

HIMSS Patient Identity Integrity Work Group

Work Plan 2010

Operationalizing PII Whitepaper Recommendations

1. Create Patient Identity Section in HIMSS P&S Toolkit

Work with HIMSS Privacy and Security Toolkit Task Force in developing comprehensive content for new Patient Identity Section. This should contain Model Business Practices and Training Resources with a target audience of all management levels, front line staff in Access, HIM, IT, Registration, Scheduling staff, among others. Training resources to be provided for each section may be from model organizations real implementations. Immediate content build will be to support the 56 Whitepaper recommendations. Goal for completion of these Toolkit content items is June 30, 2011. These initial sections will include the following. Items in small print are specific whitepaper recommendations that will be addressed in that section. (Note: the numbering in small print refers to the number of the Key Influencer to which it relates and not to the toolkit section in which it will act upon.)

1.1 Security Safeguards: How to incorporate them into the workflow and business process, including role-based staff training requirements. (Lead = Vinnie Sakore)

- 1.2 Adequate security safeguards must be in place for assuring minimal risks to privacy.
- 1.3 In order to assure that patient confidentiality cannot be compromised, effective security controls and processes must be embedded in the workflow.
- 2.3 Ensure that information system employees are properly trained in understanding patient identity and their role in ensuring its integrity through creation of interfaces that transmit patient data between applications.

1.2 Model Interface Protocols: Testing protocols, procedures, tools including test scripts. (Lead = TBD)

- 2.2 Test, test, and retest. Do not assume that because a message was sent that it was received. Test thoroughly, repeatedly, and with numerous messages. Give careful consideration to the downstream impact of patient identification standards. Testing the patient identification standards and profiles in the organization's environment should be conducted with a multi-disciplinary approach since so many different areas of an organization are impacted by patient identification.
- 2.4 Develop protocols and tools to ensure that information flowing across the organization arrives at the intended destination without error. Involve the business owners of the information in testing the veracity of the interfaced data to help ensure accurate information in all applications.

1.3 Metrics: For managing PII with tools and use cases for effective matching: computing duplicate record rates, duplicate creation rates, search threshold minimums, record auto-linking minimums, maximum allowable duplicate record rates, et.al. (Lead = Stacie Durkin)

- 3.3 Adopt an industry standard method of computing duplicate record rates in MPI databases and a standard formula for computing the "creation" rate of newly created duplicate records.
- 3.5 Using study results, recommend algorithm standards including search threshold minimums and record auto-linking minimums.
- 3.6 Provide industry standards for maximum allowable duplicate record rates.
- 5.6 Accuracy of patient identification by the responsible registrar.

1.4 Model Data Practices: Minimum data elements required to maintain PII to be utilized in record matching algorithms and create data dictionary for them, with model procedures for the collection, re-entry validation, input, and query of information, use of lookup entries and newer technologies. (Co-Leads = Sara Temlitz and April Stevenson)

- 1.1 Healthcare sector should always consider the minimum amount of data that is required in order to maintain the integrity of this process while minimizing privacy impacts.
- 3.1 Create data definitions (data dictionary) for all key demographic data fields utilized in record matching algorithms to facilitate consistency across providers in the collection of these data fields. Recommend minimum data elements to be utilized in record matching algorithms.
- 3.4 Provide industry guidance on the process that providers and health information exchange organizations should follow to resolve potential duplicate records within their database. Guidance on staff education and experience requirements of individuals who are capable of monitoring potential duplicate records and resolving them is needed.
- 3.7 Using study results, improve tools and industry standards for IT systems.
- 5.1 Best practices start with an organization's commitment to accurate patient identification that includes a quantifiable expectation or performance standard for accuracy of medical record number assignment. Executive level support for a multi-stakeholder administrative group that identifies problem areas, monitors relevant data, prioritizes corrective actions, and practices structured, ongoing communication is the foundation. This group should include at minimum representation from patient registration, patient finance, information systems, and health information management departments. Emphasis for this group must include ensuring adequate tools and resources, and process support, including initial and ongoing competency-based training.

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- 5.2 Explicit organizational guidelines for data stewardship and data governance that reach beyond patient identification are critical to the success of patient identification processes.
- 5.4 Corrective action required by ineffective business processes or human error should have a multi-disciplinary approach. While the approach for the corrective action may be centralized or decentralized, clear ownership must be established. And, standardized business processes for corrective action, irrespective of the approach.
- 6.1 Create standardized procedures for the collection, input, and query of information.
- 6.2 Staff should be trained to verify data elements before entering them to prevent assumptions.
- 6.3 The utilization of look-up entries as opposed to free text entries and rules based data validation (e.g., zip code to city validation) should be incorporated in data input methodologies whenever possible.
- 6.4 To ensure data accuracy is to minimize the number of times the information should be collected, input, and queried.
- 7.3 Currently the best practice is to standardize the collection and entry of three or four static identifiers that are unique enough to provide value to the match, yet not so revealing they pose a threat to the individual's data security.
- 8.1 Healthcare organizations should strive to educate the individuals who create and modify patient identification information within their health information systems.
- 8.3 Areas that fail to meet expectations or that have not had appropriate historical practices must be corrected. This may involve implementation of new technology paired with effective procedures and on-going training. Any successful long-term solution must incorporate people and processes along with technology.

1.5 Model Monitoring Reports: For data accuracy, pattern analysis and trending by individual, location, and organization performance along with procedures for sanction and corrective actions. (Lead = Vinnie Sakore)

- 5.4 Corrective action required by ineffective business processes or human error should have a multi-disciplinary approach. While the approach for the corrective action may be centralized or decentralized, clear ownership must be established. And, standardized business processes for corrective action, irrespective of the approach.
- 5.5 Reports are key business practices that should be designed to support the monitoring of data accuracy and staff performance. Measurement of patient identification accuracy should be through standard reports structured to monitor them.
- 5.6 Accuracy of patient identification by the responsible registrar.
- 5.7 Identification of contributing factors to the error.
- 5.8 Trending of the data by data entry person, (e.g. registrar), their location (e.g. registration area), and organization.
- 8.3 Areas that fail to meet expectations or that have not had appropriate historical practices must be corrected. This may involve implementation of new technology paired with effective procedures and on-going training. Any successful long-term solution must incorporate people and processes along with technology.

1.6 Executive Level Training: on organizational commitment to accurate patient identification that includes: quantifiable expectations and performance standards, data governance stewardship, training and administration of all intake and scheduling areas including appropriate compensation, recognition, and professional certification in those areas. (Lead =Barbara et al?) Jim, Stacie, and Lorraine?

- 2.3 Ensure that information system employees are properly trained in understanding patient identity and their role in ensuring its integrity through creation of interfaces that transmit patient data between applications.
- 5.1 Best practices start with an organization's commitment to accurate patient identification that includes a quantifiable expectation or performance standard for accuracy of medical record number assignment. Executive level support for a multi-stakeholder administrative group that identifies problem areas, monitors relevant data, prioritizes corrective actions, and practices structured, ongoing communication is the foundation. This group should include at minimum representation from patient registration, patient finance, information systems, and health information management departments. Emphasis for this group must include ensuring adequate tools and resources, and process support, including initial and ongoing competency-based training.
- 5.2 Explicit organizational guidelines for data stewardship and data governance that reach beyond patient identification are critical to the success of patient identification processes.
- 5.3 Ongoing training and administration of all intake and scheduling areas should include appropriate compensation, recognition, and professional certification.
- 8.1 Healthcare organizations should strive to educate the individuals who create and modify patient identification information within their health information systems.
- 8.2 The first step is to assess the organization's current practice across all areas that impact patient identification. Often an assessment by a third party offers new insights that those individuals involved in day-to-day operations may overlook.

1.7 Existing Literature/Publications: Complete literature search for pertinent articles. (Lead = Lorraine Fernandes)

- 7.1 The accuracy of biometrics as a tool for identification has been improving.
- 7.2 In the short term, there are other technologies that can be used as an interim step, such as smart cards with an amalgam ID.

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2. Medical Devices (Referred to P&S Committee)

Work with the Medical Device Work Group and other resources to address these. The PII WG believes that Medical Devices need standardization of their data and technology as quickly as possible and incorporating algorithms to promote accurate record linking.

- 9.1 Foster the adoption of Patient Identifier Cross-referencing Integration Profile (PIX) data elements to support accurate record linking.
- 9.2 Develop a process to ensure that the patient and the device in legacy systems are being integrated with clinical systems.
- 9.3 Conduct security risk assessment of medical devices.
- 9.4 Assign responsibilities and accountability associated with threats and vulnerabilities.
- 9.5 Matching algorithms need to be applied to data transactions to ensure linkage to the correct record.
- 9.6 Develop patient demographic data capture standards.
- 9.7 Develop matching criteria across systems standards.
- 9.8 Develop standard data sets.
- 9.9 Develop coordination of standards.
- 9.10 Identify the existing legal and regulatory framework surrounding identity management and integrity in medical devices.
- 9.11 National legislation and policy may need to be put in place to address compliance.
- 9.12 Identify logical connectivity for these disparate systems. Focus on the process of accessing point-of-care stand alone systems.
- 9.13 Encourage and incentivize further development of technologies and modification to existing systems, making interoperability possible.
- 9.14 Adopt a Web client interface that associates with an enterprise network. A Web client provides a common gateway interface, augmenting the integration of these disparate systems.
- 9.15 Standardize the hardware connections for true “plug-and-play” connectivity.
- 9.16 Data standards are needed to improve/reduce the time-to-market.

3. Industry Actions: Work with industry to:

- 3.1 Require use of HL7 and IHE standards (ATNA Integration Profile) and vendor compliance through HHS Certification.
- 3.2 Encourage acceptance and dissemination of Toolkit Models in NIST and government actions and activities.
 - 1.4 The IHE Audit Trail and Node Authentication (ATNA) Integration Profile should be adopted to achieve this level of auditing.
 - 2.1 Organizations should use IHE and HL7 standards for patient identification, and require that their vendors demonstrate compliance with the patient identification standards through the most recent IHE Connectathons.
 - 3.8 Adoption of a patient identifier solution.
 - 3.9 Reduce dependence on algorithms.
 - 4.4 Use the results of work below (research) to determine implementation process and timeline for unique identifiers as component of patient identity solution.
 - 4.5 Implement unique identifiers as component of patient identity solution.

4. Government Interface and Actions: Work with congress on the following: (Leads = Lisa & Barbara)

- 4.1 Adoption of a patient identifier solution (this would include dealing with Congressional prohibition against HHS studying UI solutions and formal study of cost/benefit of UI solution.)
- 4.2 Perform a research study to validate algorithm effectiveness for electronically linking patient records.
- 4.3 Enforce existing privacy and security regulations.
 - 3.2 Perform a research study to validate algorithm effectiveness for electronically linking patient records.
 - 3.5 Using study results, recommend algorithm standards including search threshold minimums and record auto-linking minimums.
 - 3.7 Using study results, improve tools and industry standards for IT systems.
 - 3.8 Adoption of a patient identifier solution.
 - 3.9 Reduce dependence on algorithms.
- 4.1 Congressional lifting of the prohibition against HHS studying UI solutions;
- 4.2 HHS conducting a study of the cost/benefit and practicality of implementing a UI solution.
- 4.3 HHS establishing pilot implementations of unique identifiers to document the challenges and benefits.
- 4.4 Use the results of work above to determine implementation process and timeline for unique identifiers as component of patient identity solution.
- 4.5 Implement unique identifiers as component of patient identity solution.