



Standard Guide for Properties of a Universal Healthcare Identifier (UHID)¹

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1. Scope

1.1 This guide covers a set of requirements outlining the properties of a national system creating a universal health care identifier (UHID). Use of the UHID is expected to be limited to the population of the United States.

1.2 This guide sets forth the fundamental considerations for a UHID that can support at least four basic functions effectively:

1.2.1 Positive identification of patients when clinical care is rendered;

1.2.2 Automated linkage of various computer-based records on the same patient for the creation of lifelong electronic health care files;

1.2.3 Provision of a mechanism to support data security for the protection of privileged clinical information; and

1.2.4 The use of technology for patient records handling to keep health care operating costs at a minimum.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

E 1384 Guide for Description for Content and Structure of an Automated Primary Record of Care²

3. Terminology

3.1 Definitions:

3.1.1 *clinical record linkage*—individual unit records linked for the purpose of documenting the sequence of events or care, or both, for a specific patient.

3.1.2 *discriminating power of an identifier*—the capability of an identifier to reduce the possible global population to a smaller number. For example, sex identification reduces the population size to approximately half. Date of birth reduces the

population size to approximately one of 25 000 in the United States. The smaller the population size covered by an identifier (that is, the greater the discriminating power), the better that identifier is.

3.1.3 *encounter*—an instance of direct (face-to-face) interaction, regardless of the setting, between a patient and a practitioner vested with primary and autonomous responsibility for diagnosing, evaluating, or treating, or some combination thereof, the patient's condition or providing social worker services. (Encounters do not include ancillary services, visits, or telephone contacts) (see Guide E 1384).

3.1.4 *encrypted universal health care identifier (EUHID)*—a UHID that has been encoded in order to disidentify the person associated with that UHID.

3.1.5 *episode of care*—a chain of events over a period of time during which clinical care is provided for an illness or a clinical problem (see Guide E 1384).

3.1.6 *healthcare identifier*—a tag for the identification of an individual created for exclusive use of the health care system.

3.1.7 *identifier*—a datum, or a group of data, that allows positive recognition of a particular individual.

3.1.8 *occasion of service*—a specified identifiable instance of an act of service involved in the care of patients or consumers (see Guide E 1384).

3.1.9 *permanent identifier*—a characteristic feature of an individual that generally does not change over time, such as sex, date of birth, place of birth, or fingerprint.

3.1.10 *prospective record linkage*—successive documentation of clinical encounters so that all records are linked during the process of care to ensure the continuity of patient care. Linkage is performed at the unit record level and occurs during the time the patient is receiving care. For electronic health records, prospective record linkage involves linking all patient assessment, diagnostic, treatment, and other information collected by all care providers so that the information is available at the time the patient is being treated. All records for an individual patient will be linked accurately since errors will be discovered and corrected in the process of providing care.

3.1.11 *retrospective record linkage*—matching unit records in data files not originally designed to be linked. The purpose of the linkage is to expand the comprehensiveness of each file being linked to facilitate evaluations of efficiency and effectiveness. Linkage can be performed manually using the actual paper records if the files are small. Linkage is more efficient if

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² *Annual Book of ASTM Standards*, Vol 14.01.