Best Practice Recommendations for the Collection of Key Patient Data Attributes

Prepared by the
National Association of Healthcare Access Management

October 2016

Introduction

The National Association of Health Access Management (NAHAM) has developed these *Best Practice Recommendations for the Collection of Key Patient Data Attributes* in coordination with the work on patient matching by the Office of the National Coordinator for Health Information Technology (ONC), which has most recently identified the following patient data attributes as the 2015 criteria for Certified EHR Technology (CEHRT):[1]

- First name
- Last name
- Previous name
- Middle name (including middle initial)
- Suffix
- Date of birth
- Address
- Phone number
- Sex

NAHAM has reorganized these attributes into the five *Best Practice Recommendations* presented below:[2]

1. Patient name
2. Date of birth
3. Address
4. Phone number
5. Sex and gender

[1] These attributes are also identified and discussed in the ONC's 2014 *Patient Identification and Matching Final Report ("2014 Final Report")*.

[2] NAHAM recognizes that each organization will have developed its own, perhaps unique, patient inquiry protocols and uses secondary identifiers only if certain primary identifiers fail to produce a patient match. For example, an organization may use name, date of birth, and social security number as primary search criteria. If these fail to produce a match, the organization may use sex, address, and phone number as secondary criteria. Organizations may also choose to use other demographic data that are considered reliable and not subject to change as patient identifiers.

Patient name includes separate fields for first name, last name, previous name, middle name or initial, and suffix. Date of birth includes the two-digit month, two-digit day, and four-digit year. Address and phone number includes former addresses and phone numbers. Address is recorded according to the U.S. Postal Service standard formats, and phone number is recorded according to the international standards for telecommunication addresses. Sex is to be recorded as the sex or gender presented on current government-issued photo identification—using M (male), F (female), or U (unknown). If the patient reports a gender different from that listed on current government-issued photo identification, a separate field for gender to capture the gender identity stated by the patient is preferred.

For purposes of ensuring accurate data collection and input, these data attributes should be given by the patient, with the exception of sex or gender, where a current government-issued identification is presented with sex indicated and not disputed by the patient. For example, the patient should state his or her name in full. In any instance where an element of the name (first name, middle name, last name, or preferred name) is unclear or subject to more than one spelling, the patient should be asked to spell the name element. NAHAM notes that health IT systems can support accurate data collection by providing adequate field lengths and extra field lines (in the case of addresses), so as not to truncate or alter the accurate and complete spelling of the name. Health IT systems can incorporate platforms that allow for the validation of the address given by the patient.

Patient data attributes serve several purposes in healthcare systems. Healthcare IT systems and the collection of this data should be designed to support the following:

- The patient experience – Patients expect their information to appear on documents and displays (ID bracelets, document, portal, mailings, etc.) the way the patient prefers (where this is not contrary to patient matching protocols).
- Record retrieval and matching
- The legal medical record
- Continuity of care
- Payment

NAHAM recognizes that these patient data attributes are not the only attributes that organizations may use for purposes of patient matching. NAHAM may review additional attributes in the future, as well as review and update elements of these *Best Practice Recommendations*.

NAHAM recognizes that organizations may also use additional demographic data, such as race and ethnicity, as potential matching criteria, and others may use “non-changeable” data, such as place of birth with fields for city, state; or city, country (for non-US born individuals), and mother’s or father’s name.

NAHAM's development of these *Best Practice Recommendations* is an outgrowth of its Policy Development and Government Relations Committee's work on patient identity integrity (PII) over the last several years.

This work includes NAHAM's *Public Policy Statement on Patient Identity Integrity* (November 2015), which called for a set of standardized data attributes to help eliminate patient matching errors.

> *The National Association for Healthcare Access Management (NAHAM) recognizes and supports patient safety as a national health priority. Patient identification errors through the registration process can delay patient care and increase the potential for patient harm. Long-term downstream effects include increased financial liability, diminished reputation, and decreased physician and employee loyalty. Patient identity integrity (PII) ensures that healthcare access professionals identify and accurately match the right patient with his or her complete medical record, every time, in every provider setting. Ensuring the right patient, right record, every time, is the first critical step in providing patient care.*
>
> *PII processes should be prioritized and standardized to include: Principles guiding practice, policies and procedures, training and competency validation, standard scripting, defining acceptable forms of identification, naming conventions, search guidelines and algorithms, banding verification, establishing response guidelines for difficult situations, measuring and tracking duplicate records, and rapid response and resolution to errors.*
>
> *NAHAM recognizes that current patient identification and matching procedures vary throughout the country. Using two patient identifiers with a combination of secondary identifiers is standard and compliant practice. Achieving the goal of eliminating patient identification errors nationally will require a unique patient identifier and/or a standardized combination of data attributes that support patient identity integrity.*

Previous work also includes the April 2015 launch of NAHAM's *Patient Identity Integrity Toolkit* to serve as a repository of information, best practices, and educational material on the collection of patient attributes and patient matching.

While working on the development of the toolkit, NAHAM contributed to the efforts of the ONC to identify potential standards to enhance patient matching efforts. NAHAM's comments were incorporated in the ONC's 2014 *Patient Identification and Matching Final Report*:

NAHAM is a nonprofit association with the goals of establishing best practices and subject matter expertise; providing networking, education, and certification opportunities; and enabling its members to influence and promote high quality delivery of patient access services (including scheduling, call centers, registration, admissions, patient finance, benefits coordination, and other front-end revenue cycle related services). NAHAM believes that positive patient identification is an essential attribute to patient safety and the delivery of healthcare services to all. Positive patient identification is the first critical step in providing patient care. Incorrect patient identification through the registration process increases the potential for patient harm. Improved patient identification standards, processes, and technology ensure safe and appropriate patient care and can eliminate duplicate medical records and fraudulent billing.

NAHAM supports continuing efforts to create an environment of positive patient identity, and believes that the standardization of patient identification protocols and technologies are important means to this goal. NAHAM is investigating appropriate third factors to enhance positive patient identification. NAHAM supports the development of standards for data attributes in electronic systems, whether clinical or administrative, and enhanced common capabilities for all healthcare data systems to input standardized data. NAHAM members have seen errors on insurance cards, or people using two different names for their personal and professional lives (for example, some clergy members, or women using maiden and married names interchangeably) produce difficulties in accurate identification and matching of health records and the creation of duplicate records that may not provide the full medical history. Increasing the chance of error are the multiple data systems and their individual users that feed into the EHR (patient registration, patient scheduling, and clinical settings) and the several ways that patient data must be collected (for example, in person, over the phone, and in the emergency room).

NAHAM believes that education and training are important parts of the solution for positive patient identity. NAHAM offers two levels of certification for patient access professionals, and believes that certification can become an effective means for providing training and continuing education.

Education and training are also important to ensure personnel at all levels understand the important roles patient data input and patient identification protocols serve in enhancing patient safety. NAHAM supports Stage 3 Meaningful Use requirements to improve patient matching, and supports a comprehensive approach that includes the standardization of patient identification attributes, the development of standards for EHR technology solutions, and the development of best practices and protocols for data input. This would include regular feedback from supervisors and audits for quality control.

A note on the use of patient Social Security numbers

Many healthcare systems use the patient's Social Security number (SSN)—in whole or the last four digits—as a unique patient identifier. In adopting the patient data attributes for the 2015 CEHRT, the ONC briefly addressed this point in its final rule, stating that the adopted list "represents a good first step toward improving patient matching".[3] NAHAM recognizes the role the SSN may play in patient matching, but recommends other primary data attributes, such as name and date of birth, as initial search criteria. Therefore, the SSN, in whole or the last four digits, may be used, but is not recommended as an initial data attribute for purposes of patient matching.

In its *Patient Matching and Identification Final Report*, the ONC noted:

> *Many organizations continue to use the Social Security number (either the full number or the last four digits) at least internally. Fewer share Social Security numbers with providers who are neither employed nor affiliated with their health system. Most acknowledged that patients are becoming increasingly unwilling to share Social Security numbers in a healthcare context, and that some medical practices, hospitals, and insurance carriers have stopped collecting it. There was a strong feeling among the organizations that a unique number can be very useful in working through records of patients with the same name and birth date, but a few said the Social Security number is not that helpful. Proponents of a unique number, whatever it may be, said it helps the system be more automated and reduces the need for costly manual review.*[4]

In its final 2015 CEHRT rule, the ONC went on to say:

> *We intend to continue our work in developing patient matching best practices and standards, including evaluating the feasibility, efficacy, and, in some cases, the legality of specifying other data elements for patient matching. We may propose to expand this list or adopt a more sophisticated patient matching policy in future rulemaking as standards mature.*[5]

A note on Patient Identification and Matching and Information Verification

Patient identification and matching involves the use of a set of primary and secondary search criteria. Once positive patient identification is achieved, information in the patient's existing record should be verified. Each organization should establish its own search guidelines

[3] ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), ("*2015 Final Rule*"), page 62637.
[4] *2014 Final Report*, page 7.
[5] *2015 Final Rule*, page 62637.

(algorithms) for patient identification and matching, and develop its own set of questions, scripts, and guidelines for verifying and updating patient information.

NAHAM's *PII Toolkit* includes a checklist that offers a sample list of elements that can be used to create policies and procedures for a PII program. Among the checklist elements are the development of "standard scripts to reduce patient identification errors," and standardization of "search guidelines and algorithms" to assist the accurate patient inquiries given an organization's unique health IT systems. The *PII Toolkit* also includes a sample algorithm to assist in the development of such scripts and search guidelines. These *Best Practice Recommendations for the Collection of Key Patient Data Attributes* offer a partial list of scripts and search guidelines. Each organization should develop resources that best meet its specific needs. NAHAM's *PII Toolkit* also includes competency checklists for Patient Access regarding search criteria to best ensure the capture of the patient's Master Record Number (MRN), and protocols for when it is discovered that a patient is registered using an incorrect existing MRN.

DATA ATTRIBUTE: Patient Name

Definitions:

- A set of words by which a person is known.
- Legal name is the name that identifies a person for administrative and other official purposes. A person's first legal name is generally the name that appears on his or her birth certificate, but note that a person's first legal name may change subsequently.

Data Format:

Name Fields:

- Data related to names should be stored in five fields:
    - Last name/surname. Generational titles (i.e., Jr, Sr, III) are considered part of the last name.
    - First name/given name.
    - Middle name or initial (the entire middle name is preferred).
    - Suffix–to be used to indicate educational degrees and accreditation. Those commonly used in healthcare as a sign of respect include MD, DO, CRNP, PhD. Generational titles are not considered suffixes.
    - Prefix—to be used for professional purposes, religious titles, or honorifics such as Doctor, Sister, Father, Professor (could routinely be entered using typical two-character designations such as Dr, Sr, Fr). Although some systems may allow for the collection of name prefixes, such as Mr, Mrs, Ms, or Miss, they are not commonly used in healthcare data collection.

- Name is to be collected from a current government-issued photo identification whenever possible.
- Middle name (initial) is to be collected whenever a patient has one.
- When a patient's first name is an initial, it should be captured and stored as such.
- Patient's entire middle name should be captured, stored, and should appear on displays and printed documents.
- In addition to the patient's legal name, preferred name should display on computer screens and documents whenever possible. When that is not possible, legal name should be used.
- Ideally, there will be a separate field for suffixes and prefixes (where an organization chooses to capture these).
- For patient matching purposes, NAHAM *Best Practice Recommendations on Patient Name* specifies the name on the government-issued identification presented by the patient.

Punctuation:

- Systems need to be designed to allow punctuation to be captured, displayed, and printed to accommodate a patient's expectation. Punctuation commonly used in names include hyphens (-) and apostrophes (').

    - Punctuation should be eliminated by algorithms for search/match process.
    - Punctuation should be eliminated for electronic billing purposes.

Spaces:

- Systems need to be designed to allow data capture using spaces without concatenation. Patients expect to see their name on bands and documents the way they commonly record it. When a patient's first name contains a space, such as Mary Jane, Billy Bob, etc., systems need to retain the two-part name in the given name field—do not move the name after the space into the middle name field. When a last name has multiple spaces, systems need to retain the spaces (e.g., Van De Haven, St James, etc.).

    - Spaces should be eliminated by algorithms for search/match process.
    - Spaces should be eliminated for electronic billing purposes.

Field Lengths

- Each name field needs to be sufficient to collect and store the patient's entire name without truncating it or shifting it into the next field.

Data Collection and Usage:

Patient name:

Patients expect their information to appear on documents and displays (i.e., ID bracelets, documents, portals, mailings, etc.) the way they commonly record it. Systems need to be designed to allow capture, printing, and display of name to support the patient experience without impacting the accuracy of search/match algorithm.

Preferred name should display in addition to legal name on computer screens and documents whenever possible. When that is not possible, legal name should be used. For patient matching purposes, NAHAM *Best Practice Recommendations* specifies the name on the government-issued identification presented by the patient.

Previous names:

When a patient's name is changed, health IT systems should automatically store previous versions of the name. They should be used as part of the search/match process.

Preferred name:

- Preferred name should be included in the list of commonly collected data attributes.
    - This should be an optional field—only to be valued when the patient routinely uses a name other than the legal name presented on their government-issued photo identification.
    - This field will also be used when the patient's signature does not match the legal name presented on the government-issued photo identification.

Insurance card/plan name:

- When the name on a patient's insurance is different from the name on their government-issued photo identification, it should be entered with the insurance information, but not as the legal name.

Comments (Scripts, FAQs, etc.):

- Always ask patient for government-issued identification. Each organization should define what constitutes an acceptable form of government identification. See the Appendix for a list of common and less common government-issued identification.
- The patient should be asked to spell first, last, and middle names to avoid misspelling.
- Many organizations will ask patients to validate the spelling of their name on their wrist band and/or other documents with their initials.
- The ONC's *Patient Identification and Matching Final Report* lists first name, last name, middle name/initial, previous name, and suffix as separate attributes; the ONC's subsequent 2015 *Health IT Certification Criteria* adopted these same attributes. For the purpose of best practices and the patient experience, NAHAM combines them into one best practice recommendation. Even though they are routinely entered into separate fields in computers, patients expect Patient Access to treat their name as a unit.

- In instances where the patient reports a name different from the name shown on the government-issued identification document also presented by the patient, NAHAM recommends that the name as shown on the government-issued identification document

be recorded. Note NAHAM's recommendation above to capture the patient's preferred name.

- In instances where a patient who has been previously admitted reports a name that does not match an existing record, Patient Access may ask: "Are there any former legal names or past or present nicknames for you?" The patient's MRN may reflect a nickname or former legal name. In such a case, ask the patient to state all possible names.
- In addition to the attributes adopted by the ONC as part of the 2015 *Health IT Certification Criteria*, NAHAM recommends that health IT be able to capture and display the patient's preferred name.

DATA ATTRIBUTE: Date of Birth (DOB)

Definitions:

- The reported day, month, and year of birth for a patient.
- Per the Office of the National Coordinator for Health Information Technology (ONC), the date of birth attributes are the two-digit month, the two-digit day and the four-digit year of birth.

Data Format:

- Data entry reveals **mm-dd-yyyy.**
    - No alphabetical characters are allowed in the data set. Note the use of the customary dash (-) rather than the competing customary forward slash (/). Ideally, systems will allow the input of the month, day, and year, and populate the field as mm-dd-yyyy.

Data Collection and Usage:

- Always ask the patient for current government-issued photo identification. Each organization should define what constitutes an acceptable form of government identification. See the Appendix for a list of common and less common government-issued identification.

Comments (Scripts, FAQs, etc.):

- Many organizations will ask patients to validate their date of birth on their wrist bands and/or other documents with their initials.
- If the date of birth is unknown, or the patient is unresponsive and a representative is not immediately available, a standard format for an anonymous patient should be entered as 01-01-1880.
    - NAHAM recognizes that systems will have a standard birthdate that is used where the date of birth is unknown. It is felt that values such as 01-01-1901 are not sufficiently remote as to not impact a record on file.
    - NAHAM recommends 01-01-1880 as a best practice recommendation because it is sufficiently unlikely to impact a record on file. Even though there are other "anonymous" birthdays to indicate an unknown or not-reported birthdate, a single standard will foster data matching across hospitals systems.
- ONC will not require hour, minute, second as part of the 2015 Health IT Certification Criteria. The ONC notes: "We clarify that for the purposes of certification, the hour, minute,

and second for a date of birth are optional for certification. If a product is presented for certification to this optional provision, the technology must demonstrate that the correct time zone offset is included."[6]

[6] *See* ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), at 62637.

Definitions:

- The address fields are used to collect/store the patient's legal address using the United States Postal Service (USPS) – Postal Addressing Standards.
- Additional information on USPS Addressing Standards can be found at: **Publication 28 - Postal Addressing Standards**.

Data Format:

- **In General:**
  - Each field needs to be sufficient to collect and store the entire street address, P.O. Box (if the patient prefers this for billing purposes), city, state, and ZIP Code, without truncating it and shifting into the next field.
  - For international addresses, there should be a separate field for country. NAHAM notes that, in some cases, international addresses will not easily fit into four lines; therefore, additional fields would be ideal for address to help avoid truncation.

- **U.S. Address Format:**

Name:	Patient/Company Name
Address Line 1:	House Number and Street Name
Address Line 2:	
Address Line 3:	City, State, and ZIP+4 Code (Note: City, State, and ZIP+4 Code in separate fields)

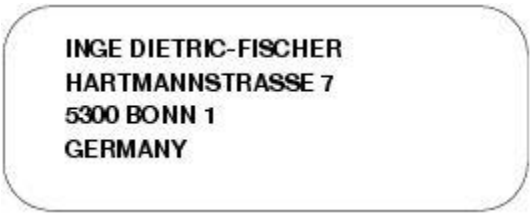
  - Three-line Address Example:

  - NAHAM recommends using a standardized address, which is one that is fully spelled out, abbreviated by using the Postal Service standard abbreviations (shown in Publication 28, or as shown in the current Postal Service ZIP+4 file), and uses the proper format for the address style**.** See USPS Publication 28 – *Postal Addressing Standards*.

- The delivery address line and the last line of addresses output should be complete, standardized, and validated with the ZIP+4 file and City State file, respectively.
- The Postal Service defines a complete address as one that has all the address elements necessary to allow an exact match with the current Postal Service ZIP+4 and City State files to obtain the finest level of ZIP+4 and delivery point codes for the delivery address.
- For the use of P.O. Box address, enter *PO BOX NN* on the mail piece.
- The address recorded should be where the patient lives.

- **International Address Format:**

  - NAHAM's recommendation is to use the USPS format for capturing international addresses. The bottom line of the address should show only the country name, written in-full (no abbreviations), and preferably in all capital letters.
  - **Do not place the postal codes ZIP+4 Codes) of foreign country designations on the last line of the address.**
  - **Do not underline the capitalized country name.**
  - An example of a correct foreign address follows:



Data Collection and Usage:

- NAHAM's recommendation is that delivery address information be stored in 64 bytes or spaces to be compatible with the **Postal Service National ZIP+4** database.
- A four-line address field is recommended to accurately capture complete addresses.
- With the exception of the hyphen in the ZIP+4 Code, punctuation should be omitted in the delivery address block.
- Special characters should not be allowed in the address block fields (i.e., line one or line two).
- The patient should be asked to spell the names of streets, cities, and other address names that could be subject to misspelling.

- The organization should have a consistent policy for capturing patient's preferred address for billing purposes. If patient indicates a difference address for purposes of billing, NAHAM recommends recording billing address on the line for guarantor's address.
- All system address fields should consistently capture the NAHAM-recommended delivery

address format. These include addresses for:

- Master Patient Index/Patient Demographics
- Guarantor
- Employer
- Nearest relative and/or emergency contact
- Subscriber
- Insurance section
- Alternate address, etc.

- Historical Address: NAHAM recommends that historic information be stored and used in record matching. Therefore, additional address fields should be available to maintain historical addresses.
- NAHAM notes that historical addresses can be useful in patient matching; therefore, when a patient reports a new address, the previous address should be stored as a historical address. This is not a recommendation to ask patients for their previous addresses during registration.

Comments (Scripts, FAQs, etc.):

- The three most common attributes used for matching are the patient's name, date of birth, and gender.
- Addresses are not used as primary attributes for patient identification and/or medical record selection.
- Due to the frequency of address changes, and to improve patient identity integrity, current address information should be requested from patients and/or the patient's representative, for each specific encounter. Address verification should be conducted utilizing appropriate scripting to verify the patient's current address.

    - Patient Access will ask the patient for a complete address, to include the street direction, apartment number, city, state, and ZIP Code.
    - Patient Access is mindful of the patient's time and will be familiar with the patient response, "Why do you always ask me that?"; however, the registration representative should avoid saying, "Do you still live at _____?" when verifying address.

- Patient Access should ask the patient to spell any street names or other names where the correct spelling is not readily known.
- NAHAM recommends organizations verify the patient's reported address through a third-party source, such as with the U.S. Postal Service.
- Addresses may be verified/obtained from the patient and/or patient's representative, patient's valid driver's license, utility bill(s), and health insurance eligibility responses (271

messages often return patients' current address).

- In instances where a patient who has been previously admitted reports an address that does not match an existing record, Patient Access may ask: "What are your former addresses?" The patient's MRN may reflect an address from long ago. In such a case, ask the patient to state all former addresses.
- Historical addresses are merely stored, not collected, during the registration process.
- NAHAM recognizes that not all hospitals may be able to capture the standard ZIP+4 format, as recommended by the U.S. Postal Service, due to system limitation. However, it is recommended to ensure timely mail delivery when applicable.
- Homeless addresses: NAHAM recommends that the hospital's billing address be entered as the patient's address for homeless patients. It is preferred to have the ability to flag these addresses to alert the billing department.
- ONC Health IT Certification Criteria will require use and representation of address in the C-CDA standard. The ONC notes in its 2015 Health IT Certification Criteria that this represents "the best, and most incremental, path forward." The C-CDA Release 2.1 standard references the HL7 postal format and the ONC anticipates that developers will adhere to the use of the HL7 postal format.[7]
- Recognizing that a number of commenters, and the American Health Information Management Association (AHIMA), recommended adoption of the U.S. Postal Service standard for representing address, the ONC notes: "We see a need for continued industry work to determine the appropriateness of existing standards and tools for normalizing postal address for healthcare-use cases, such as matching of electronic patient health records, and intend to work with stakeholders in this space. Thus, we look forward to continuing to work with stakeholders to analyze the USPS address standard and other industry standards with respect to any future updates to the C–CDA to bring about industry-wide consistency."[8]

[7] *See* ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), at 62637.
[8] *See* ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), at 62637.

DATA ATTRIBUTE: Phone Numbers

Definitions:

- The definition corresponds with the North American Numbering Plan (NANP)
- The NANP includes US, Canada (24 countries/territories)

    - https://www.nationalnanpa.com/about_us/abt_nanp.htm
    - https://en.wikipedia.org/wiki/North_American_Numbering_Plan

Data Format:

- Country Code for NANP–1

    - **Numbering Plan**- 10 digits
    - Single Country Code (from drop down country name selection; US as first in list)
    - Area Code or NPA (Numbering Plan Area code or NPA code)
    - Subscriber Number

- Numbering Plan – 10 digits

    - **Numbering Format** - ***(NPA) NXX-XXXX***
    - NPA is the area code
    - NXX-XXXX is the account holder's number
    - NXX prefix of the subscriber number indicates the local telephone exchange or rate center

- Written Format

    - NPA-NXX-XXXX, or as 1-NPA-NXX-XXXX when including the number 1, the long-distance trunk access code, or sometimes the stylized format NPA.NXX.XXXX, is seen more common since the rise of the Internet and the dot-separated notation of domain names.

Data Collection and Usage:

- Phone Number Contact Data in ADT Standard Field

    - Demographic patient information section lists **primary** and **secondary** data fields. Additional fields should indicate type of phone numbers–home, office, and cell.
    - Employer section, nearest relative, and/or emergency contact would have **primary** data field specific to their section. Nearest relative, and/or emergency contact would have primary and secondary fields with labels to indicate type of phone numbers–home, office, and cell.
    - Due to the frequency of phone number changes, and to improve patient identity integrity, phone contact numbers should be requested from patients and/or patient representatives in a standard method requiring the patient or patient representative to state their phone number for each specific encounter.
    - Phone numbers are not used as primary attributes for patient identification, but may be used for medical record retrieval and selection.
    - Phone number for the primary contact should be a required field. All others should be optional.
    - If the patient/family is unable to provide a number for the required field, a standardized number should be entered. A standard for entering an unknown number in the required field is 111-111-1111 (indicating an unknown value).
    - NAHAM recognizes that systems may also use 000-000-0000 or 999-999-9999 for unknown phone numbers. These, as well as the recommended best practice 111-111-1111, are adequate in serving the purpose of indicating no phone number was provided; however, to create a best practice recommendation that supports patient matching across hospital systems, NAHAM recommends 111-111-1111.
    - NAHAM also sees a distinction between an instance where no phone number is provided, and the instance where the patient does not have a phone. In this case, the iteration 999-999-9999 could be used to indicate that the patient does not have a phone, distinguished from the iteration 111-111-1111 to indicate that no phone number was provided.

- Historical Phone Number: NAHAM recommends that historic information is stored and used in record matching. Therefore, additional phone number fields should be available to maintain historical phone numbers. This is not a recommendation to ask patients for their previous phone numbers during registration.

Comments (Scripts, FAQs, etc.):

- In instances where a patient who has been previously admitted reports a phone number that does not match an existing record, Patient Access may ask: "Are there any phone numbers you once had but no longer use or no longer have?" In such a case, ask the patient to state all possible phone numbers.
- ONC has adopted the International Telecommunications Union's (ITU) format specified in the ITU's ITU-T E.123 44 and ITU-T E.164 standards. The ONC notes: "These are the best available industry standards for representing phone numbers, and we have adopted them for representing phone numbers in this certification criterion."[9]

- The ONC adopted the following new standard:

  § 170.207 Vocabulary standards for representing electronic health information.

  (q) *Patient matching.* (1) *Phone number standard.* ITU–T E.123, Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors, International operation—General provisions concerning users: Notation for national and international telephone numbers, email addresses and web addresses (incorporated by reference in § 170.299); and ITU–T E.164, Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors, International operation—Numbering plan of the international telephone service: The international public telecommunication numbering plan (incorporated by reference in § 170.299).[10]

[9] *See* ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), at 62636.
[10] *See* ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), at 62744, 45.

NAHAM recommends separate fields for sex (as indicated on a current government-issued photo identification) and for gender (for patient's gender identification). See below where the ONC has recommended best practice questions for capturing gender identification and sexual orientation as part of patient demographics, not as a means for patient data matching. NAHAM notes that Patient Access can appropriately capture sex as reported on a government-issued identification, but cannot validly determine sex at birth.

Definitions:[11]

- Sex – Refers to a person's biological status and is typically categorized as male, female, or intersex (that is, atypical combinations of features that usually distinguish male from female). Generally understood as a biological construct, referring to the genetic, hormonal, anatomical, and psychological characteristics of males or females.
- Gender – Refers to the attitudes, feelings, and behaviors that a given culture associates with a person's biological sex. Behavior that is compatible with cultural expectations is referred to as gender-normative; behaviors that are viewed as incompatible with these expectations constitute gender-nonconformity.
- Sexual Orientation – The preferred term used when referring to an individual's physical and/or emotional attraction to the same and/or opposite gender. Sexual orientation describes how people locate themselves on the spectrum of attraction. Someone who feels a significant attraction to both sexes is said to be bisexual; a man entirely or primarily attracted to men is said to be gay; and a woman entirely or primarily attracted to women is said to be a lesbian. It is important to note that sexual orientation, which describes attraction, is distinct from gender identity or gender expression.
- Gender Identity – One's basic sense of being: male, female, or other gender (i.e., transgender or gender queer). Gender identity can be congruent or incongruent with one's sex assigned at birth based on the appearance of external genitalia.

[11] *See* Glossary, Advancing Effective Communication, Cultural Competence, and Patient and Family Centered Care for the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community: A Field Guide (The Joint Commission: October 2011), starting at page 87.

Data Format:

Acceptable indications in the patient registration system and electronic medical record should be:

Male – M
Female – F
Unknown – U

Data Collection and Usage:

- Always ask the patient for current government-issued photo identification. Each organization should define what constitutes an acceptable form of government identification. See the Appendix for a list of common and less common government-issued identification.
- Do not assume patient sex based on visual appearance. The sex indicated on the identification should be indicated in the registration system.
- In the absence of government identification or physician documentation, the patient must be asked their sex at birth and be registered as per what they indicate.
- In the absence of government identification, and if the patient is unavailable to provide the information, the sex should be indicated as unknown unless there is an order (i.e. lab work) that indicates sex as it should be entered.
- NAHAM recommends that a field be added to healthcare systems for sexual orientation/gender identity. See *Transgender Patients* below.

Comments (Script, FAQs, etc.):

- Currently the ONC recommends listing the sex at birth; however, because of challenges associated with asking questions about an individual's gender identification/sexual orientation during the registration process, NAHAM is recommending at this time the use of the "sex" or "gender" recorded on a government-issued identification document. Therefore, these recommendations address best practices applicable today.
- In the absence of government-issued identification or physician documentation, the patient should be asked whether he/she prefers to be registered as male, female, or unknown.

Transgender Patients

- For those patients who identify with a gender other than their gender assigned at birth, they should be registered with the following:
  - Gender and name of the patient should be registered as per the government-issued identification document.
  - If there is no government-issued identification document, the patient is registered based on what the patient tells registration.
- Communicate to the healthcare team the patient's preferred gender and name (document in the registration system) if possible and give a verbal handoff.
- NAHAM recommends that a separate field be added to healthcare systems for sexual orientation/gender identity.
- If the health IT system in use has a separate field for sexual orientation/gender identity, the "best practice" questions and answers may be employed (see below). NAHAM recognizes that some organizations may choose to use the question "What is your current gender identity?" only when prompted by the patient to do so (as when the patient identifies with a gender of which they were not born).

The ONC has not adopted "structured or coded questions for soliciting sexual orientation/gender identity information as part of the 2015 Health IT Certification Criteria; however, it has adopted certain questions and answers as best practices:[12]

> "We do, however, believe that these questions are being used today in healthcare settings as 'best practices,' and would suggest that healthcare providers and institutions decide whether to include these questions in the collection of SO/GI [Sexual Orientation/Gender Identity] information."

The ONC ''best practice'' questions and answers are:[13]

- Do you think of yourself as:
  - Straight or heterosexual?
  - Lesbian, gay, or homosexual?
  - Bisexual?
  - Something else? Please describe.
  - Don't know.

[12] *See* ONC Final Rule, *2015 Edition Health Information Technology (Health IT) Certification Criteria*, 80 Fed. Reg. 62602 (October 16, 2015), at 62619.

[13] For definitions of various terms, see Glossary, Advancing Effective Communication, Cultural Competence, and Patient and Family Centered Care for the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community: A Field Guide (The Joint Commission: October 2011), starting at page 87.

- What is your current gender identity? (Check all that apply.)
  - Male
  - Female
  - Transgender male/Trans man/Female-to-male
  - Transgender female/Trans woman/Male-to-female
  - Genderqueer—neither exclusively male nor female
  - Additional gender category/ other, please specify
  - Decline to answer

NAHAM recognizes that some organizations may choose to capture and record sexual orientation/gender identity in the clinical setting. As noted above, the 2015 CEHRT consider this information to be a part of the patient's demographic data.

Appendix

I. Common forms of government-issued identification include:

- Birth certificate (with current notary seal)
- Current passport
- A current driver license bearing a photograph of the person
- A current state ID card bearing a photograph of the person
- U.S. Armed Forces ID card issued to military personnel, Common Access Card, or DD Form 2

II. Less common forms of government-issued identification include:

- Certified birth certificate or equivalent document from the state or territory, or certificate of birth abroad issued by U.S. Dept. of State (federal forms FS-545 or DS-1350)
- Certificate of U.S. citizenship (federal form N-560)
- Consular report of birth abroad
- Court order (including emancipation order) with full name, date of birth, and court seal. (Does not include abstract of criminal or civil convictions)
- Employment Authorization Document
- Federal I-94 Arrival/Departure Record (parole or refugee version) and MV3002
- A federal temporary resident card or employment authorization card (federal form I-688, I-688A
- Court order with full name, date of birth, and court seal. (Does not include abstract of criminal or civil convictions).
- Valid I-551, permanent resident card (issued by the Department of Homeland Security/U.S. Citizenship and Immigration Services). Non-expiring, I-551 (issued 1977-1989) cards are acceptable
- U.S. Certificate of Naturalization (Federal form N-550)

Notes:

- All government-issued identification must be current and not expired.
- Some organizations use current nursing home registration face sheets where there the patient has no government-issued identification.

III. Simple Patient Identification Algorithm example:

1. Search by **last name** and **date of birth**. *If no result, then…*

2. Search by **last name** alone. *If no result, then…*

3. Search by **last name** and **first initial**. *If no result, then…*

4. Ask the patient if he/she has had a **name change** and **search again** (back to No. 2) with the different name. *If no result, then…*

5. Search by **Social Security Number** (may have been historically collected). *If no result, then…*

6. **Call** or **page** your coordinator/supervisor, call or page another department supervisor, or call Medical Records for **assistance** in finding a patient's MRN.

IV. Simple Information Verification Guideline example:

STEP 1: Once the medical record results are displayed, <u>Secondary Information</u> must be verified.

Patient will <u>state and spell Secondary Information</u>-

1. Full legal name
2. Date of birth
3. Address
4. Date and reason for last visit
5. Employer

STEP 2: If all Secondary Information matches, you may proceed.

However, what if there is a difference in…

1. the address?
2. the phone number?
3. the last name?

You should follow up with some questions, such as:

1. ***What are your former addresses?***
A patient's MRN may reflect an address from long ago.
Have the patient state all known former addresses.

2. ***Are there any former legal names or past or present nicknames for you (the patient)?***
A patient's MRN may reflect a nickname or a former legal name.
Have the patient state all possible names.

3. ***Can you please repeat the last four digits of your Social Security Number?***
If search was not performed by SSN, have the patient repeat last four digits to match.

Acknowledgements

These Best Practice Recommendations were developed by the NAHAM Policy Development and Government Relations Committee. This work represents a continuum of work by the Committee over the course of several years by many of its members and previous chairs. It is also noted that this work is ongoing, and the Committee will continue to review these attributes as well as others as means to improve patient matching outcomes.

Special recognition is given to the following Committee members –

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The Committee also acknowledges the contribution of the following NAHAM members –

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