N.C. Health Information Exchange Authority Patient Matching Guides Why You Should Notify the NC HIEA of Changes to Your Assigning Authority

A Medical Record Number, or MRN, is a number that helps identify a patient so they can be matched in the systems of different health care providers. To make sure each patient's MRN is unique, three numbers are combined to get one final complete ID.

1) The first number is the ID number of the health care facility or organization. This is known as an Organization ID or OID. It is usually a large number, but we'll just call it "F1" for now.

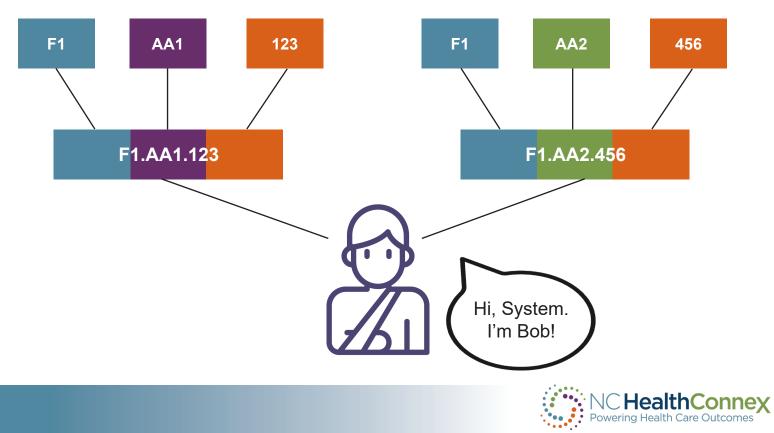
2) The next number is the ID number of a system known as a number creation system or Assigning Authority. This system assigns IDs to patients. The system's ID is known as the AA OID. Since a facility could have two or more AAs, we will call them "AA1" and "AA2".

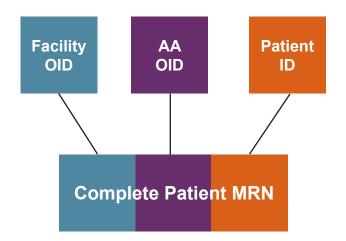
3) The last number is the patient ID created by the number creation system or AA. This is a numeric or alphanumeric ID. We'll keep it to simple 3-digit numbers.

If there are two AAs in the same facility, it is possible they could assign the same ID to two different patients. Even though the Facility OIDs are the same and the Patient IDs are the same, the complete MRN is still easy to match if that middle number, the AA OIDs, are different. If they are not different, the patients will match when they should not.

Here is an example:

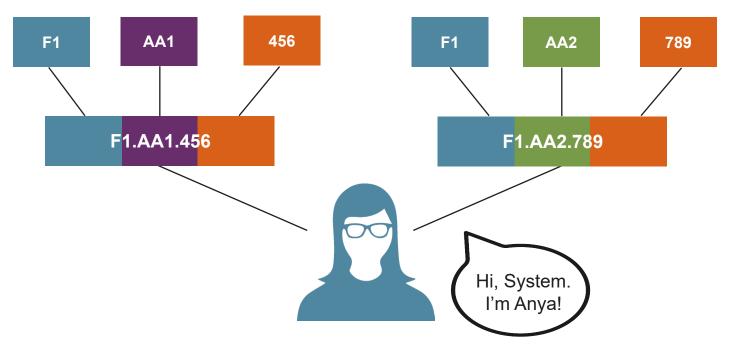
Let's say that Bob breaks his arm and visits Facility 1. The system F1.AA1 assigned Bob the number "123." Then, the facility has an upgrade to their Assigning Authority and that system gives Bob the number "456." Bob's old number was F1.AA1.123. His new number is F1.AA2.456. Both still easily point to Bob.



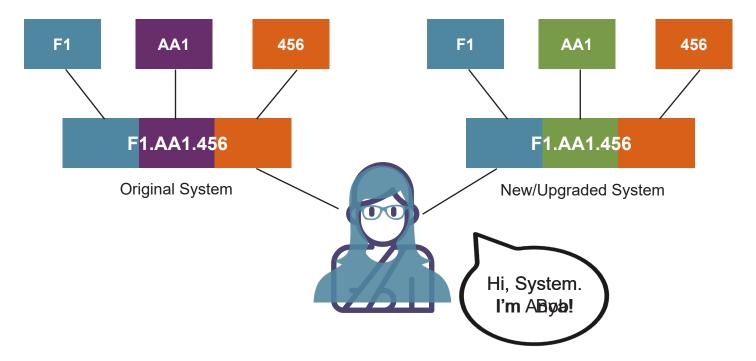


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Anya also visits Facility 1. The old system, F1.AA1, gives her the number "456" and the new or upgraded system gives her "789." Anya's numbers are now F1.AA1.456 and F1.AA2.789, but the are easily matched to Anya.



Our system can easily use other information to match two MRNs to the right patient. But if two patients have the same MRN, the matching is much harder. What happens if the new or upgraded AA system is still given the name AA1 instead of its own unique name?



The system may incorrectly match Bob and Anya because they share the same MRN. To solve this issue, each AA system needs to have its own unique ID, just as each facility and each patient does. Notifying the NC HIEA of any changes or upgrades to this system can ensure patient matching continues smoothly.

