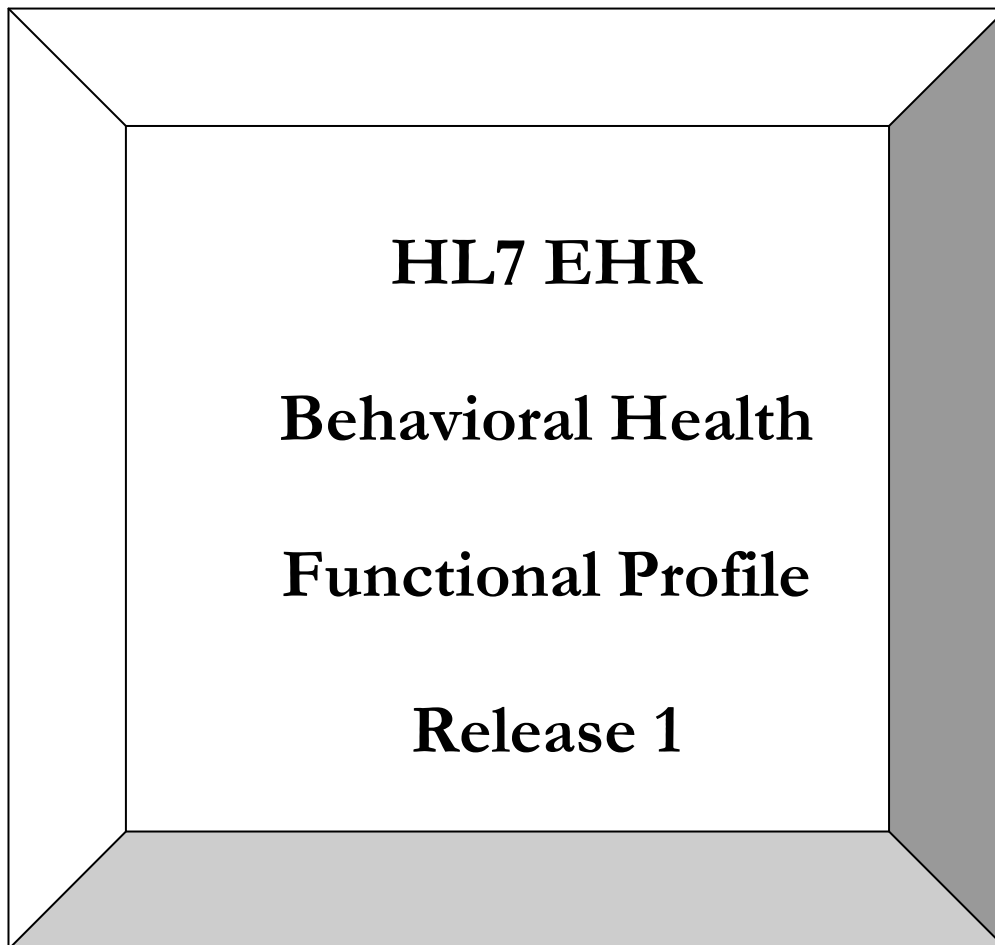




**ANSI/HL7 EHR BHFP, R1-2008**  
**December 10, 2008**  
The Health Level Seven  
EHR Behavioral Health Functional Profile, Release 1



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## **HL7 EHR Behavioral Health Functional Profile, Release 1**

**December 2008**

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## Preface

### *i. Notes to Readers*

Release 1 of the Behavioral Health Functional Profile, based on the HL7 EHR-S Functional Model Release 1, February 2007, has been registered with the HL7 EHR Work Group and successfully passed HL7 committee level balloting in January 2008. This profile is currently being balloted at the HL7 normative level. The intention is for this functional profile to become an ANSI approved normative standard.

### *ii. Acknowledgements*

The Behavioral Health Profile Working Group was sponsored and facilitated by:

- The Center for Mental Health Services and
- The Center for Substance Abuse Treatment
- Substance Abuse and Mental Health Services Administration
- U.S. Department of Health and Human Services

The HL7 EHR Work Group and these organizations are indebted to the following workgroup facilitators and members for their contributions towards the Behavioral Health domain and the materials presented in this profile.

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### ***iii. Changes from Previous Release***

The Conformance Clause was modified to address concerns about inconsistencies in timing and priority across functions and criteria. Changes to Profile functions and criteria were not significant and were mostly of an editorial nature.

## Behavioral Health Functional Profile: Introduction

In May, 2006, a letter signed by the directors of the Center for Mental Health Services, A. Kathryn Power, and the Center for Substance Abuse Treatment, H. Westley Clark, M.D., J.D. was distributed to more than one hundred thirty behavioral health professional and institutional providers, professional associations, provider trade associations, state and local mental health and substance abuse treatment agencies, and consumer groups. The letter solicited volunteers to participate in a lengthy series of conference calls that would discuss the HL7 Electronic Health Record System (EHR-S) Functional Model, function by function, and conformance criterion by conformance criterion with the intent of determining its importance and utility for a behavioral health oriented EHR.

More than sixty-five volunteers came forward to contribute to this profile building endeavor. These behavioral health stakeholders included representatives from a broad range of professional and trade associations; county, state and federal agencies; consumer and family member advocacy groups; and other interested parties. Each volunteer received a number of documents preparatory to an extensive series of two, two-hour per week conference calls that occurred between July, 2006 and August, 2007. These documents included a copy of the EHR-S Functional Model, a ballot spreadsheet for the entire functional model, an introductory paper explaining what was to be accomplished, and the procedures we would be following.

The first two conference calls stressed two themes. The first was one of perspective, namely that we would be working on defining the functional capabilities a BH EHR-S should provide, not content, not architecture, not platform, and not what users were required to do. The second theme was that this would be a consensus driven undertaking. To this end the group adopted the criterion that nothing would be adopted without a minimum two-thirds majority approving it. Once these issues were clarified, all participants were requested to complete the EHR-S functional model ballots that had been distributed.

All of the ballots the BH Profile Group used during the construction of the profile used the same two-layer spreadsheet format. The top layer replicated the information infrastructure (IN), support services (S), and the direct care (D) functions and conformance criteria verbatim. The second layer contained abbreviated versions of the functions and criteria plus columns containing "Essential Now", "Essential Future", "Optional", and "Reject" radio buttons for functions and "SHALL", "SHOULD", "MAY", and "REJECT" radio buttons for conformance criteria, plus columns for comments and suggested restatements.

Results from all returned ballots were uploaded to a custom crafted web site designed by the Center for Mental Health Services' Decision Support 2000+ project team, <http://WWW.DS2KPlus.ORG>. This facilitated the reconciliation conference calls. "Reconciliation" in this context meant that each comment, suggested rewording, and concern were explained by its author, discussed and tentatively tweaked until consensus was attained. In rare instances voice votes were taken and if at least two-thirds concurred, the supermajority view was adopted. For each function and each criterion, a summary of votes appeared followed by a table which showed each voter's name, vote for that function or criterion, and comments. The web site was kept up essentially 24x7 and participants were welcome to change their votes at any time until a mutually agreed to final date and time was reached. Indeed, one could watch vote totals and individual votes change in real time during some discussions.

The BH Profile Group went through three rounds of balloting and reconciliation. In part, the additional reviews were necessary to discuss changes in the basic HL7 EHR-S model that were adopted after the BH Profile Group had begun its work. The additional reviews also were conducted so revisions made by the relatively small group of participants on some calls could be reviewed and voted upon by the larger working group. This iterative process mirrored the one used by HL7 to ensure broad participation and thereby meet the process requirements for this type of standards development. Every comment, positive or negative, from every participant was discussed and resolved.



At a minimum, this profile provides a shopping list of capabilities a behavioral health provider might consider when selecting an electronic health record system.

## **1 Organization (Reference)**

This functional profile represents the best efforts of a great many behavioral health stakeholders to derive from the HL7 EHR-S Functional Model the capabilities that are relevant for electronic health record systems in behavioral health settings. Each function was rated according to whether it was considered essential to BH EHR-s now, essential in the future when certain conditions will make it more feasible, optional now, or optional in the future when certain conditions will make it more feasible. In addition to a conformance clause section, the profile is organized around the same three sections as the functional model, namely:

- Direct Care Functions and associated conformance criteria dealing with the provision of care to individual patients and patient groups.
- Supportive Functions and associated conformance criteria dealing with activities that do not directly impact the care received by patients but related functions that fulfill administrative and financial requirements and provide facilities to facilitate the use of clinical data for research, public health, and quality assessment.
- Information Infrastructure Functions and associated conformance criteria dealing with capabilities necessary for the reliable, secure computing and the management of features needed to provide interoperability with other automated systems.

Although this profile describes the capabilities of “a system” it does not require that all functions must be provided by one computer program. Indeed, it is left open whether an integrated set of programs from one source or from different vendors, might be used to provide the spectrum of capabilities described.

## **2 Conformance Clause (Normative)**

This profile is based upon the HL7 EHR-S Functional Model, Release 1, February, 2007 available at <http://www.hl7.org/ehr> and incorporates the model's conformance chapter here by reference with a few extensions as described below.

For each function, the behavioral health profile group assigned a priority rating with consideration of whether the function was essential across most types of behavioral health settings or only a few, and whether the function was feasible to provide now or only after some future condition was met (e.g. time for development, passage of other supporting standards). The group rated the functions according to the four priority categories listed below. The first three were provided by HL7 and further defined by the profile group, and the last category was added by the profile group with approval by HL7 and NIST:

- Essential Now – EHR functions considered relevant and essential for most types of behavioral health settings and feasible to offer now. Functions with this rating must be present in a BH EHR-S for it to be considered in conformance with the profile.
- Essential Future – EHR functions considered relevant for most behavioral health settings but not feasible to offer until certain specified conditions are met. Typically, the future conditions are described in units of years from the time this profile is released. In other instances, the future conditions are described in terms of events such as the adoption of an ANSI standard dealing with a specific issue.