/Results Reporting module, incorporating expert system databases and other ease of use features to provide provider order entry functionality
- 4.1.1.2. Provide core set of rules (with ability to modify) to use as basis for developing rules for order entry decision support
- 4.1.1.3. Ability to include secondary or "corollary" orders in the rules. (i.e., recommending an order for drug levels when the user orders a medication for which the patient's blood level should be monitored to titrate dosing)
- 4.1.1.4. Ability to evaluate the nine categories of erroneous medication orders including:
 - 4.1.1.4.1. Therapeutic duplication
 - 4.1.1.4.2. Single and cumulative dose limits
 - 4.1.1.4.3. Allergies and cross allergies
 - 4.1.1.4.4. Contraindicated route of administration
 - 4.1.1.4.5. Drug-drug and drug-food interactions
 - 4.1.1.4.6. Contraindication / dose limits based on patient diagnosis
 - 4.1.1.4.7. Contraindication / dose limits based on patient age and weight
 - 4.1.1.4.8. Contraindication / dose limits based on laboratory studies
 - 4.1.1.4.9. Contraindication / dose limits based on radiology studies
- 4.1.1.5. Provide for a comprehensive drug-alert notice:
 - 4.1.1.5.1. Patient identification and demographics (i.e., patient identification number, patient name, age, height, weight, etc.)
 - 4.1.1.5.2. Medication order information (i.e., order number, medication name, amount, route, frequency, and medication/order information for both contraindicated medication orders)
 - 4.1.1.5.3. New recommended medication dose
 - 4.1.1.5.4. Relevant lab results
 - 4.1.1.5.5. Alert generating application
- 4.1.1.6. Ability to provide various levels of decision support:
 - 4.1.1.6.1. Guided choices that include templates with, for example, defaults and allowable values, and standard order sets
 - 4.1.1.6.2. Messages that provide critiques during the ordering process and advice on alternatives, thus clarifying the rationale behind the recommendation (i.e., providing appropriate dose based on weight and renal status as the default value)

- 4.1.1.7. Ability to order sets and guided choices tailored for the individual patient's diagnosis and condition but also including possible variations and conditions when appropriate
- 4.1.1.8. Provide seamless access between ordering and inquiry functions, as well as to viewing of results
- 4.1.1.9. Provide link between CPOE and documentation modules
- 4.1.1.10. Ability to interface with HCO clinical data repository
- 4.1.1.11. Ability to display basic patient demographic information and other pertinent information: 'Header information' at the top of the screen, at all times for order entry and resulting functions.
- 4.1.1.12. Ability to have patient header information display (at the top-of-screen) with pertinent patient information (such as patient ID and location, allergies, admission diagnosis, key clinical indicators (i.e. diabetic), special instructions (i.e. DNR), and other user-defined fields.
- 4.1.1.13. Ability to have header information specific to each unit
- 4.1.1.14. Supports order placement for:
 - 4.1.1.14.1. Inpatients
 - 4.1.1.14.2. Observation patients on the nursing unit
 - 4.1.1.14.3. Outpatients - in multiple care areas: Report Of Contact, Tele-Psych, etc.
- 4.1.1.15. Ability for the user access patient clinical and demographic information by the following methods (or in any combination):
 - 4.1.1.15.1. Patient location (i.e. nursing unit census list)
 - 4.1.1.15.2. Patient name (alphabetically with a minimum of one letter entry)
 - 4.1.1.15.3. Patient name (phonetically)
 - 4.1.1.15.4. Patient Identification number
 - 4.1.1.15.5. Patient account number
- 4.1.1.16. Ability to define/default patient access methods may be by user type (i.e. physician and nursing uses, unit, census list, or name/ account number, etc.)
- 4.1.1.17. Provide multiple means of data entry to support user needs including
 - 4.1.1.17.1. Picklist selection
 - 4.1.1.17.2. Quick keys
- 4.1.1.18. Ability to record the date/time that an activity/intervention occurred through automatic date/time stamp at the point of entry.
- 4.1.1.19. Ability to manually override date/time stamp to allow for the retroactive charting of activities/interventions with user-defined 'reasonableness' restrictions on how far back date/time can be entered
- 4.1.1.20. Provide rapid access and retrieval - less than two second response time or better
- 4.1.1.21. Ability to develop order set profiles by utilizing "same as" feature within system set-up
- 4.1.1.22. Ability to record comments and/or documentation relating to a specific patient
- 4.1.1.23. Ability to display basic patient demographic information and other pertinent information at all times for order entry and resulting functions
- 4.1.1.24. Ability to provide statistics and management reports regarding services ordered and provided within service departments
- 4.1.1.25. Ability to identify services requested which were not charged
- 4.1.1.26. Ability to maintain relative value workload statistics for services provided by the departments, as defined by the users
- 4.1.1.27. Provide for control mechanism to ensure orders are accurately communicated to the performing department, including controls which demand input
- 4.1.1.28. Ability to report outstanding orders which were cancelled
- 4.1.1.29. Ability to cancel pending orders after discharge
- 4.1.1.30. Ability to bill for professional services. Preference is to have this as a template/checklist to automatically calculate professional billing code based on what is marked. (Also see Business Office section)
- 4.1.1.31. Ability to analyze statistical information based on age, group, and diagnoses
- 4.1.1.32. Ability to provide departmental control logs for various professional service departments (including patient "preps") such as:
 - 4.1.1.32.1. Psychiatry consultations
 - 4.1.1.32.2. Medical consultations - sick board
 - 4.1.1.32.3. Psychology consultations
 - 4.1.1.32.4. Social work (i.e. rehabilitative services, dietary, etc.)
- 4.1.1.33. Ability to maintain all order transactions in detail for user-defined timeframe. These transactions should include:
 - 4.1.1.33.1. Services requested
 - 4.1.1.33.2. Results reported/tests acknowledged
 - 4.1.1.33.3. Order modifications

- 4.1.1.33.4. Current medications
- 4.1.1.33.5. Patient transfers and other movement activities
- 4.1.1.33.6. Diet changes
- 4.1.1.33.7. Drug and food interaction
- 4.1.1.34. Ability to print HCO-defined patient specific labels at requested locations
- 4.1.1.35. Provide report writer / report generator capability that can report or extract all appropriate data elements from the application ad hoc for creation of reports per the HCO's, specific department's specifications
- 4.1.1.36. Ability to access documentation in chronological or reverse chronological order as determined by the user
- 4.1.1.37. Ability to search for record by specific date
- 4.1.1.38. Ability to search by ICD9 Code or other standard code
- 4.1.1.39. Ability to access data for viewing (results, previously charted info) from remote sites
- 4.1.1.40. Ability to access data\input orders, etc. from remote sites
- 4.1.1.41. Ability to access data\input nurses' notes, etc. from remote sites
- 4.1.1.42. Ability to support care delivery and documentation for:
 - 4.1.1.42.1. Inpatients
 - 4.1.1.42.2. Observation patients on the unit
 - 4.1.1.42.3. Outpatients in multiple care areas
- 4.1.1.43. Ability to define/default patient access methods by user type (i.e. nursing uses nursing unit census list, clinical departments choose by account number, etc.)
- 4.1.1.44. Ability for the user to access patient clinical and demographic information by the following methods (or in any combination):
 - 4.1.1.44.1. Patient location (i.e. nursing unit census list)
 - 4.1.1.44.2. Patient name (alphabetically with a minimum of one letter entry)
 - 4.1.1.44.3. Patient name (phonetically)
 - 4.1.1.44.4. Patient Identification number
- 4.1.1.45. Ability to have patient header information display (at the top-of-screen) with pertinent patient information (such as patient ID and location, allergies, admission diagnosis, key clinical indicators (i.e. diabetic), special instructions, and other user-defined fields.
- 4.1.1.46. Ability to have header information specific to each unit
- 4.1.1.47. Ability to record the date/time that an activity intervention occurred through automatic date/time stamp at the point of entry
- 4.1.1.48. Ability to manually override date/time stamp to allow for the retroactive charting of activities/interventions with user-defined 'reasonableness' restrictions on how far back date/time can be entered
- 4.1.1.49. Ability to filter/audit pick list utilization in maintenance/set-up, so that low-use entries can be eliminated from user-choices
- 4.1.1.50. Ability to support multiple means of data entry based on user needs including picklist selection, 'quick keys', and entering data (allowing free text if not in list), etc.

4.1.2. Order Placement

- 4.1.2.1. Provide for control mechanism to ensure that orders placed by physicians to ancillary departments are immediately communicated to the unit, so that the responsible nurse is aware of change in patient status.
- 4.1.2.2. Provide standard department-specific data prompts and screen layouts with edits for data entry (i.e. lab vs. radiology vs. dietary formats) with appropriate fields
- 4.1.2.3. Ability for user-defined modification of these standards
- 4.1.2.4. Ability to provide for HCO-defined order modifiers (i.e., frequency, duration, volume, status, priority, date and time of order, date and time of test, date and time of surgery, transportation, precautions, infection, reason for test) by department, nursing station and out patient clinic
- 4.1.2.5. Ability to create clinical/patient profile record. To allow capture and maintenance of relevant repetitive clinical patient data (HCO and/or nursing specific defined) such as age, sex, weight, diagnosis, allergies, isolation, type of isolation, transport need, relevant conditions (i.e. blind/deaf), and pregnancy for appropriate sex. Ability to capture in single screen (s), and display as applicable on ordering requisition/screen per department/test. (i.e. 'transport' info needed for radiology, lab and pharmacy)
- 4.1.2.6. Ability to remind user if clinical/patient profile information is incomplete and prompt directly to indicated field
- 4.1.2.7. Provide for security capabilities which ensure that only those authorized to access patient information are able to access it throughout the organization

- 4.1.2.8. Ability to default/pre-fill the 'Ordering Doctor' field with the name of the physician who is placing the order
- 4.1.2.9. If someone *other* than a physician is entering an order, ability to have the 'Ordering Doctor' field default to the patient's attending or admitting physician
- 4.1.2.10. Allow HCO to flag what the default should be (attending or admitting physician) per institution and per nurse station
- 4.1.2.11. Ability to modify the defaulting ordering physician name when:
 - 4.1.2.11.1. Initially entering order
 - 4.1.2.11.2. Prior to completing order placement function
 - 4.1.2.11.3. Ability to allow verbal or phone orders entered by nursing personnel
- 4.1.2.12. Prompt the physician the next time he/she signs on to the system to 'co-sign' the order
- 4.1.2.13. Provide for/allow co-signing of the order by another member of the ordering doctor's physician's group
- 4.1.2.14. Allow for co-signing of orders by more senior physicians when necessary (i.e. Medical student entries must be co-signed by Attending Psychiatrist)
- 4.1.2.15. Ability to display multiple descriptions for a single item during the order entry process to facilitate order identification and entry
- 4.1.2.16. Ability to utilize mnemonics to facilitate order identification and entry
- 4.1.2.17. Ability to accommodate order "add ons", changes, cancellations and provide immediate notification to the area originating the order, with appropriate documentation
- 4.1.2.18. Ability to allow for multiple physician and nurse identifiers to be attached to all service orders
- 4.1.2.19. Ability to separate timed orders from others, and print in the ancillary department when necessary/scheduled
- 4.1.2.20. Ability to review previously requested active orders
- 4.1.2.21. Provide for professional service ordering (such as social services) with requisition printing within the professional service, admitting and ancillary departments
- 4.1.2.22. Ability to flag duplicate diagnostic tests, therapies and drug orders
- 4.1.2.23. Ability to check recently ordered tests or duplicate order testing base on HCO-defined parameters (i.e., same test ordered within two hour time frame)
- 4.1.2.24. Ability to flag treatments that are contraindicated (medication ordered for known allergy, for example)
- 4.1.2.25. Ability to define precedence checking in individual order/test entries and order sets
- 4.1.2.26. Provide for exploding orders
- 4.1.2.27. Ability to print out patient instructions for corresponding orders
- 4.1.2.28. Ability to electronically sign orders
- 4.1.2.29. Ability to enter recurring orders
- 4.1.2.30. Ability to enter open-ended orders especially for dietary orders
- 4.1.2.31. Ability to differentiate between unit-collected specimens versus laboratory-collected specimens to allow routing of requisitions to the appropriate department
- 4.1.2.32. Provide support of future orders without limit to date but include a check for reasonable date profile
- 4.1.2.33. Ability to support future order limit flexibility by dept. (i.e., lab is 2 hours, x-ray is 24 hours)
- 4.1.2.34. Ability to "trigger" patient care activities from procedures/services ordered (link with interdisciplinary care plans/clinical paths)
- 4.1.2.35. Ability to profile certain data elements identified as critical for compliance with HCO policies (i.e., medical necessity, allergies, date of birth) as required fields in system set-up
- 4.1.2.36. Ability to prompt on-line user to enter all required data with a 'hard stop', insuring completion before user can proceed and exit from the screen
- 4.1.2.37. Ability to display scheduling conflicts when an order is entered to identify:
 - 4.1.2.37.1. Which order should take precedence
 - 4.1.2.37.2. Which tests are ordered at the same time
 - 4.1.2.37.3. Which departments are over-booked
 - 4.1.2.37.4. When the ancillary department will perform the test
 - 4.1.2.37.5. To correlate appropriateness of exam order to clinical information entered
- 4.1.2.38. Ability to have HCO-defined or user-defined order sets:
 - 4.1.2.38.1.1. Physician
 - 4.1.2.38.1.2. Diagnosis or patient problem
 - 4.1.2.38.1.3. Procedure/charge description
 - 4.1.2.38.1.4. Other
- 4.1.2.39. Allow these defined order sets to include orders from:
 - 4.1.2.39.1. Individual departments
 - 4.1.2.39.2. Across multiple departments

- 4.1.2.39.3. Allow inclusion of 'nurse orders'
- 4.1.2.40. Provide flags in definition of order sets, so that they can be defined in 'to be ordered' or 'not to be ordered' default status
- 4.1.2.41. Allow user ability to delete (or not order) individual items within the order set at ordering time
- 4.1.2.42. Ability to define some order sets as 'protocols' for clinically-indicated situations (Code Blue, Shock, etc.) that will allow nursing to *restrict* modification of order set components
- 4.1.2.43. Provide for unit-specific 'common order pick lists' of both individual orders and order sets, in order to make most frequently ordered tests/services readily available
- 4.1.2.44. Ability to cancel individual occurrences of multiple orders or the entire order series as necessary
- 4.1.2.45. Ability to accommodate a "comment", "rationale" or "verbal orders" field text for requisitions using predefined fields or free-form text (i.e., combative, not to be left unattended)
- 4.1.2.46. Ability to notify appropriate areas of transportation requirements based on HCO-defined criteria
- 4.1.2.47. Ability to display order review screen/window prior to final completion of order, with multiple options for proceeding
- 4.1.2.48. Ability to define unlimited HCO-defined order priority classifications (i.e., STAT, Pre-Op, Post-Op, routine, ASAP, timed)
- 4.1.2.49. Ability to identify standard priorities
- 4.1.2.50. Ability to define unlimited order frequency classifications (i.e., BID, QID, Daily, etc.) with nursing unit variations (i.e. BID is 8a-8p, etc)
- 4.1.2.51. Ability to identify standard frequencies
- 4.1.2.52. Ability to modify diet order(s) from previous diet to allow for temporary NPO order, or multiple special diets
- 4.1.2.53. Ability to give selection criteria when NPO status is ordered. (i.e. time, date, hold)
- 4.1.2.54. Ability to display message that ordered meal cannot be generated and prompt the user for the alternate method required to order the meal and place order for future meals (i.e. late tray)
- 4.1.2.55. Ability to maintain patient history diet orders on-line for an HCO-define time period
- 4.1.2.56. Provide 'Order Modification' processing ability to allow such fields as priority, date/time of service, and ordering doctor to be changed without having to cancel and re-place the original order
- 4.1.2.57. Ability to cancel order for services and tests. Includes the following capabilities:
 - 4.1.2.57.1. Coded/picklist-driven cancel reasons provided
 - 4.1.2.57.2. Ability to add 'additional comments' via free text
 - 4.1.2.57.3. Allow unit to cancel if test/service is in the appropriate status
 - 4.1.2.57.4. Ability to send message to receiving department
 - 4.1.2.57.5. Ability to have HCO-defined parameters regarding credit for test/service that is cancelled
- 4.1.2.58. Ability to cancel orders after discharge, if the order is pending
- 4.1.2.59. Provide patient related information for personnel with a "need to know" The types of data required include:
 - 4.1.2.59.1. Patient history inquiry
 - 4.1.2.59.2. Order history
 - 4.1.2.59.3. Order verification
 - 4.1.2.59.4. Results inquiry
 - 4.1.2.59.5. Census and patient status
 - 4.1.2.59.6. Patient treatment scheduling
 - 4.1.2.59.7. Patient location
- 4.1.2.60. Ability to access order inquiry in chronological or reverse chronological order, as determined by the user
- 4.1.2.61. Ability to search for record by specific date
- 4.1.2.62. Provide for order inquiry for all services ordered for a patient:
 - 4.1.2.62.1. For a day
 - 4.1.2.62.2. For entire length of stay and/or clinic visit
 - 4.1.2.62.3. For a specific department
- 4.1.2.63. Ability to provide direct, online communication linkage to remote facilities and physician groups offices

4.1.3. Medication Prescription Ordering for Outpatients

- 4.1.3.1. Ability to allow storage of common prescriptions for quick entry
- 4.1.3.2. Ability to allow that one entry of a prescription can replace the manual tasks of entering data in the progress notes the medication list, and the prescription blank
- 4.1.3.3. Ability to allow documentation of medications proved to be effective

- 4.1.3.4. Ability to produce prescriptions that comply with specific state regulations
- 4.1.3.5. Ability to facilitate refills or repeat prescriptions
- 4.1.3.6. Ability to support drug formularies and prescribing guidelines
- 4.1.3.7. Ability to accommodate formularies
- 4.1.3.8. Alternative drug prompters
- 4.1.3.9. Ability to allow electronic storage of prescriptions for retrieval by:
 - 4.1.3.9.1. Drug name
 - 4.1.3.9.2. Coded term/dictionary selections
 - 4.1.3.9.3. Drug code number
 - 4.1.3.9.4. By amount prescribed
 - 4.1.3.9.5. Monthly
 - 4.1.3.9.6. Yearly
 - 4.1.3.9.7. Both
- 4.1.3.10. Ability to allow prescription to:
 - 4.1.3.10.1. Print locally
 - 4.1.3.10.2. Print remotely (at a retail pharmacy)
 - 4.1.3.10.3. Record patient's preferred pharmacy
 - 4.1.3.10.4. Be faxed to patient's pharmacy
 - 4.1.3.10.5. Sent via modem to patient's pharmacy
- 4.1.3.11. Ability to record:
 - 4.1.3.11.1. Drug form
 - 4.1.3.11.2. Drug strength
 - 4.1.3.11.3. Drug quantity
 - 4.1.3.11.4. Drug duration
 - 4.1.3.11.5. Drug discontinuance date
 - 4.1.3.11.6. Drug dosage instructions
 - 4.1.3.11.7. Drug refills
 - 4.1.3.11.8. Date of authorization
 - 4.1.3.11.9. Prescribing physician
 - 4.1.3.11.10. Pharmacy preference
 - 4.1.3.11.11. Link to prescribed medication to related diagnosis
- 4.1.3.12. Ability to automatically update the encounter-notes when a prescription is written
- 4.1.3.13. Ability to automatically update the medication list when a prescription is written
- 4.1.3.14. Ability to offer drug/prescribing information:
 - 4.1.3.14.1. Such as Physicians Desk Reference (Hospital Formulary, etc.)
 - 4.1.3.14.2. Drug-contraindication/active problem interactions
 - 4.1.3.14.3. Drug-lab linking to check that appropriate studies are obtained (when order diuretics, check potassium levels)
 - 4.1.3.14.4. Drug-dispense (refill) overdue
 - 4.1.3.14.5. Breakdown of trade-named combination drugs into their constituent components
 - 4.1.3.14.6. Ability to list all drugs within a therapeutic class
- 4.1.3.15. Ability to offer drug interaction information:
 - 4.1.3.15.1. Drug-drug interaction
 - 4.1.3.15.2. Drug-allergy interaction
 - 4.1.3.15.3. Drug-symptom/finding alerts warning message
 - 4.1.3.15.4. Ability to prioritize/rank importance of interactions/warnings
- 4.1.3.16. Ability to automatically drop acute medications from the medication list when their course is finished
- 4.1.3.17. Ability to offer automatic or timed searching for drug interactions
- 4.1.3.18. Ability to automatically alert the provider of a drug allergy as the medication is prescribed

4.1.4. Patient Order Profile

- 4.1.4.1. Ability to capture select patient clinical info a single time that can be automatically displayed/pre-filled on all order entry screens without requiring re-entry, such as height, weight, BMI, medical indicators (i.e. diabetic), care indicators (i.e. program level, special considerations)
- 4.1.4.2. Ability to pre-fill fields w/the default data on the new order screen, but allow the ability to edit and change as indicated
- 4.1.4.3. Ability to print out all patient data for corresponding orders if order is going to foreign system/location

4.1.5. Order Entry

- 4.1.5.1. Ability to identify patients by a variety of standard selection criteria (name on census list, identification number, etc.) for order entry functions to insure accuracy
- 4.1.5.2. Provide standard department-specific data prompts and screen layouts with edits for data entry (i.e. lab vs. radiology vs. dietary formats, with appropriate fields)
- 4.1.5.3. Ability to provide for HCO-defined order modifiers (i.e., frequency, duration, volume, status, priority, date and time of order, date and time of test, date and time of surgery, transportation, precautions, infection, reason for test) by department, nursing station and out patient clinic.
- 4.1.5.4. Ability to create clinical/patient profile record. To allow capture and maintenance of relevant repetitive clinical patient data (HCO and/or nursing specific defined) such as age, sex, weight, diagnosis, allergies, isolation, type of isolation, transport need, relevant conditions (i.e. blind/deaf), and pregnancy for appropriate sex. Ability to capture in single screen (s), and display as applicable on ordering requisition/screen per department/test (i.e. 'Transport' info needed for Radiology, but not Lab)
- 4.1.5.5. Ability to alert user if clinical/patient profile information is incomplete and prompt directly to indicated field
- 4.1.5.6. Provide for security capabilities which ensure that only those authorized to access patient information are able to access it throughout the organization
- 4.1.5.7. Ability to have ordering physician default from the patient's attending or admitting physician on the order entry screen (with ability to over-ride the default as necessary)
- 4.1.5.8. Provide profile ability to allow HCO to flag per institution
- 4.1.5.9. Ability to modify the default ordering physician when:
 - 4.1.5.9.1. Initially entering order
 - 4.1.5.9.2. Prior to completing order placement function
- 4.1.5.10. Ability to identify and maintain HCO-defined maximum orderable quantities by item
- 4.1.5.11. Ability to accommodate procedure identification by name, linking the procedure with the ancillary department identifier and service type
- 4.1.5.12. Ability to display multiple descriptions for a single item during the order entry process to facilitate order identification and entry
- 4.1.5.13. Ability to utilize mnemonics to facilitate order identification and entry
- 4.1.5.14. Ability to accommodate order "add ons", changes, cancellations and provide immediate notification to the area originating the order, with appropriate documentation
- 4.1.5.15. Ability to allow for multiple physician and nurse identifiers to be attached to all service orders
- 4.1.5.16. Ability to separate timed orders from others, and print in the ancillary department when necessary/scheduled
- 4.1.5.17. Provide seamless integration with ADT for clinical users
- 4.1.5.18. Ability to review previously requested active orders
- 4.1.5.19. Provide for professional service ordering with requisition printing within the professional service, admitting and ancillary departments
- 4.1.5.20. Ability to place orders for patients in a pre-registration or pre-admit status with appropriate notification/warnings
- 4.1.5.21. Ability to flag duplicate diagnostic tests, therapies and drug orders
- 4.1.5.22. Ability to flag treatments that are contraindicated (medication ordered for known allergy, for example)
- 4.1.5.23. Ability to link order to appropriate diagnosis and appropriate APC (if applicable) with ability to override this component as well
- 4.1.5.24. Ability to define precedence checking in individual order/test entries and order sets
- 4.1.5.25. Provide for exploding orders
- 4.1.5.26. Print out patient instructions for corresponding orders
- 4.1.5.27. Ability to electronically sign orders
- 4.1.5.28. Ability to enter recurring orders to ensure that revenue is accurately captured
- 4.1.5.29. Ability to enter open-ended orders especially for dietary orders
- 4.1.5.30. Ability to differentiate between unit-collected specimens versus laboratory-collected specimens to allow routing of requisitions to the appropriate department
- 4.1.5.31. Provide support of future orders without limit to date but include a check for reasonable date profile
- 4.1.5.32. Ability to support future order flexibility by dept. (i.e. lab is 2 hours, x-ray is 24 hours)
- 4.1.5.33. Ability to "trigger" patient care activities from procedures/services ordered (link with interdisciplinary care plans/clinical paths)
- 4.1.5.34. Ability to enter "if/and/then" orders and appropriately respond to them
- 4.1.5.35. Ability to profile certain data elements identified as critical for compliance with HCO policies (i.e., medical necessity, allergies, date of birth) as *required* fields in system set-up

- 4.1.5.36. On-line, prompt user to enter all required data with a 'hard stop', insuring completion before user can proceed and exit from the screen
- 4.1.5.37. Ability to have user defined help text by entity
- 4.1.5.38. Ability to display scheduling conflicts when an order is entered to identify:
 - 4.1.5.38.1. Which order should take precedence
 - 4.1.5.38.2. Which tests are ordered at the same time
 - 4.1.5.38.3. Which departments are over-booked
 - 4.1.5.38.4. When the ancillary department will perform the test
 - 4.1.5.38.5. To correlate appropriateness of exam order to clinical information entered
- 4.1.5.39. Ability to have HCO-defined or user-defined order sets:
 - 4.1.5.39.1. Physician
 - 4.1.5.39.2. Diagnosis or patient problem
 - 4.1.5.39.3. Procedure/charge description
 - 4.1.5.39.4. Other
- 4.1.5.40. Allow these defined order sets to include orders from:
 - 4.1.5.40.1. Individual departments
 - 4.1.5.40.2. Across multiple departments
 - 4.1.5.40.3. Allow inclusion of 'Nurse orders'
- 4.1.5.41. Provide flags in definition of order sets, so that they can be defined in 'to be ordered' or 'not to be ordered' default status
- 4.1.5.42. Allow user ability to delete (or not order) individual items within the order set at ordering time
- 4.1.5.43. Ability to define some order sets as 'Protocols' for clinically-indicated situations (Code Blue, Shock, etc.) that will allow nursing to *restrict* modification of order set components
 - 4.1.5.43.1. Provide for unit-specific 'common order pick lists' of both individual orders and order sets, in order to make most frequently ordered tests/services readily available
 - 4.1.5.43.2. Ability to cancel individual occurrences of multiple orders or the entire order series as necessary
- 4.1.5.44. Ability to accommodate a "comment", "rationale" or "verbal orders" field text for requisitions using predefined fields or free-form text (i.e., combative, not to be left unattended)
- 4.1.5.45. Ability to notify appropriate areas of transportation requirements based on HCO-defined criteria
- 4.1.5.46. Ability to accommodate input of orders / charges for patients who are not in an assigned room (i.e., ROC patients)
- 4.1.5.47. Ability to display order review screen/window prior to final completion of order, with multiple options for proceeding
- 4.1.5.48. Ability to insert automatically system date and time during data entry with an override capability for display, *although system date/time is retained and cannot be modified*.
- 4.1.5.49. Ability to define unlimited HCO-defined order priority classifications (i.e., STAT, ASAP, timed, routine)
- 4.1.5.50. Identify standard priorities
- 4.1.5.51. Ability to define unlimited order frequency classifications (i.e., BID, QID, Daily, etc.) with nursing-unit variations (i.e. BID is 8a-8p, while adult floor is 9a-9p)
- 4.1.5.52. Identify standard frequencies
- 4.1.5.53. Ability to have allow multiple diet orders per patient and to exclude certain diets (i.e., supplements) from reports
- 4.1.5.54. Ability to provide meal order entry at the nursing station or dietary department
- 4.1.5.55. Ability to generate diet labels for trays
- 4.1.5.56. Ability to modify diet order(s) from previous diet to allow for temporary NPO order, or multiple special diets
- 4.1.5.57. Ability to give selection criteria when NPO status is ordered. (i.e. time, date, hold)
- 4.1.5.58. Ability to display message that ordered meal cannot be generated. Prompt the user for the alternate method required to order the meal and place order for future meals (i.e. late tray)
- 4.1.5.59. Ability to maintain patient history diet orders on-line for an HCO-defined time period
- 4.1.5.60. Ability to maintain a weekly and monthly count of diet orders by type (i.e., number of regulars, number of blands)
- 4.1.5.61. Ability to produce a dietary production list (food items necessary for a specific time period) using the census, historical quantity of diet types ordered and the food file
- 4.1.5.62. Ability to queue all orders in the case of a printer malfunction
- 4.1.5.63. Ability to change queue to another printer in case of printer malfunction
- 4.1.5.64. Provide 'Order Modification' processing ability to allow such fields as priority, date/time of service, and ordering doctor to be changed without having to cancel and re-place the original order
- 4.1.5.65. Ability to cancel order for services and tests. Include the following capabilities:

- 4.1.5.65.1. Coded/picklist-driven cancel reasons provided
- 4.1.5.65.2. Ability to add 'additional comments' via free text
- 4.1.5.65.3. Allow Nursing unit to cancel if test/service is the appropriate status
- 4.1.5.65.4. Notice sent to receiving department
- 4.1.5.65.5. Have HCO-defined parameters regarding credit for test/ service that is cancelled
- 4.1.5.66. For use as communication tool/audit trail, the ability to capture referrals/consultations information:
 - 4.1.5.66.1. The type of referral or request
 - 4.1.5.66.2. Date
 - 4.1.5.66.3. Person making request
 - 4.1.5.66.4. Specialty/department selections
 - 4.1.5.66.5. Reason for consultation
 - 4.1.5.66.6. Contractual status of referral/consultation
 - 4.1.5.66.7. Consultants available based upon conditions
 - 4.1.5.66.8. Consultants available based upon specialty
 - 4.1.5.66.9. Consultants based upon insurance coverage

4.1.6. Orders / Results inquiry

- 4.1.6.1. Ability to support automated order entry and order status inquiry at the Nurse station, patient bedside, or at the other HCO selected locations
- 4.1.6.2. Ability to sort, summarize, total and manipulate the data indicated above
- 4.1.6.3. Ability to provide 'Order History' log for each department to allow cross-visit listing of all past services, exams, and treatments provided
 - 4.1.6.3.1. Allow department-specific definition of which service exams are to be retained in their History log
 - 4.1.6.3.2. Also allow department to identify if associated results are to be retained with the order
- 4.1.6.4. Ability to develop and access a referral contact database when patients "needs" must be communicated to the entity receiving the patient.
- 4.1.6.5. Ability for user-defined consultation orders. (i.e. dietary consultation)
- 4.1.6.6. Ability to retrieve patient historical order/result data across admissions/visits
- 4.1.6.7. Provide for availability of patient related information for personnel with a "need to know" The types of data required include:
 - 4.1.6.7.1. Patient history inquiry
 - 4.1.6.7.2. Order history
 - 4.1.6.7.3. Order verification
 - 4.1.6.7.4. Results inquiry
 - 4.1.6.7.5. Census and patient status
 - 4.1.6.7.6. Patient treatment scheduling
 - 4.1.6.7.7. Patient location
- 4.1.6.8. Provide for order inquiry for all services ordered for a patient:
 - 4.1.6.8.1. For a day
 - 4.1.6.8.2. For entire length of stay and/or clinic visit
 - 4.1.6.8.3. For a specific department
- 4.1.6.9. Ability to access patient orders/results by:
 - 4.1.6.9.1. By patient, indicating the status of the order, all inclusive or with date criteria
 - 4.1.6.9.2. Department performing service, by patient
 - 4.1.6.9.3. Service performed (test, procedure, etc.)
 - 4.1.6.9.4. Ordering physician
 - 4.1.6.9.5. Ordering service
 - 4.1.6.9.6. Significant result indication
 - 4.1.6.9.7. Date of service
 - 4.1.6.9.8. By orders needing verification; by patient, ancillary, physician, or unit
 - 4.1.6.9.9. By orders scheduled to expire in the next 24 hours; by patient, unit, or physician
 - 4.1.6.9.10. By incomplete / complete order within ancillary department, by patient
 - 4.1.6.9.11. Diet orders by patient, unit, or diet type
 - 4.1.6.9.12. Other user defined parameters
- 4.1.6.10. Ability to print / display an ancillary department schedule / work list based on order requests by time or priority of order

4.1.7. Charge Capture

- 4.1.7.1. Ability to profile charge-capture times for orders by both department and individual order.
Charges will then be automatically transmitted to the patient accounting system based on the following options:
 - 4.1.7.1.1. Order entry
 - 4.1.7.1.2. Specimen collection
 - 4.1.7.1.3. Order completion
 - 4.1.7.1.4. Resulted
- 4.1.7.2. Ability to process automatically the correct charge or credit for services that are changed or cancelled
- 4.1.7.3. Ability to identify orders and cancellations that are not to appear on the bill (i.e., errors, non-charge items)
- 4.1.7.4. Ability to allow for charges and credits to be entered by the user departments for HCO-defined services, with appropriate security
- 4.1.7.5. Ability to provide automatic edit of all charges entered that are over a HCO-defined amount with an override capability. (Edits may be based on security code or department)
- 4.1.7.6. Ability to send all price modifications and charges automatically to a Patient Accounting System with audit trail capability provided
- 4.1.7.7. Ability for the price file to support multiple procedure codes and multiple revenue codes.
- 4.1.7.8. Ability to generate exploded charges (generation of multiple charges from a single entry) and notify the appropriate department of the explosion
- 4.1.7.9. Ability to override the charge explosion
- 4.1.7.10. Ability to provide for add-on charges and credits (i.e., additional fee for portable X-Ray) as part of the primary charge
- 4.1.7.11. Ability to have multiple linked items (with quantity) display and provide option to print or not

4.1.8. Additional System Set-Up Capability

- 4.1.8.1. Ability to provide 'starter kit' database for numerous order entry master files, tables, and other parameters provided, that are modifiable at the HCO-level to include:
 - 4.1.8.1.1. Ordering departments
 - 4.1.8.1.2. Order items
 - 4.1.8.1.3. Screen layouts (i.e. lab vs. radiology vs. dietary, etc.)
 - 4.1.8.1.4. Priorities
 - 4.1.8.1.5. Frequencies

4.2. Multi-Disciplinary Treatment plans

4.2.1. General Requirements

- 4.2.1.1. Ability to provide a non-technical report-writer for all clinical applications
- 4.2.1.2. Ability to access treatment plans in chronological or reverse chronological order as determined by the user
- 4.2.1.3. Patient access methods may be defined/defaulted by user type (i.e. nursing uses unit census list, clinical departments choose by account number, etc.)
- 4.2.1.4. Ability to allow user access to patient clinical and demographic information by the following methods (or in any combination):
 - 4.2.1.4.1. Patient location (i.e. nursing unit census list)
 - 4.2.1.4.2. Patient name (alphabetically with a minimum of one letter entry)
 - 4.2.1.4.3. Patient name (phonetically)
 - 4.2.1.4.4. Patient Identification number
- 4.2.1.5. Ability to have patient header information display (at the top-of-screen) with pertinent patient information (such as patient ID and location, allergies, admission diagnosis, key clinical indicators (i.e. diabetic), special instructions (i.e. Close Observation Status Scale Level), and other user-defined fields)
- 4.2.1.6. Ability to have header information be profile-able by nursing unit
- 4.2.1.7. Ability to record the date/time that an activity/intervention occurred through automatic date/time stamp at the point of entry
- 4.2.1.8. Ability to protect system date/time and allow institution to determine if both times display
- 4.2.1.9. Ability to filter/audit pick list utilization in maintenance/set-up, so that low-use entries can be eliminated from user-choices
- 4.2.1.10. Ability to safeguard all clinical information against loss and assure accessibility (downtime, backup procedures)
- 4.2.1.11. Ability for clinical data to be available and updateable, and allow for "transfer" when the patient location changes

4.2.2. Global Treatment Plan Requirements

- 4.2.2.1. Ability to develop and maintain standard treatment plan protocols which support a case management approach for acute inpatient management
- 4.2.2.2. Ability to incorporate online critical information for the patient into the treatment plans (i.e., Dr.'s orders, allergies, diagnosis, demographics)
- 4.2.2.3. Ability to review and update (add, change, delete, complete) the problem or objective, interventions or evaluations as defined in the treatment plans
- 4.2.2.4. Ability to enter interventions that automatically update nursing orders and the patient treatment plan record
- 4.2.2.5. Ability for treatment plans to be available and updated, and allow for "transfer" when the patient type or location changes
- 4.2.2.6. Support user defined patient outcomes
- 4.2.2.7. Ability to easily review and print all orders, treatments, interventions, etc. for a patient whether "active" or "complete"
- 4.2.2.8. Ability to produce a summary of key events (user defined) (by patient, by day) that is cumulative over multiple days
- 4.2.2.9. Allows standards of care and guidelines based on medical diagnosis, type of procedures, or treatment protocol
- 4.2.2.10. Ability to provide alert features if the care of the patient departs from the standard treatment plan guidelines
- 4.2.2.11. Ability to allow the user to identify the level of involvement (user defined) when requesting a consulting physician for treatments or assigned protocols
- 4.2.2.12. Ability to display associated costs with individual treatment plans
- 4.2.2.13. Ability to support on-line multi-disciplinary treatment planning using standards and protocols
- 4.2.2.14. Ability for unlimited the number of items per patient on each treatment plan
- 4.2.2.15. Ability to provide individualized care plans based on nationally approved nursing standards of care and hospital defined protocols which can be modified by the hospital to reflect its unique needs and/or individual patient circumstances for all treatment plans
 - 4.2.2.15.1. Nursing diagnosis
 - 4.2.2.15.2. Admit diagnosis, patient problem or condition
- 4.2.2.16. Ability to delineate interventions and goals based on both nationally accepted standards and user entry
- 4.2.2.17. Ability to correlate treatment plan activities with length of stay
- 4.2.2.18. Ability to correlate treatment plan activities with reimbursement charges, outcomes and other factors
- 4.2.2.19. Provides assignment of a treatment plan with timeframes or benchmarks
- 4.2.2.20. Ability to document the individual's progress through the treatment plan
- 4.2.2.21. Ability to trend and track progress of a patient group (Diagnostic Related Groupings), procedure, diagnosis, demographic info) through treatment plan
- 4.2.2.22. Facilitates conflict resolution when two or more treatment plans are needed to establish the plan of care
- 4.2.2.23. Allows multi-disciplinary documentation of the individual's progress through the pathway/care plan/protocol
- 4.2.2.24. Ability to support non-standard user defined patient treatment plan entry
- 4.2.2.25. Ability to allow users to access patient treatment and pertinent associated data from previous admissions
- 4.2.2.26. Ability to utilize an on-line logic to identify alternative options based on outcomes or changes in patient status
- 4.2.2.27. Ability to update the treatment plan on-line as needed to appropriately reflect the changing status and care needs of the patient:
 - 4.2.2.27.1. Resolution of existing problems
 - 4.2.2.27.2. Identification of new problems
 - 4.2.2.27.3. Recurrence of "old" problems within same visit
- 4.2.2.28. Ability to effectively link/relate each activity/intervention with the clinical problem that the activity/ intervention is intended to address
- 4.2.2.29. Ability to identify:
 - 4.2.2.29.1. Date/time an activity was scheduled to occur
 - 4.2.2.29.2. Date/time an activity actually occurred
 - 4.2.2.29.3. An activity where the time difference between its scheduled occurrence and its actual occurrence exceeds a hospital-defined timeframe parameter
- 4.2.2.30. Ability to identify trends in the above time differences

- 4.2.2.31. Ability to access patient care plans post transfer to another inpatient or outpatient location within a user-defined time frame
- 4.2.2.32. Ability to store and provide on-line retrieval of information relating to treatment plans utilized in previous episodes of care
- 4.2.2.33. Ability for clinician access to patient demographic, medical care plan information, post discharge
- 4.2.2.34. Ability to aggregate ordering and documentation data for the creation of benchmarks and clinical pathways in order to refine/update the definition of the treatment plan in system set-up
- 4.2.2.35. Ability to maintain standard treatment plans
- 4.2.2.36. Ability to build a customized treatment plan for an individual patient by selecting from a problem-oriented list of common nursing diagnoses/interventions/standards
- 4.2.2.37. Ability to incorporate national nursing outcomes classifications (i.e. NIC, NOC).
- 4.2.2.38. Ability to easily print treatment plans on request
- 4.2.2.39. Ability to provide variance charting prompts for the methods taken to respond to the deviation from the expected outcome
- 4.2.2.40. Ability to track variance trends for a population by:
 - 4.2.2.40.1. Age
 - 4.2.2.40.2. Diagnosis
 - 4.2.2.40.3. Physician
 - 4.2.2.40.4. User-defined criteria
- 4.2.2.41. Ability to provide variance charting including identification of the variance, its cause, and the clinician's response to the variance
- 4.2.2.42. Ability to access, accumulate and analyze daily breakdown of user-defined critical
- 4.2.2.43. Ability to notify the nursing unit when the patient treatment plan orders are changed by the modification of orders in the ancillary departments
- 4.2.2.44. Ability to identify and flag user of key missing patient clinical information and print on a report
- 4.2.2.45. Ability to allow user to define sorts (i.e., diet, weight, allergies)
- 4.2.2.46. Ability to allow for on-line age-specific standards of care for access by staff
- 4.2.2.47. Provides assignment of a treatment plan with timeframes or benchmarks
- 4.2.2.48. Ability to trend and track progress through plan
- 4.2.2.49. Provides analysis of the effectiveness of all the components of the plan
- 4.2.2.50. Ability for individual patient's treatment plan to invoke/prompt charting entries in the documentation application
- 4.2.2.51. Ability to support non-standard user defined patient treatment plan entry
- 4.2.2.52. Ability to allow documentation of care provided against the care plan as well as allowing the tracking of status of all orders, treatments, and interventions as "active" and "complete"
- 4.2.2.53. Ability to allow access to patient care plans post transfer to another inpatient or outpatient locations for a hospital-defined period of time
- 4.2.2.54. Store and provide on-line retrieval of information relating to clinical pathways utilized in previous episodes of care

4.2.3. Multi-Disciplinary Treatment plans

- 4.2.3.1. Ability to provide for inter-disciplinary treatment planning
- 4.2.3.2. Ability to support care planning based on standards of care:
- 4.2.3.3. Medical/nursing diagnosis
- 4.2.3.4. Interventions
- 4.2.3.5. Clinical communications (MD. orders, nurse orders, diagnosis, documentation)
- 4.2.3.6. Expected patient outcomes
- 4.2.3.7. Expected outcomes goal date
- 4.2.3.8. Assessment/resolution
- 4.2.3.9. Case management (variances)
- 4.2.3.10. Quality indicators
- 4.2.3.11. Clinical assessment data automatically triggers alerts to the multi-disciplinary teams as defined by the institution/user, throughout the patient's stay

4.2.4. Patient Problem List/Case Management

- 4.2.4.1. Ability to offer a summary of the problem lists, allergies, medications and prevention
- 4.2.4.2. Ability to support separate chronic or acute problem lists
- 4.2.4.3. Ability to support the active problem list to be updated from the "assessment" or diagnosis in the progress note
- 4.2.4.4. Allow definition/retention of data for a patient profile of select key data
- 4.2.4.5. Provide flexible, HCO-defined Problem 'statuses'

- 4.2.4.6. Ability to provide support documentation of the date of onset of a problem or diagnosis
- 4.2.4.7. Ability to provide support documentation of the severity of a problem or diagnosis
- 4.2.4.8. Ability to provide support documentation of the date of a change in the status of a problem or diagnosis
- 4.2.4.9. Ability to receive/send reminder of key indicators as profiled, triggered by both on-line databases as well as admitting database
- 4.2.4.10. Ability to offer electronic listings of past interventions, hospitalizations, diagnostic procedures, and therapies for easy review
- 4.2.4.11. Ability to support risk factor monitoring
- 4.2.4.12. Ability to support case management by providing both default and patient specific health care reminder protocols and prompts
- 4.2.4.13. Provide a mechanism to identify cases that would benefit from case management with user-defined criteria for high risk patients
- 4.2.4.14. Ability to identify problems and expected outcomes
- 4.2.4.15. Allows trending and tracking of problems and expected outcomes (i.e., by age)
- 4.2.4.16. Ability to notify caregivers when designated events occur:
 - 4.2.4.16.1. Annual PPD's on long term patients
 - 4.2.4.16.2. Use of Foley catheters, restraints, antipsychotic drugs
 - 4.2.4.16.3. Hospital defined protocols (i.e. high-risk medications, dressing changes, etc.).
 - 4.2.4.16.4. User-defined criteria

4.2.5. Discharge Planning Support

- 4.2.5.1. Ability in treatment plans to create/support comprehensive discharge planning activities including identifying specific discharge instructions, discharge orders, other treatment plan activities
- 4.2.5.2. Provide reporting for internal and external communication to interagency referrals including, but not limited to:
 - 4.2.5.2.1. Active orders
 - 4.2.5.2.2. Active treatment plans
 - 4.2.5.2.3. Discharge orders
 - 4.2.5.2.4. Medications upon discharge
 - 4.2.5.2.5. Supplies upon discharge
 - 4.2.5.2.6. Advanced directive status
 - 4.2.5.2.7. Allergies, functional status, current physical assessment including vital signs, weight, vaccination status, and demographics
- 4.2.5.3. Ability to provide a listing of potential referring agencies
- 4.2.5.4. Ability to "match" patients to referring agencies
- 4.2.5.5. Ability to maintain discharge instruction work lists by diagnosis and medication
- 4.2.5.6. Ability to produce a summary care plan at discharge with admission assessment, discharge assessment information, diagnosis, goals, clinical documentation, patient teaching, and discharge instructions

4.2.6. Management Reporting

- 4.2.6.1. Ability to easily produce flexible ad hoc reports using data stored in the system
- 4.2.6.2. Ability to collect data, analyze it, and produce reports which can trend audit results
- 4.2.6.3. Ability to collect and analyze pertinent patient information (location, census, acuity, diagnosis, demographics, infection rates, death rate, average length of stay, etc.)
- 4.2.6.4. Ability to access patient profile data for use in special studies
- 4.2.6.5. Ability to trend incident reports
- 4.2.6.6. Ability to provide summary reports of clinical activity completed
- 4.2.6.7. Ability to provide automated support for the development of policies, procedures and standards for clinical departments
- 4.2.6.8. Ability to support concurrent and retrospective quality of care assessments utilizing the system to track pre-defined indicators and to assist with the monitoring of those indicators
- 4.2.6.9. Based on protocols, the ability to access, accumulate and analyze daily critical elements of care by patient, by diagnosis, and by the related cost of accumulated services
- 4.2.6.10. Ability to track length of stay by diagnosis/DRG information against critical pathway data
- 4.2.6.11. Ability to provide and maintain computer system training records to support user knowledge of system utilization and functional capabilities
- 4.2.6.12. Ability to configure the system to require entry of patient teaching documentation during the assessment process

- 4.2.6.13. Ability to allow trending of patient teaching information by patient education staff
- 4.2.6.14. Ability to support processing and printing of individualized discharge instructions for:
 - 4.2.6.14.1. Inpatients
 - 4.2.6.14.2. Observation patients on the unit
 - 4.2.6.14.3. Outpatients- in multiple care areas:.
 - 4.2.6.14.4. Service line specific ambulatory patients (i.e., psych, rehab, etc.)
- 4.2.6.15. Ability to track inpatients and outpatients as clinical services are rendered throughout the hospital
- 4.2.6.16. Ability to provide a non-technical report-writer for all clinical applications
- 4.2.6.17. Ability to produce hospital-defined care provider census worksheets. The hospital can determine:
 - 4.2.6.17.1. Sorts
 - 4.2.6.17.2. Team designation
 - 4.2.6.17.3. Generation times
 - 4.2.6.17.4. Format
- 4.2.6.18. Ability to allow the user to define reportable incidents such as adverse drug reactions for the purpose of collecting aggregate patient information

4.3. Unit Support

4.3.1. General Requirements

- 4.3.1.1. Ability to access records in chronological or reverse chronological order as determined by the user
- 4.3.1.2. Ability to define/default patient access methods by user type (i.e. unit uses census list, clinical departments choose by account number, etc.)
- 4.3.1.3. Ability to allow the user to access patient clinical and demographic information by the following methods (or in any combination):
 - 4.3.1.3.1. Patient location (i.e. nursing unit census list)
 - 4.3.1.3.2. Patient name (alphabetically with a minimum of one letter entry)
 - 4.3.1.3.3. Patient name (phonetically)
 - 4.3.1.3.4. Patient Identification number
- 4.3.1.4. Ability to have top-of-screen patient header information display pertinent patient information (such as patient ID and location, allergies, admission diagnosis, key clinical indicators (i.e., 'diabetic'), special instruction, and other user-defined fields)
- 4.3.1.5. Ability to have header information specific to each unit
- 4.3.1.6. Ability to enter data into patient charts from multiple locations by multi-disciplines (i.e., other ancillary departments).
- 4.3.1.7. Support of clinical data collection at the point of service.
- 4.3.1.8. Ability to safeguard all clinical information against loss and assure accessibility (downtime, backup procedures).
- 4.3.1.9. The system records the date/time that an activity/intervention occurred through:
 - 4.3.1.9.1. Automatic date/time stamp at the point of entry
 - 4.3.1.9.2. Manual override of date/time stamp to allow for the retroactive updating of activities/ interventions (note that both date/times will be retained in system)
- 4.3.1.10. Allow user-defined restrictions (institution-level, caregiver class-level: i.e. staff RN, aide vs. supervisor) on how far back date/time can be entered
- 4.3.1.11. Ability for clinical data to be available and updateable, and allow for "transfer" when the patient location changes

4.3.2. Patient Classification/Acuity Support

- 4.3.2.1. Ability to automatically calculate a patient's acuity based on user defined patient care indicators and required skill mix
- 4.3.2.2. Ability to have real time access and electronic update capability from the acuity application to support projected staffing need determinations in the nurse staffing system to determine resources needed for coverage
- 4.3.2.3. Ability to easily modify the key nursing care indicators, staffing mix and budget parameters that drive the staffing component of patient classification
- 4.3.2.4. Ability to maintain up to three different patient classifications:
 - 4.3.2.4.1. Program Level: treatment plan grade - determined by the multi-disciplinary team
 - 4.3.2.4.2. Acuity: How much nursing care is required - determined by the nursing staff on the unit caring for the patient
 - 4.3.2.4.3. Observation Level: Patient risk/safety level - determined by the psychiatric and the treatment team

- 4.3.2.5. Provide the ability to identify and export data regarding the cost for nursing care based on patient specific acuity by shift (or daily) to other applicable systems such as decision support and nurse staffing
- 4.3.2.6. Ability to produce staffing reports generated by acuity data and census and patient days by unit that is consistent with the information used by decision support and nurse staffing systems
- 4.3.2.7. Produce a user-defined (i.e. each shift) acuity report, by nursing unit
- 4.3.2.8. Ability to trend data.

4.3.3. Management Reporting

- 4.3.3.1. Ability to easily produce flexible ad hoc reports using data stored in the system
- 4.3.3.2. Ability to collect data, analyze it, and produce reports which can trend audit results
- 4.3.3.3. Ability to collect and analyze pertinent patient information (location, census, acuity, diagnosis, demographics, infection rates, death rate, average length of stay, etc.)
- 4.3.3.4. Ability to access patient profile data for use in special studies
- 4.3.3.5. Ability to trend incident reports
- 4.3.3.6. Ability to provide summary reports of clinical activity completed
- 4.3.3.7. Ability to provide automated support for the development of policies, procedures and standards for clinical departments
- 4.3.3.8. Ability to support concurrent and retrospective quality of care assessments utilizing the system to track pre-defined indicators and to assist with the monitoring of those indicators
- 4.3.3.9. Based on protocols, the ability to access, accumulate and analyze daily critical elements of care by patient, by diagnosis, and by the related cost of accumulated services
- 4.3.3.10. Ability to track length of stay by diagnosis/DRG information against multi-disciplinary treatment plan data
- 4.3.3.11. Ability to configure the system to require entry of patient teaching documentation during the assessment process
- 4.3.3.12. Ability to identify trends in patient teaching information by patient education staff
- 4.3.3.13. Ability to support processing and printing of individualized discharge instructions for:
 - 4.3.3.13.1. Inpatients
 - 4.3.3.13.2. Outpatients - in multiple care areas
 - Observation patients
- 4.3.3.14. Ability to track inpatients and outpatients as clinical services are rendered throughout the hospital
- 4.3.3.15. The system provides a non-technical report-writer for all clinical applications
- 4.3.3.16. The system produces hospital-defined care provider census worksheets. The hospital can determine:
 - 4.3.3.16.1. Sorts
 - 4.3.3.16.2. Team designation
 - 4.3.3.16.3. Generation times
 - 4.3.3.16.4. Format
- 4.3.3.17. Allows for reports to be defined by users at their workstation, stored for future use, and changes as needed by:
 - 4.3.3.17.1. ICD9 codes
 - 4.3.3.17.2. CPT codes
 - 4.3.3.17.3. DSM IV codes
 - 4.3.3.17.4. Time frame for report
- 4.3.3.18. Tracking by physician: AMA, LWOT, LOS, activity, admits

4.4. Medications Charting Support

- 4.4.1.1. Provide online access to medications administration record by nursing
- 4.4.1.2. Provide printed MAR charting document automatically generated from the Pharmacy system in order to phase in capability
- 4.4.1.3. For both printed MAR charting document and on-line med charting, ability to display both 'order as written' (Ampicillin 500mg p.o. q 6hr) and 'order as dispensed' (Ampicillin 500mg as 2-250 capsules p.o. q 6hr)
- 4.4.1.4. Support online drug interaction/reaction checking
- 4.4.1.5. Ability to maintain and adjust standard medication administration schedules, including flexible scheduling (i.e., on the half-hour)
- 4.4.1.6. Ability to include by patient given/not given, observations/comments, site conditions, blood pressure, pulse, blood sugars, patient outcome, etc. for entry of medications charting data
- 4.4.1.7. Ability to generate automatic charges for all medications administered and documented, with the ability to edit
- 4.4.1.8. Ability to integrate medications to be administered and care into a single working document

- 4.4.1.9. Ability to provide reminder prompts at user defined intervals for medication scheduled but not given
- 4.4.1.10. Support for charting unscheduled medications
- 4.4.1.11. Provide cumulative medication summary report covering patient's length of stay with ability to drill down to a detail level
- 4.4.1.12. Ability to accept and process online physician pharmacy orders
- 4.4.1.13. Ability to provide automated link with pharmacy system for drug calculations and patient medication profile information, including meds on hold
- 4.4.1.14. Ability to identify:
 - 4.4.1.14.1. Date/time of scheduled medication administration
 - 4.4.1.14.2. Date/time of actual medication administration
- 4.4.1.15. Ability to identify an activity where the time difference between its scheduled occurrence and its actual occurrence exceeds a hospital-defined timeframe parameter.
- 4.4.1.16. Ability to integrate with the pharmacy system to provide information on medications, drug interactions, patient education, food/drug interactions, etc. At minimum, able to branch to Pharmacy system (drug resource) without leaving MAR functionality
- 4.4.1.17. Ability to generate report by department or physician
- 4.4.1.18. Allow for chart flagging when designated documentation is missing to also include patient outcome documentation
- 4.4.1.19. Ability to integrate with clinical documentation system for entry with either application
- 4.4.1.20. Ability to store clinical documentation on-line for a user-defined period of time
- 4.4.1.21. Ability to provide an ad-hoc report-writer of all clinical applications for all users
- 4.4.1.22. Ability to provide on-line access to documentation that acknowledges that patient consents are obtained (i.e., on-line responses Y/N to questions)
- 4.4.1.23. Ability to access documentation through various sort functions, as determined by the user
- 4.4.1.24. Ability to prompt care taker on documentation required by policy (i.e., the system would require circulation checks, etc. as well as required documentation of other methods tried before resorting to "restraints")
- 4.4.1.25. Ability to have flexible sorting of meds and user-defined heading for grouping of meds with past and future capabilities (i.e. investigative drug regimen)
- 4.4.1.26. Ability to have user-defined flexible formatting of text that prints on MAR or displays on screen
- 4.4.1.27. Allow hard and soft stops, ability to add a clinical alert (as defined by pharmacy profile):
 - 4.4.1.27.1. To ordering doctor
 - 4.4.1.27.2. To online med charting screen
 - 4.4.1.27.3. Allow for variable dose sliding scale orders
- 4.4.1.28. Allow for tapering dose schedules, i.e. steroids
- 4.4.1.29. Allow for special instruction line
- 4.4.1.30. Ability to link to original order inquiry without leaving the MAR for order detail clarification
- 4.4.1.31. Ability to provide notification on work list and MAR and in addition, as a clinical alert to prompt for user-defined time frame prior to scheduled medication administration (i.e. peak and trough levels of meds)
- 4.4.1.32. Ability to generate a list of pre-procedure medications for physician to order meds post-procedure and clinical service changes (i.e. patient transfer from one unit to another)
- 4.4.1.33. Ability to select the time or date to begin drug administration regardless of when the order was written (i.e. It is 1200 hours and I want to give 0900 meds)
- 4.4.1.34. Ability to graph the drug administration summary on a specified time line
- 4.4.1.35. Ability for the system to allow the entering of unlimited amount of MAR notes
- 4.4.1.36. Ability to allow unlimited entering of MED notes at order entry, with ability to edit the notes
- 4.4.1.37. Ability to NOT split an order on a MAR printout (i.e., rather than printing a drug at the bottom of a MAR and on the top page on the next MAR page - print the entire med order on the second page of the MAR)
- 4.4.1.38. Ability to generate discharge meds list of medications patient will be taking home.
- 4.4.1.39. Ability to migrate data to Transfer Form

B) Desirable Functional System Specifications

5. Medical Records

5.1. General Requirements

- 5.1.1. Ability to offer flexible interface options with full support of keyboard, mouse, trackball, pen, and touch screen
- 5.1.2. Ability to create an electronic record at any time (without having patient demographics entered)

5.2. Clinical Data Repository

- 5.2.1. Medical Images (PACS radiology, echo cardio, tracing, cardiac tracing, etc.)
- 5.2.2. Data and images pulled into NEFSH Repository from outside organizations (i.e. Lab results from providers and Quest Labs; scanned documents Provide access to retrieval of EKG waves, other wave forms, and other electronically stored tracings
- 5.2.3. Ability to FAX, e-mail, and/or print results, documents to referring offices and other remote sites with appropriate security
- 5.2.4. Ability to access to patient information via multiple types of devices:
 - 5.2.4.1. Wireless, Portable PC on cart
 - 5.2.4.2. Hand-held devices, tablet
 - 5.2.4.3. Other types
 - 5.2.4.4. Provide the ability to download query output for evaluation and manipulation with other software packages

5.3. RHIO Support

- 5.3.1. Support the collection and storage of the following patient information from each institution participating in the repository:
 - 5.3.1.1. Patient demographics
 - 5.3.1.2. Patient orders and order status
 - 5.3.1.3. Results of diagnostic procedures
 - 5.3.1.4. On-line documentation - Nurse, Physician, all Ancillary Departments
 - 5.3.1.5. ALL Transcribed Reports in any format including: history and physical; physician consults (including psychology services reports) and follow-up reports; progress notes; discharge summary
 - 5.3.1.6. Transcribed radiology, pathology, CV, etc. reports
 - 5.3.1.7. Scanned documents and images
 - 5.3.1.8. Ability to retrieve patient historical data across admissions/ visits (previous inpatient or outpatient episodes)

5.4. Multi-Disciplinary

- 5.4.1. Ability to have header information specific to each unit

5.5. Data Searching and Reporting

- 5.5.1. Allow for linking to electronic textbooks and/or electronic medical literature searching
- 5.5.2. Allow linking to electronic diagnostic assistance systems, such as BP machines
- 5.5.3. Ability to offer programmed learning
- 5.5.4. Ability to allow patient simulations

5.6. Patient Charting Support

- 5.6.1. Ability to allow user to modify the hospital-defined standard as indicated for individual patient charting
- 5.6.2. Ability to design forms for use with outside agencies (i.e., state and reporting agency required documents)
- 5.6.3. The ability to notify caregivers via link with Clinical Alert Engine when designated events occur to prompt for charting
- 5.6.4. Provides 'strike-out' ability to correct/update incorrect charting entries
- 5.6.5. Provides an on-line WorkList schedule of events/ care activities based on the Care Plan/Clinical Pathway to be performed by the caregiver with Charting prompts
- 5.6.6. Sort/Format to be user-defined
- 5.6.7. The ability to identify:
 - 5.6.7.1. Date/time a user-defined activity was scheduled to occur
 - 5.6.7.2. Date/time a user-defined activity actually occurred
- 5.6.8. The ability to identify an activity where the time difference between its scheduled occurrence and its actual occurrence exceeds a hospital-defined timeframe parameter
- 5.6.9. The ability to identify trending of above time differences
- 5.6.10. The ability to identify key missing patient clinical information and prompts user to chart appropriately
- 5.6.11. The ability for user to define sorts of how data is displayed

- 5.6.12. The ability to produce a quality management report which identifies missing or incomplete assessments, flow sheets, patient teaching, etc. within user-defined time frames. Report may be generated by nursing unit.
- 5.6.13. Ability to fax (or communicate online) clinical summaries to outside referral agencies upon discharge
- 5.6.14. The ability to prompt care taker on documentation required by policy (i.e., The system would require circulation checks, etc., as well as required documentation of other methods tried before resorting to "restraints")

5.7. Inquiry/Data Retrieval / Report Printing

- 5.7.1. Ability to print summary data (by type and grand total) automatically:
 - 5.7.1.1. Supports automated user-defined log books for various parameters:
 - 5.7.1.2. Patient sign-in/sign-out log when going off-unit
 - 5.7.1.3. Restraint Log
 - 5.7.1.4. User-defined logs
 - 5.7.1.5. Standards supplied
- 5.7.2. Ability to define reportable incidents such as adverse drug reactions for the purpose of collecting aggregate patient information

5.8. Legal Office

NEFSH has the responsibility for accurate collection, management and tracking of legal status of patients during their hospital stay

Ability to view online:

- 5.8.1. Track status for each patient encounter, admission to discharge: History of patient should be available for all admissions since starting new system. Ability to input history for a current admission.
- 5.8.2. Legal action Calendar: Updates to legal status will update a calendar that includes all current patients. Ability to input legal status and filing deadlines to alert when next commitment is due.
- 5.8.3. Generate alerts of involuntary commitment time lines: As dead-lines approach, the system needs to alert the HIMS legal staff several days in advance
- 5.8.4. Ability to track court dates
- 5.8.5. Docketing Calendar
- 5.8.6. Provide flexible definition of data elements to capture all required tracking information. Allow for tables of valid responses to be defined for such items as:
 - 5.8.6.1. Patient Legal Status
 - 5.8.6.2. Legal Status Definitions
- 5.8.7. Allow various data elements to be "tagged" for inclusion in court-order reports:
 - 5.8.7.1. Medications
 - 5.8.7.2. Treatment plans
 - 5.8.7.3. Results
 - 5.8.7.4. Notes
 - 5.8.7.5. Others
- 5.8.8. Maintain records of court orders and assignments:
 - 5.8.8.1. Assignable to a treatment plan
 - 5.8.8.2. Assignable to a provider
 - 5.8.8.3. Order/assign begin-date
 - 5.8.8.4. Order/assign end-date
- 5.8.9. Provide other records:
 - 5.8.9.1. Court appearance dates
 - 5.8.9.2. Criminal charge data
 - 5.8.9.3. Guardianship data
 - 5.8.9.4. Attorney data
- 5.8.10. Ability to Integrate with other modules/functions:
 - 5.8.10.1. Admissions/Registration
 - 5.8.10.2. Orders/Results
 - 5.8.10.3. Treatment plans
- 5.8.11. Utilization Review/Case Management

5.9. Utilization Review/Case Management

- 5.9.1. Ability to facilitate the conversion of Medicaid abstracts to automated versions via scanning and/or other methods
- 5.9.2. Allows the conversion of hard copy pre-authorizations, continued stay authorizations, and Medicaid abstracts and 'Authorization Sheets', to automated versions
- 5.9.3. Allow linking to select UR/CM fields to appropriate screens, modules, and databases
- 5.9.4. Allows revisions to be made to prior forms without overwriting or losing previous versions
- 5.9.5. Ability to automate UR certifications and link them to the patient chart

- 5.9.6. Provide an interface between pre-authorizations, continued stay authorizations, and treatment plan information to streamline submission of supporting documentation required by the utilization review or managed care organization
- 5.9.7. Allow entry of patient specific pre-authorization information, including authorized dates of service, authorized number of visits or treatments to actual utilization data
 - 5.9.7.1. Ability to automatically notify clinician in advance, according to clinician-specified parameters
- 5.9.8. Provide tracking of authorized dates of service to actual calendar dates and automatically notify clinician in advance, according to clinician-specified parameters
 - 5.9.8.1. Primarily only needed w/MD as MD-visit is the only billable type
- 5.9.9. Allow correlation/tracking of utilization data with:
 - 5.9.9.1. Specific inpatient admission
 - 5.9.9.2. Specific outpatient services
 - 5.9.9.3. Specific treatment plans
- 5.9.10. For each episode-of-care (i.e., Admission, OUT PATIENT Service or Treatment Plan), ability to perform utilization management functions or denote:
 - 5.9.10.1. Authorized dates of service
 - 5.9.10.2. Authorized number of visits for MD-visits, which are billable
 - 5.9.10.3. A comparison of "authorized visits" to "actual visits"
 - 5.9.10.4. "Continued stay" or "continuation" authorizations
 - 5.9.10.5. Notification to clinicians on variance to authorized services
 - 5.9.10.6. Notification to clinicians on approaching end of authorization period
 - 5.9.10.7. Notification to clinicians on approaching end of authorized number of treatments - via standard review
 - 5.9.10.8. Notification to clinicians on approaching end of authorized number of treatments - via retrospective review
 - 5.9.10.9. Creation of Medicaid abstracts
 - 5.9.10.10. Tracking of denials and appeals
 - 5.9.10.11. Tracking of authorization dates
- 5.9.11. For purposes of insurance-related case management, identify episodes of care (i.e., Admission, OUT PATIENT Service or Treatment Plan) with defined "cases" for purposes of "grouping" the related data.
- 5.9.12. Ability to easily toggle between episodes of care
- 5.9.13. Ability to easily access CDR from UR/CM desktop

5.10. Chart Tracking and Management

- 5.10.1. Provide the ability to electronically establish a chart library
- 5.10.2. Ability to allow for definition of volume division by:
 - 5.10.2.1. Date
 - 5.10.2.2. Service type
 - 5.10.2.3. Identify other
- 5.10.3. Ability to define multiple chart and storage locations, users, etc.
 - 5.10.3.1. Internal locations
 - 5.10.3.2. External locations
 - 5.10.3.3. Ability to use barcoding to help with tracking
- 5.10.4. Ability to define flexible tracking screens
- 5.10.5. Provide flexible table values for tracking information fields
- 5.10.6. Identify standard fields provided

5.11. Deficiency Processing

- 5.11.1. Ability for chart analysis activities
- 5.11.2. Ability to flag and notate records that are deficient
- 5.11.3. Ability to define chart deficiency worksheets (user defined deficiencies and time lines for completion)
- 5.11.4. Identify standard worksheet provided
- 5.11.5. Ability for institution to create multiple worksheets (specialty or provider-specific) *Incomplete Record Statistics
- 5.11.6. Ability to attach notes/instruction to the provider
- 5.11.7. Ability to notate completion of deficient records

5.12. Release of Information Processing

- 5.12.1. Ability to establish/create audit trail of records released to authorized entities
- 5.12.2. Ability to create/manage log of all 'released' records
- 5.12.3. Ability to define categories of authorized entities, individual recipients, reasons for release, etc.
- 5.12.4. Ability to collect fees; calculate charges when indicated and print a bill

- 5.12.5. Ability to track requests for information from outside agencies, turnaround time, and NEFSH patient data out
- 5.12.6. Ability to track requests for information from outside agencies from Medical Officer and patient info into NEFSH
- 5.12.7. Ability to meet HIPAA requirement for tracking mandated accounting of disclosures.
- 5.12.8. Ability to create letters and other notifications
- 5.12.9. Ability to create list of all information released without consent within the limits of imposed HIPAA

5.13. Medical Record Abstracting

- 5.13.1. Ability to abstract and record relevant, required data elements from the patient record
- 5.13.2. Ability to define abstracting worksheets
- 5.13.3. Identify standard worksheet provided
- 5.13.4. Ability for institution to create multiple worksheets (specialty or provider-specific)

5.14. Admission – Discharge – Transfer on-line functions:

- 5.14.1. Ability to create labels to patients based on primary physician, financial class, insurers, zip code, age, gender, account number, date of service, date of birth
- 5.14.2. Ability to display bad debt indicator when applicable when registering return patients
- 5.14.3. Ability to display Preferred Provider Organization authorization when applicable when registering patients

6. Business Office

6.1. Appointment Scheduling

- 6.1.1. Ability for on-line scheduling of appointments for patient services
- 6.1.2. Ability to schedule physicians and service
- 6.1.3. Ability to schedule activities/time out-of the office
- 6.1.4. Support entry of patient name and phone number, symptom, reason for exam, or expected procedure, referring physician, authorization number, appointment reason, comments
- 6.1.5. Support appointment 'templates' by individual physician or resource to meet specific needs:
 - 6.1.5.1. Data collected
 - 6.1.5.2. Time frames for appointment slots, intervals, btw, appt, etc.
- 6.1.6. Provide on-line graphic display of schedules and available slots
- 6.1.7. Display a pop-up calendar on demand
- 6.1.8. Ability to display more than one day's schedule at a time
- 6.1.9. Ability to schedule add-in or work-in patients (i.e. add a patient to the schedule without a time-slot or allow for more multiple appointment per time slot
- 6.1.10. Ability to schedule more than one patient at a time (i.e. for family appointments)
- 6.1.11. Automatically capture ID info for person scheduling appt
- 6.1.12. Track appointments by type
- 6.1.13. Ability to schedule new patients with a minimum amount of data
- 6.1.14. Ability to schedule recurring services for a patient with one entry (i.e. bi-monthly for 3 months)
- 6.1.15. Ability to find available appointment slot by next available appointment slot, within a specified data range, day of week, time of day, or length of appointment
- 6.1.16. Ability to add, cancel, or change an appointment within the same screen. Allow changes without having to re-enter data
- 6.1.17. Ability to promote bumped patients for rescheduling
- 6.1.18. Ability to reassign (i.e. move) appointments to another physician
- 6.1.19. Track and manage schedule changes including bumps, cancellations, and no-shows
- 6.1.20. Ability to 'wait-list' patients wanting to see their physicians when no appointments are available, so can be easily booked if time opens up
- 6.1.21. Support scheduling multiple service for a patient to be performed at multiple sites without conflicts
- 6.1.22. Ability to schedule two or more resources simultaneously
- 6.1.23. Provide set-up, maintenance level ability to control the number of appointments that can be booked per time slot
- 6.1.24. Support scheduling blocks of dates and times (with controls for limiting appointments) for specific procedures or services, physicians, and types of patients (i.e. capitated, testing/procedures)
- 6.1.25. Ability to control by appointment type when appointments are purged
- 6.1.26. Ability to print daily appointment lists with appointment info, account status, patient notes, and diagnosis printed by physician, office or location, type of appointment
- 6.1.27. Print appointment work lists
- 6.1.28. Ability to print routers, encounter forms, or fee slips and allow them to be sorted by date and time, service location, provider

- 6.1.29. Ability to include on the router or fee slip: the purpose of visit, diagnosis, and problems, guarantor, employer, insurance company, account status and aging, and delinquency messages
- 6.1.30. Ability to print customized routers for different insurance companies, types of visits, or provider
- 6.1.31. Print patient recall notices, letters, and/ or mailing labels:
 - 6.1.31.1. address, phone number
 - 6.1.31.2. reason
 - 6.1.31.3. date and time
 - 6.1.31.4. procedures
 - 6.1.31.5. office address
 - 6.1.31.6. provider
- 6.1.32. Ability to sort mailing paperwork by zip code
- 6.1.33. Ability to notify staff on-line when patients arrive for their appointment

6.2. Management Reports/Decision Support

6.2.1. General Requirements

- 6.2.1.1. Ability to produce a variety of standard reports for all applications including:
 - 6.2.1.1.1. Maintain a set of standard reports for ADT, billing, accounts receivable, banking, pharmacy and clinical treatment
 - 6.2.1.1.2. Allow user-defined reports to be added to the standard report group
- 6.2.1.2. Ability to create user-defined custom reports
- 6.2.1.3. Ability to generate statistical, management and ad hoc reports using any field in the database.
- 6.2.1.4. Ability to use standard interface capabilities for exporting data to a stand-alone database reporting system
- 6.2.1.5. Maintain a user-friendly report writing capability
- 6.2.1.6. Ability to write all data to data warehouse where reports can be processed without affecting real time system operation

6.2.2. Reporting and statistical reporting; Practice Analysis

- 6.2.2.1. Ability to provide reports on visit counts by physician/location/payor
- 6.2.2.2. Ability to provide reports on visits and revenue by practice and physician by revenue code, by month, YTD and prior years' comparative
- 6.2.2.3. Ability to provide reports on visits and revenue by practice and physician by financial class by month, YTD and prior years' comparative
- 6.2.2.4. Ability to provide reports on visits and revenue by practice and physician by charge code by month, YTD and prior years' comparative
- 6.2.2.5. Ability to provide reports on visits and revenue by practice and physician by ICD by month, YTD and prior years' comparative
- 6.2.2.6. Ability to provide analysis of activity by zip code and physician
- 6.2.2.7. Ability to provide revenue reports by procedure and by insurance type
- 6.2.2.8. Ability to print provide revenue trend reports providing side-by-side comparisons of user-defined time periods
- 6.2.2.9. Ability to provide revenue realization reports comparing actual fees charged to standard prices
- 6.2.2.10. Ability to provide realization reports with summary totals by:
 - 6.2.2.10.1. Office
 - 6.2.2.10.2. Insurance company, and PPO
 - 6.2.2.10.3. Procedure code
 - 6.2.2.10.4. Provider
 - 6.2.2.10.5. Area of practice or department
 - 6.2.2.10.6. Referral source
- 6.2.2.11. Ability to print production reports including Relative Value Unit info
- 6.2.2.12. Print referral trend summary report listing:
 - 6.2.2.12.1. Source
 - 6.2.2.12.2. Number
 - 6.2.2.12.3. Revenue
 - 6.2.2.12.4. MTD totals
 - 6.2.2.12.5. YTD totals
 - 6.2.2.12.6. Practice-to-date totals
- 6.2.2.13. Print referral reports summarized by:
 - 6.2.2.13.1. Type
 - 6.2.2.13.2. Procedures
 - 6.2.2.13.3. Office
- 6.2.2.14. Ability to provide JCAHO ORYX Report from Database
- 6.2.2.15. Automatic generation and submission of JCAHO ORYX reports

- 6.2.2.16. Ability to run reports to file, monitor or printer
- 6.2.2.17. Ability to export, open report data in Excel, Access and/or Word Processing (MS Office 2003)
- 6.2.2.18. Ability to migrate data to 'shadow' database in order to not negatively affect the product system when pulling data for aggregate views, reporting

6.2.3. Decision Support

- 6.2.3.1. Ability to provide standard clinical and business reports and data
- 6.2.3.2. Ability to provide statistical reporting based on admissions, discharges, transfers, Average Daily Census, highest Daily Census, lowest Daily Census, patient days, length of stays (hospital and unit), and legal statistics
- 6.2.3.3. Ability to provide statistical reporting based on population snapshot: race, sex, length of stay, Dx

6.3. Patient Billing/Procedure Entry

- 6.3.1. Family billing
- 6.3.2. Multiple financial accounts per patient
- 6.3.3. Support family accounts (i.e. guarantor, group) billing of patients, producing single statement for related accounts *in a manner that insures HIPAA-compliance*
- 6.3.4. Print patient statements with postnet bar coding (i.e. for low bulk mailing rates)

6.4. Payment Posting

- 6.4.1. Print deposit slips for checks and credit card receipts

7. Clinical

7.1. General Requirements

- 7.1.1. Ability to do alert notification by:
 - 7.1.1.1. Voice mail
 - 7.1.1.2. E-mail
 - 7.1.1.3. Fax
 - 7.1.1.4. Alphanumeric pagers
 - 7.1.1.5. Allow those reports created as ad hoc requests to be retained as new 'standard reports' for the department that created them
 - 7.1.1.6. Ability to provide a non-technical report-writer for all clinical applications

7.2. Clinical Alerts

- 7.2.1. Provide interactive clinical-rules-based alerts and reminders for clinicians from data in documentation (including MAR), orders, results reporting applications
- 7.2.2. Provide core set of rules (with ability to modify) to use as basis for developing rules for order entry decision support
- 7.2.3. Ability to notify the end-user of a potential adverse event with override capability
- 7.2.4. Ability to identify adverse patient events (i.e., allergic or adverse medication reaction, ADE, needle sticks, falls)
- 7.2.5. Ability to notify numerous clinicians with single event as indicated - i.e. notify Risk Management Office regarding 'Falls'
- 7.2.6. Provide core set of rules (with ability to modify) to use as basis for developing rules for order entry decision support
- 7.2.7. Ability to include secondary or "corollary" orders in the rules (i.e., recommending an order for drug levels when the user orders a medication for which the patient's blood level should be monitored to titrate dosing)
- 7.2.8. Ability to identify and filter nuisance, constipation, and other types of alerts
- 7.2.9. Provide for a comprehensive drug-alert notice:
 - 7.2.9.1. Patient identification and demographics (i.e., MRN, patient name, age, height, weight, etc.)
 - 7.2.9.2. Medication order information (i.e., order number, medication name, amount, route, frequency, and medication information order information for both contraindicated medication orders)
 - 7.2.9.3. New recommended medication dose
 - 7.2.9.4. Relevant lab results
 - 7.2.9.5. Alert generating application
 - 7.2.9.6. Date and time stamp when the alert was generated
 - 7.2.9.7. Priority of the alert
- 7.2.10. Ability to provide various levels of decision support:
 - 7.2.10.1. Guided choices that include templates with, for example, defaults and allowable values, and standard order sets.
 - 7.2.10.2. Messages that provide critiques during the ordering process and advice on alternatives, thus clarifying the rationale behind the recommendation (i.e., providing appropriate dose based on weight and renal status as the default value)

- 7.2.10.3. Order sets and guided choices tailored for the individual patient's diagnosis and condition but also including possible variations and conditions when appropriate.
- 7.2.11. For Pharmacy orders or Prescription writing:
 - 7.2.11.1. Provide an alert to display allergies on file when medications are ordered.
 - 7.2.11.2. Ability to link to external reference/ expert databases (i.e., PDR, poisondex)
 - 7.2.11.3. Provide automated link with pharmacy system for drug calculations, allergies, drug-drug, drug-class, etc. checks per patient medication profile information for a specific patient
 - 7.2.11.4. Provide drug-LAB checks for applicable med titers and other results when attempting to order specific meds
 - 7.2.11.5. Ability to check globally (in advance of patient-specific queries) with expert systems for research, planning purposes for medications, diagnoses, treatments, etc.
- 7.2.12. Provide an interactive diagnostic assistance tool
- 7.2.13. Ability to compare clinical indicators to industry norms
- 7.2.14. Ability to link to Order Entry/Results Reporting, CPOE, Clinical Documentation (structured data findings from Assessments, MARs, etc.) to test for potential or real notable events
- 7.2.15. Ability to notify caregivers when designated events occur: LINK ORDERS, RESULTS, and DOCUMENTATION - specific med order w/ change in VS, affect, and blood levels from Lab tests
 - 7.2.15.1. Annual PPD's on long term patients
 - 7.2.15.2. Greater than 5% weight change
 - 7.2.15.3. Use of Foley catheters, restraints, antipsychotic drugs
 - 7.2.15.4. Skin ulcers / pressure sores
 - 7.2.15.5. Hospital defined protocols (i.e. certain types of assessments at various milestones or time intervals, dressing changes).
- 7.2.16. Ability to identify yearly assessments due on long-term Patients
- 7.3. Patient Management Tools**
- 7.3.1. Ability to maintain an Patient Profile including all active orders for the patient, including demographic information, interdisciplinary team notes, lab orders, nursing orders, treatment orders, preps, scheduled procedures and medications during the length of stay
- 7.3.2. Ability to print on-demand a list of interventions for all patients on a unit, or for an individual patient in format that is user-defined
- 7.3.3. Ability to update/print additional patient care data worksheets and lists, including:
 - 7.3.3.1. Unit task work list
 - 7.3.3.2. Patient ancillary treatments and orders to be performed by time or by department, or completed last 24-48 hours
 - 7.3.3.3. Medications to be administered, or given in last 24-48 hours
- 7.3.4. Ability to easily review and print all orders, treatments, interventions, etc. for a patient whether "active" or "complete"
- 7.3.5. Provide flexible format that is user-defined
- 7.3.6. Ability to produce a patient itinerary for the day
- 7.3.7. Ability to print trends in clinical data
- 7.3.8. Ability to track consultations, appointments, etc.
- 7.3.9. Ability for the system to automatically flag patients on admission who are at risk (age, diagnosis, etc.)
- 7.3.10. Ability to define and print hospital forms
- 7.3.11. Ability to access all necessary patient information across departments (allergies, assessment information, etc.)
- 7.3.12. Ability to record and display patient physical location
- 7.3.13. Ease of access on main Nursing/Clinical Desktop to ADT, Enterprise Scheduling, and Order functions
- 7.3.14. Ability to update physician "Patient List"
- 7.3.15. Ability to provide summary report of unit statistics (census, acuity, patient mix)
- 7.3.16. Ability to provide summary reports of nursing activity completed for quality of care audits
- 7.3.17. Ability to provide variance reports based on care documentation and daily activity requirements
- 7.3.18. Ability to access and report on all necessary patient information across departments (allergies, assessment information, etc.).
- 7.3.19. The system generates work lists by provider:
 - 7.3.19.1. Physician/student
 - 7.3.19.2. RN/PNA
 - 7.3.19.3. Therapist
 - 7.3.19.4. Social Worker
 - 7.3.19.5. Dietician
 - 7.3.19.6. Other clinicians as defined

- 7.3.20. The system generates work lists that contain all scheduled interventions including, but not limited to:
 - 7.3.20.1. Medications
 - 7.3.20.2. Treatments
 - 7.3.20.3. Special procedures
 - 7.3.20.4. Tests
 - 7.3.20.5. Diet
 - 7.3.20.6. Advanced directives
 - 7.3.20.7. Therapies and activities
- 7.3.21. The system allows for creation of work lists by assignment
- 7.3.22. The system automatically updates the work list on-line to reflect the changing status of physician and nursing orders and admitting/demographic information changes
- 7.3.23. Work list and exception lists can be produced at user defined intervals and on-demand
- 7.3.24. New orders are flagged on the work lists
- 7.3.25. Outstanding orders have a unique flag on the work lists
- 7.3.26. The system produces hospital-defined care provider census worksheets. The hospital can determine:
 - 7.3.26.1. Sorts
 - 7.3.26.2. Team designation
 - 7.3.26.3. Generation times
 - 7.3.26.4. Format
 - 7.3.26.5. Content

7.4. Order Placement

- 7.4.1. Ability to notify users automatically that a consent form is needed for a particular procedure ordered
- 7.4.2. Provide for definition of Prep Instructions to automatically print (or prompted for) at time of order for associated test
- 7.4.3. Ability to enter "if/and/then" orders and appropriately respond to them
- 7.4.4. Ability to send an electronic message to nursing/pharmacy
- 7.4.5. Ability to automatically charge for services at the time the service is requested, or completed, at the user's option

7.5. Lab Results Reporting

- 7.5.1. Must be able to populate data from CLINLAB system
- 7.5.2. Provide for online results reporting with real time access
- 7.5.3. Ability to have stat results immediately transmitted to current patient location (user-definable receiving locations nurse station PC/ printer, assigned caregiver, etc. (with clinical alert system))
- 7.5.4. Ability to enter critical and panic-level results with designated user and/or output location. (i.e. Blood sugars, O2 saturation, UA, etc.)
- 7.5.5. Ability to enter stat results with designated user and/or output location
- 7.5.6. Ability to access and print cumulative reports for the entire hospital-based or ambulatory stay in graphic format including trending
- 7.5.7. Ability to report results from previous inpatient or outpatient episode
- 7.5.8. Provide for complete results reporting communications from various departmental systems and flag abnormalities
- 7.5.9. Ability to report outstanding orders for which no result has been received
- 7.5.10. Ability to print a result in multiple locations (i.e. nursing unit, physician office, etc.)
- 7.5.11. Ability to report results to an identified location
- 7.5.12. Ability to have results reported in chartable form (including electronic signature)
- 7.5.13. Ability to auto-FAX and/or print in referring offices and other remote sites
- 7.5.14. Ability to provide automated interface for point of care lab devices for unit-based testing with the ancillary department

7.6. Multi-Disciplinary Treatment Plans

- 7.6.1. Ability to interface computer based training to Learning Management System
- 7.6.2. Allows for reports to be defined by users at their workstation, stored for future use, and changes as needed by:
 - 7.6.2.1. ICD9 codes
 - 7.6.2.2. CPT codes
 - 7.6.2.3. DSM IV codes
 - 7.6.2.4. Time frame for report

7.7. Patient Classification / Acuity Support

- 7.7.1. Ability to automatically link patient care documentation and acuity system to calculate projected staffing needs.

7.8. Management Reporting

- 7.8.1. Ability to provide and maintain computer system training records to support user knowledge of system utilization and functional capabilities
- 7.8.2. Allow the user to define reportable incidents such as adverse drug reactions for the purpose of collecting aggregate patient information

8. Pharmacy

8.1. General Requirements

- 8.1.1. Support interface to MEDICS pharmacy system
- 8.1.2. Ability for nursing to access drug information database software (Gold standard, etc)
- 8.1.3. Productivity reporting by staff class, by medication class, by shift
- 8.1.4. Provide ad hoc workload reporting statistics:
 - 8.1.4.1. Collected to support work load productivity
 - 8.1.4.2. By nursing station and/or user
 - 8.1.4.3. Include clinical workload units

8.2. Pharmacy Profiles

- 8.2.1. Ability to display the entire patient profile at one screen. Ability to differentiate each med type, (xxxxx,yyyy) for example, by color (controlled=blue, meds=white, etc.)

8.3. Drug / Drug Interactions

- 8.3.1. Ability to provide for the following interaction tests:
 - 8.3.1.1. Drug to lab
 - 8.3.1.2. Drug to protocol compliance
 - 8.3.1.3. Minimum and maximum doses per body weight/surface area
 - 8.3.1.4. Maximum fluid intake

8.4. Medication Administration Record

- 8.4.1. Ability to provide generic and trade name to be listed on the medication administration record

8.5. Medications Charting Support

- 8.5.1. Ability to chart medication administration online with an interface to a pharmacy application
- 8.5.2. Ability to support online nurse order entry for pharmacy orders, with verification by Pharmacy
- 8.5.3. Ability to display both generic and brand names on MAR and on-line (toggle)
- 8.5.4. Ability to identify and flag (alert) key missing patient clinical information and print on a report. Ability for user to define sorts (i.e., diet, weight, allergies)
- 8.5.5. Ability to produce a quality management report which identifies missing or incomplete assessments within user-defined time frames
- 8.5.6. Ability to provide for typical nursing mathematical calculations to be available on-line (i.e.. drug calculations, metric conversion)
- 8.5.7. Allows template development, save and edit for future use
- 8.5.8. Ability to allow the user to define reportable incidents such as adverse drug reactions for the purpose of collecting aggregate patient information
- 8.5.9. Ability for current med list interface from any facility/clinic
- 8.5.10. Ability to access list and select those that are still pertinent for doctor to order continuation during hospitalization
- 8.5.11. Ability to generate discharge meds list of medications patient will be taking home, with option to print:
 - 8.5.11.1. Patient version
 - 8.5.11.2. Professional version
 - 8.5.11.3. Professional electronic version available to physician office (or hospital if comes from clinic)

8.6. Transcription

- 8.6.1. Provide capability to access transcribed report via local or remote workstations to review, edit, or approve document
- 8.6.2. Support unlimited number of facilities
- 8.6.3. Provide global search and replace capabilities
- 8.6.4. Ability to automatically timestamp transcription start and stop times on both dictation and transcription
- 8.6.5. Provide the capability to request a "time out" during transcription
- 8.6.6. Ability to calculate report turnaround times on both dictation and transcription
- 8.6.7. Ability to stop in the middle of a report and place it on hold on both dictation and transcription
- 8.6.8. Ability to start a new report in the middle of a report "on-hold" session on both dictation and transcription
- 8.6.9. Ability to return to the report "on hold" right where the transcriptionist left off on both dictation and transcription
- 8.6.10. Provide access to reports that have already been transcribed

- 8.6.11. Ability to identify carbon copy distribution "on the fly" with minimal keystrokes, without having to have entered distribution at the beginning or end of the report
- 8.6.12. Ability to have automatic carbons for certain user-defined work types
- 8.6.13. Ability to print multiple copies of the report at different locations
- 8.6.14. Ability to provide an automatic capability to identify the number of reports to print and a single keystroke capability to overwrite the default
- 8.6.15. Ability to automatically mark with textual prompts to print on the report (i.e., chart copy, original, each individual carbon name, etc.)
- 8.6.16. Provide access to a physician master code file for ease of input
- 8.6.17. Ability for the doctor master file to contain a field for method for carbon copies (fax, print, e-mail) and a field for fax number or IP address for the printer
- 8.6.18. Provide visual HELP support.
- 8.6.19. Integrate with HIMSS/ADT for demographic information for index of data between dictation/transcription
- 8.6.20. Ability to select fields for display to the transcriptionist and the documents
- 8.6.21. Ability to flag report that requires supervisory review
- 8.6.22. Ability to support remote transcription and dictation
- 8.6.23. Provide the capability to import text documents
- 8.6.24. Provide capability to change work types in a real-time environment
- 8.6.25. Ability to sign reports electronically
- 8.6.26. Ability to provide for co-signature electronic capability
- 8.6.27. Provide automatic report formatting based upon dictation worktype/author
- 8.6.28. Provide user defined report headings and footers
- 8.6.29. Provide a comprehensive medical dictionary and other on-line references that crosses medical disciplines/services
- 8.6.30. Provide a comprehensive English word dictionary
- 8.6.31. Ability to support user defined mnemonics (abbreviations) by transcriptionist or for group to speed routine narrative typing with minimal keystroke input
- 8.6.32. Ability to use Microsoft Word (industry standard) for transcribing reports
- 8.6.33. Ability to have sort by carbon copy name
- 8.6.34. Provide the ability to place reports on hold in a print queue
- 8.6.35. Provide the capability to change the priority of a specific print job
- 8.6.36. Ability to create user defined macros to minimize keystrokes
- 8.6.37. Provide daily transcriptionist activity logs and productivity reports
- 8.6.38. Provide dictated/transcribed report statistics
- 8.6.39. Ability to provide on-line, real time access to up-to-date daily activity
- 8.6.40. Ability to produce report turnaround summaries identifying those reports that meet customer specified turnaround intervals
- 8.6.41. Provide standard management report package, with ad hoc reporting capabilities
- 8.6.42. Provide user defined productivity measurements
- 8.6.43. Provide user defined report turnaround calculations
- 8.6.44. Ability for transcribed reports to be written to a database, in HL7 format for upload or export
- 8.6.45. Ability for ad-hoc reporting on all fields in the database and ability to export data to Microsoft Excel, both on demand and automatically
- 8.6.46. Ability to segregate work for voice and text by entity
- 8.6.47. Capable of operating across existing enterprise network, and/or within its own local area network, to include full support for users external to the WAN/LAN environment
- 8.6.48. Provide complete support and flexible security for multiple site and multiple department installations
- 8.6.49. Ability for backup processes to be automatically started as a scheduled event and provide for on-line, automatic backups of both data and voice files
- 8.6.50. Provide a transaction log, allowing the system to rebuild the database in case of media failure
- 8.6.51. Provide a graphical user interface with WYSIWYG medical transcription and word processing application that is fully navigable by keyboard or mouse
- 8.6.52. Ability to store patient demographic, encounter and orders data for the purpose of report auto-fill and transcriptionist inquiry
- 8.6.53. Provide the capability (in real time) or batch to upload transcribed reports and associated data to the HIS, where they can be processed as the facility deems appropriate
- 8.6.54. System administrator has ability to define an unlimited number of user groups with appropriate system privileges and security
- 8.6.55. Ability for each workgroup to have its own unique set of privileges
- 8.6.56. Ability for the system to support an unlimited number of report types

- 8.6.57. Provide institution-defined global report templates
- 8.6.58. Ability to provide a quick and easy way for the user to modify global template to define provider-specific report templates
- 8.6.59. Templates must accommodate facility logos, letterhead and other graphic objects as part of the template definition
- 8.6.60. Allow real-time access to dictation data from any workstation
- 8.6.61. The transcription software must provide a user customizable data entry screen for automatic merge into reports
- 8.6.62. All database tables must provide search and sort features, and permit easy on-line editing
- 8.6.63. Ability for the system to incorporate a memory resident computer shorthand feature. The abbreviations must be defined by each individual transcriptionist. The abbreviated phrase must automatically expand at the touch of the space or punctuation keys
- 8.6.64. Provide one-touch spell check, save, exit, and queue for faxing and printing from word processor
- 8.6.65. Allow the user to define custom dictionary
- 8.6.66. Provide the capability of magnifying and reducing the on-screen size of the viewed report
- 8.6.67. Must provide the capability to view an entire page in one screen
- 8.6.68. Provide a windowing functionality for viewing of reports (the capability of viewing multiple reports each with its own unique set of variables at the same time)
- 8.6.69. Ability for the multiple document capability to have a "time-out feature" in order to accurately track document statistics
- 8.6.70. Provide a single keystroke to place a document on hold in the event of an interruption. A similar keystroke must be employed to retrieve a document that has been placed on hold
- 8.6.71. End of document information to automatically insert from the HMS, dictation, and transcription systems. Must include the signature of the dictator, transcriptionist's initials, and the date/time of dictation and transcription
- 8.6.72. Ability to work off-line, print, and upload results if network system is down
- 8.6.73. Ability for remote transcriptionist to connect with the central voice and text system by WAN or Internet connection
- 8.6.74. Provide all the system features to remote transcriptionists as on-site workers
- 8.6.75. Provide for the support of electronic signature

8.7. Electronic Signature

- 8.7.1. Provide electronic signature capabilities to allow authorized physicians to view and sign electronically
- 8.7.2. Ability for system to offer password protection for authentication purposes
- 8.7.3. Ability to present the user with a list of documents awaiting authentication, upon logging into electronic signature
- 8.7.4. Ability to display dictation anomalies in a document being presented for electronic signature
- 8.7.5. Ability to allow the user to edit the document rather than dictate changes
- 8.7.6. Provide an option of requiring the user to enter a password to confirm each authentication
- 8.7.7. Ability to "sign all" after they have reviewed the reports eliminating the individual password authentication
- 8.7.8. Ability to not allow edit to documents that have been authenticated
- 8.7.9. Ability to create an addendum to accommodate necessary changes to authenticated documents. (this addendum must attach to the report and order number)
- 8.7.10. Ability for dictator / transcriptionists communication and still be able to sign off report
- 8.7.11. Ability for transcriptionist to view report they typed and that the dictator made corrections. (use for QA purposes)

8.8. Document Distribution

- 8.8.1. Ability to upload the document to the Clinical Data Repository
- 8.8.2. Ability to automatically route completed reports to multiple locations (via fax, remote print, or e-mail)
- 8.8.3. Ability to distribute a document for one physician to multiple sites (i.e., office, billing, etc).
- 8.8.4. Provide full integration with network fax server:
- 8.8.5. Faxed reports must transmit identical information to printed reports. The fonts, word and line spacing, format, etc. must be identical
- 8.8.6. Provide automatic default fax locations and provide a single keystroke to modify fax locations
- 8.8.7. Provide a log which details successful or unsuccessful fax attempts
- 8.8.8. Provide full integration with network e-mail
- 8.8.9. Provide full integration with network printers
- 8.8.10. Ability to resubmit all fax fails with one keystroke
- 8.8.11. Ability to set system to fax all reports to the same number in a batch vs. one at a time

8.9. Transcription Management/Productivity

- 8.9.1. Ability to view transcription line count:

- 8.9.1.1. By document
- 8.9.1.2. By transcriptionist
- 8.9.1.3. Total by day
- 8.9.2. Ability for the line count to distinguish and properly credit report edits (credit only for edits and not the entire report).
- 8.9.3. Ability to track "down time" in the event the transcriptionist is interrupted
- 8.9.4. Ability to collect the reason for the down time and automatically create a log of all down time inclusive of customized menu for transcriptionists to select from
- 8.9.5. Ability to automatically calculate incentive pay at various levels, include daily totals, weekly totals, monthly totals, as well as user defined periods
- 8.9.6. Ability to produce graphical reports for productivity reporting, custom reports, and ad-hoc reports
- 8.9.7. Ability to report what should have faxed or printed from the transcription systems and to whom for QA purposes

9. Medical Records Document Imaging

9.1. User Security and Access

- 9.1.1. Ability to jointly define user/terminal location 'rules' so that appropriate access is defined at the institution
- 9.1.2. Ability to allow authorized remote access
- 9.1.3. Ability to support both internal and external requests to view the record
- 9.1.4. Ability to set up security to limit authorized viewing on select patients for defined user classes/locations (partial patients)
- 9.1.5. Ability to set up security to view only designated portions of the patient record for defined user classes (Partial Records)
- 9.1.6. Ability to limit print capabilities by user location as defined by the institution
- 9.1.7. Allow distributed printing
- 9.1.8. Ability to send document/chart to FAX
- 9.1.9. All controls/access must be HIPAA compliant

9.2. Viewing the Chart

- 9.2.1. Ability to define chart sequence for viewing of the patient record
- 9.2.2. Ability to define an institution-wide 'default'
- 9.2.3. Ability to define user class-specific preferences
- 9.2.4. Ability to define individual user-specific preferences
- 9.2.5. Ability to 'bookmark' desired patient records, key sections, forms by user
- 9.2.6. Provide tools to manipulate document views by user such as 'zoom', 'rotate', 'pan', etc.

9.3. Workflow Capability

- 9.3.1. On-line Deficiency Management
 - 9.3.1.1. Provide support on-line deficiency management capability
 - 9.3.1.2. Provide ability to automatically/electronically analyze records, including tools to:
 - 9.3.1.3. Flags deficiencies to a specific provider
 - 9.3.1.4. Attach notes/instruction to the provider
 - 9.3.1.5. Allow for on-line physician completion of deficiencies
 - 9.3.1.6. Provide electronic signature capability compliant w/State of Florida law
- 9.3.2. Release of Information
 - 9.3.2.1. Capability to support all release of information procedures including Viewing/printing/FAX of authorized patient records, forms, etc.
 - 9.3.2.2. Ability to create/manage log of all 'released' records
 - 9.3.2.3. Ability to create letters and other notifications

9.4. Reporting

- 9.4.1. Ability to produce a variety of standard reports
- 9.4.2. Ability for ad-hoc reporting