

Description Paper (Draft)

IHS Behavioral Health System Integration Initiative

Definition, Functional:

Behavioral Health is the field dedicated to promoting a philosophy of health that stresses individual responsibility and the application of behavioral and biomedical science knowledge and techniques to the maintenance of health and the prevention of illness and dysfunction by a variety of self-initiated individual or shared activities (Matarazzo, 1980). For the purpose of the IHS initiative, Behavioral Health is encompassed by three primary categories: Alcohol/Substance Abuse, Mental Health, and Social Services.

Definition, Automated Application:

Provides Behavioral Health providers the ability to electronically document, retrieve, and track relevant behavioral health patient encounter data, including, but not limited to, demographics, family history, visit data, problem lists, referral and follow-up data, RX history, and laboratory results. An automated Behavioral Health application enhances, and in some environments, eliminates the need for paper-based approaches by enabling cost-containment, quality-assurance applications, and electronic notification services.

General Behavioral Health Topics:

- Alcohol and Alcohol Related Issues
- Drug Abuse
- Anxiety, Fear or Phobia
- Attention Deficit Disorder
- Bipolar Disorder – Manic Depression
- Compulsive Gambling
- Obsessive Compulsive Disorder
- Depression
- Eating Disorders (i.e., Anorexia Nervosa, Bulimia Nervosa, etc.)
- Elder Abuse and Neglect
- Adolescent Drug and Alcohol Abuse
- Post Traumatic Stress Disorder
- Schizophrenia
- Seasonal Affective Disorder
- Stress
- Suicide
- Domestic Violence
- Psychological Abuse
- Co-dependency
- Mental Illness

Behavioral Health Categories:

Alcohol/Substance Abuse:

Defined as: A destructive pattern of substance use leading to clinically significant (social, occupational, medical) impairment or distresses over a sustained 12-month period.

Substances include alcohol, amphetamines, anabolic steroids, caffeine, cocaine (crack), hallucinogens, heroin, hypnotics/sedatives, inhalants, marijuana, morphine, and prescription drugs.

Symptoms: Need for significant increased amounts of the substance to achieve intoxication, or significant or diminished effect with continued use of the same amount of the substance.

The individual suffers withdrawal symptoms within several hours to a few days after a reduction in the amount of the substance taken over a prolonged period of time. Symptoms include:

- Sweating
- Hand/body tremors
- Nausea or vomiting
- Agitation
- Insomnia
- Anxiety
- Hallucinations or illusions
- Seizures

The individual tries to cut down or quit taking the substance, but can't.

Treatment: Drug treatment; Support Groups; Intervention and Behavioral Treatments; Public Health Measures

Mental Health:

Defined as: The balance between all aspects of life – social, physical, spiritual, and emotional. It impacts on how individuals manage their surroundings and make choices.

An individual's state of mental health is a reflection of how one feels about oneself, about others, and about how one is able to meet the demands of life in general.

An individual's mental health is jeopardized by the presence of mental disorders, each with its unique symptoms and treatments.

Mental Disorder Categories:

- Addictive Disorders
- Adjustment Disorders
- Anxiety Disorders
- Childhood Disorders

**IHS Behavioral Health Integrated Application Project
Requirements Meeting, June 11-13, 2002
Orientation Paper**

Purpose

The purpose of this paper is to provide designated IHS Behavioral Health Subject Matter Experts with a high-level view of the Behavioral Health Integrated Application project, the meeting objectives, and the requirements identification and validation process in preparation for the June 11-13 meeting.

The objectives of this meeting are:

1. Identification of data items for documentation, retrieval and tracking of Behavioral Health patient encounters.
2. Documentation of business rules associated with Behavioral Health patient encounters.
3. Identification of the logical order of Requirements for application design
4. Prioritization of requirements.

Background

IHS does not currently have an integrated application that provides a full range of functions for all aspects of behavioral health disciplines, i.e., social work, alcohol and substance abuse, psychology, psychiatry, regional treatment centers, etc. The Behavioral Health integrated application project will identify and document updated functional and technical requirements necessary for an integrated information management system to enhance patient identification and tracking, treatment plans, evaluation of services, and improve third party reimbursement. Activities will include modeling and evaluation existing RPMS and COTS applications and developing an interim solution.

The overall objective of this project is to provide the Indian Health Service with requirements for an integrated Behavioral Health application. It is commonly accepted that the more time spent in customer (user) analysis directly increases the effectiveness of the resulting application. Throughout the requirements elicitation process, the contractor team will engage end-user subject matter experts for guidance, and validation/acceptance of requirements documentation.

Role of Subject Matter Experts

Determining requirements is often a complex process of identifying, discussing, and documenting “real world” processes and business needs. Far too often, software fails to live up to the expectations of the user community because the users were not involved in the early stages of the development process. As a subject matter expert selected to represent IHS Behavioral Health, you will play a critical role towards ensuring the needs of your individual subject area are addressed.

Requirements Determination

We will use well-established techniques to identify and document user requirements for the Behavioral Health integrated application. Each subject matter expert is assigned to a group based on area of concentration (Alcohol/Substance Abuse, Mental Health, Social

Services). Each group will be provided with an initial set of draft information and functional requirements documents for review, validation, and update. If conflicting requirements present themselves between the groups, follow-up discussions will be scheduled for resolution.

Requirements Elicitation Tools:

Description Paper: This paper is used by the Requirements Analysis team members to educate themselves on the Behavioral Health domain. The paper includes generally accepted definitions and terms for the various Behavioral Health categories. Subject Matter Experts will be asked to validate/update this paper as necessary.

Scenarios: Scenarios are narratives that describe the business process and interaction between a Behavioral Health Provider and a patient. The scenarios serve as an initial baseline for the analysis staff to understand common business practices and requirements. The scenarios developed to-date are included as an attachment

Gap Analysis Table: The gap analysis table lists all necessary data items, including currently collected data, and “wish list” data. The table will be used to determine the final set of data needed for retrieval, documentation, and tracking of Behavioral Health patient encounters for the integrated solution.

Access Control Level Table: This table represents the types of Behavioral Health user roles (Psychologists, Counselors, Administrative Assistants, etc.), and is used as a guideline to determining the access level of each user type.

Use Cases: A use case is an illustration of a single transaction between a user and an information system. It is structured to provide step-by-step detail of how to get from point A to point B. In theory, each step in a use case can be converted to a user requirement. Further explanation of use cases and how they will be used in this project will be forthcoming at the meeting.

Screen Design Mock-ups: Time permitting, draft screen designs for the integrated solution will be presented for review and update by subject matter experts. This exercise serves to document the logical presentation of data and requirements for the integrated application.

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