Interoperability and Challenges with Patient Matching

**Situation:**
As stated on healthit.gov, “Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and patients to appropriately access vital medical information electronically – improving the speed, quality, safety and cost of patient care.” HIEs enable interoperability.

**Background:**
Interoperability is the ability of systems to exchange information together with the ability of those system to use the exchanged information. Standards, such as a patient naming convention in healthcare, promote the meaningful use of exchanged information. Without naming convention standards, the inability to link or match patients and may negatively impact clinical care delivery.

**Assessment:**
1. No nationally agreed upon patient identification or naming convention standard.
2. No nationally agreed upon newborn naming convention *(patients who have not yet received their legal name or a temporary name).*
3. No nationally agreed upon naming convention for patients that arrive and are not able to provide information; for example, trauma patients.
4. Patients who are the product of multiple birth delivery present multiple challenges for interoperability and successful patient matching.
5. A Social Security Number (“SSN”) is often the highest weighted item used in patient matching algorithms. Concerns:
   a. Everyone is not eligible for a SSN.
   b. Identity theft has made people wary of sharing their SSN.
   c. Newborns do not have a SSN or governmental issued identification at the time of birth.

**Recommendation:**
Adoption of patient naming convention including temporary naming convention.

**Rules and Conventions:**
- The patient’s name should be recorded in all capitals.
- The complete legal name as reflected on government issued identification, such as, but not limited, to birth certificate, passport, driver’s license or as altered by a legal name change event. Events altering the legal name include: marriage, divorce, adoption, or a court approved name change.
- If the patient does not have a middle name, this field is left blank in the registration process.
- If the patient has a numeric value as the name, this should be entered.
- If the patient’s middle name is an initial only, this should be entered.
- If patient has a single legal name, the name shall be captured as the first and last name.
• Suffixes should be entered if suffix appears on the legal form of identification. Examples of suffixes include but not limited to Junior, Jr., II, III, Sr. and IV.
• Nicknames or diminutive forms of the name should only be entered as alternative names or an alias. They should never be entered as the legal name.
• A dash (-) or space are the only acceptable punctuation.
• Standardized naming convention for temporary names:
  a. Newborn:
     Mom's name: **Katie Smith**
     Mom’s maiden name: **Katie Miller**
     Baby's name if she had a girl: **Smith, Girl Katie**
     Baby's name if she had a boy: **Smith, Boy Katie**
     Baby's name if she had an undetermined sex: **Smith, Baby Katie**
     If the mom has twins: **Smith, Girl A Katie** and **Smith, Boy B Katie**
  b. Fetal care, in-vitro or prior to delivery utilize temporary newborn naming convention with estimated delivery date as the date of birth
  c. No identification available or provided:
     i. A unique alphanumeric identifier will be assigned.
     ii. Unknown shall appear as either the first or last name.
     iii. Updated within 24 hours of identity notification.
• Utilize Health Level 7, version 2.6 standards
  a. Mother’s Maiden Name: family name under which the mother was born, PID -6.
  b. Multiple Birth designation: Yes, No or Unknown, PID -24
  c. Birth Order: 0 – 9, PID -25

References:
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