Improving Patient Identification and Matching in Electronic Health Records

Patient identification and matching errors are an ongoing safety concern in healthcare. Although the complexity of the healthcare setting and volume of patients logically correlate to the scope of identification and matching challenges, even comparatively small healthcare practices can experience these mishaps. Misidentification can result in diagnostic and treatment errors, patient dissatisfaction and lack of trust, unnecessary costs, billing inaccuracies, and loss of data integrity.

The broad adoption of electronic health records (EHRs) across healthcare settings has introduced an added layer of complexity to patient identification and matching due to an increased volume of patient data, revised workflows, information exchange, lack of standardization, and usability factors.

To proactively address these issues, healthcare administrators, providers, clinical staff, health information technology staff, and EHR vendors can work together to maximize safeguards for patient identification and matching. The following checklist can help identify potential safety gaps and opportunities for improvement.[1]

	Yes	No
Does your organization have up-to-date policies and procedures for patient identification and matching?	☐	☐
Does your organization use a centralized database and a master patient index that includes standardized information to facilitate patient identification and matching?	☐	☐
Are data entry fields that support patient identification and matching mandatory in the system?	☐	☐
Are technological and/or manual procedures in place to help reduce data entry errors (e.g., "check digit" verification or two-person signoff protocols)?	☐	☐

	Yes	No
Do patients have at least two, and preferably more, identifiers associated with their records (e.g., name, date of birth, health record number, and mobile phone number)?	☐	☐
Does your organization require picture identification or biometric identification (e.g., fingerprint or iris scanning) to authenticate patient identity?	☐	☐
Does your organization have a process for assigning temporary patient identification numbers during emergencies or when insufficient information is available to establish permanent records?	☐	☐
Are protocols in place for (a) merging information associated with temporary identification numbers with permanent records once established, and (b) tracking temporary identification numbers to ensure resolution?	☐	☐
Does your organization have policies and safeguards to help prevent providers and staff members from creating duplicate patient records (e.g., EHR alerts that notify providers about patients with similar names)?	☐	☐
Does your EHR system monitor for records that have similar demographic data but contain name variations (e.g., nicknames or changed last names)?	☐	☐
Does your EHR system alert users if they are trying to create a new record that has similar demographic data to another record?	☐	☐
Does your EHR system provide an alert if a user's search returns multiple results?	☐	☐
Are protocols in place to help identify unintentional duplicate records and combine the information into one record?	☐	☐
Does your organization have a process for unique identification issues that may occur (e.g., a transgender patient whose legal name and preferred name differ)?	☐	☐
Do records clearly indicate if a patient is deceased, either through a visual cue (e.g., a distinct background color) or an alert?	☐	☐
Does your EHR system allow providers to create custom patient lists (e.g., by location or service)?	☐	☐

	Yes	No
Can providers and staff members sort patient lists in a clinically relevant order (e.g., by appointment time or room number) rather than by name to reduce the proximity of look-alike/sound-alike entries?	☐	☐
If patient lists are sorted by name, is special formatting (e.g., font color, row color, etc.) used to differentiate patients on adjacent lines who have the same name?	☐	☐
Does your EHR system clearly display patient identification information prominently on all user interfaces?	☐	☐
Does your EHR system include safeguards that prevent providers from having multiple patient records open at the same time, which can increase the risk of entering data in the wrong record?	☐	☐
Does your EHR system use distinct visual cues to distinguish between the production (live) environment and any testing or backup environments?	☐	☐
Are patient identities verified at key points of care and during transitions of care using technology (e.g., barcoded wristbands) and manual processes (e.g., quality checks and signoffs)?	☐	☐
Are patients asked to say their names rather than confirm the name a provider says to them?	☐	☐
Are patients and families educated about the organization's patient identification and matching process and their important role in providing and verifying accurate information to assist with identification?	☐	☐
Are patients and families encouraged to speak up about missing or incorrect information or unexpected tests or procedures?	☐	☐
Are interpreters and auxiliary aids provided for patients who have communication barriers?	☐	☐
Does your organization train providers and staff members on patient identification and matching policies and procedures at hire and periodically?	☐	☐
Are registration clerks trained in a consistent data entry approach across different platforms and portals?	☐	☐

	Yes	No
Does your organization include monitoring for and resolving patient identification errors as part of its quality improvement initiatives?	☐	☐
Are patient identification and matching errors that occur in your organization shared with providers and staff members so they can better understand how and why these errors occurred?	☐	☐
Do organizational leaders engage providers and staff members in discussions to identify patient identification barriers and develop solutions?	☐	☐

Endnotes

[1] This checklist is based on information from the following sources: The Office of the National Coordinator for Health Information Technology. (2016, September). Self-assessment: Patient identification. *SAFER Guides*. Retrieved from www.healthit.gov/sites/default/files/safer_patient_identification.pdf; ECRI. (2016, June). *Health Technology Assessment Information Service special report: Patient identification errors.* Retrieved from www.ecri.org/Resources/HIT/Patient%20ID /Patient_Identification_Evidence_Based_Literature_final.pdf; ECRI. (2016, September). *Self-assessment questionnaire: Patient identification*. Retrieved from www.ecri.org/; ECRI. (2021, June 29). Essentials: Patient identification. *Health System Risk Management — Guidance.* www.ecri.org; Taylor. (2022, January 12). 12 Simple Ways to Ensure Positive Patient Identification. Retrieved from www.taylor.com/blog/12-simple-ways-to-ensure-positive-patient-identification