Patient Safety Alert

Veterans Health Administration Warning System
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Item: **Issues identified with Identity Management in commercial Clinical Information Systems/Anesthesia Record Keeping (CIS/ARK) systems in use at VA facilities**

Specific Incidents: Incident 1: A VA facility reported that patient records were overwritten in a CIS/ARK system when a patient is selected and incorrectly identified in the CIS/ARK system. Incorrect identification occurred because the CIS/ARK system used only the first initial of the last name and last 4 digits of the social security number (SSN) (the combination is known as the 1U4N trait) to verify patient identity.

Incident 2: A different VA facility reported that patient records were being overwritten in a CIS/ARK system when importing or receiving information from Veterans Health Information Systems and Technology Architecture (VistA)/Computerized Patient Record System (CPRS). The problem is related to use of the Data File Number (DFN) as the sole source of establishing the patient's identity and has only occurred when a patient is treated in more than one VA facility.

Incorrect patient identity verification is a significant patient safety risk and can lead to harm if, for example, the wrong patient's allergy and other clinical information are displayed in the patient's record.

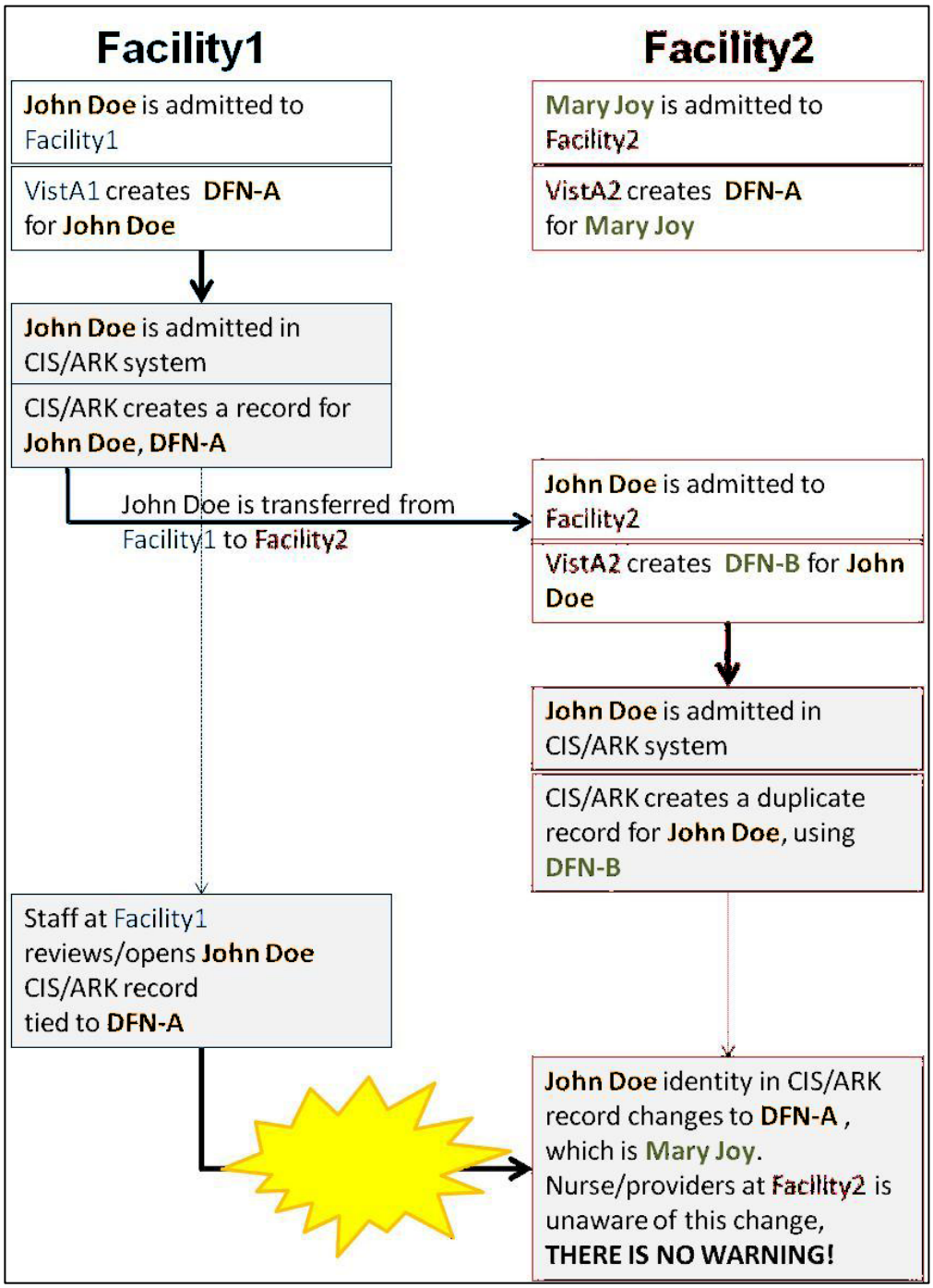
NOTE: The issues described above could exist in any of the existing or newly acquired CIS/ARK systems in VA facilities.

General Information: Many VISNs have or are planning on procuring CIS/ARK systems for patient care documentation in intensive care units, operating rooms and other critical care areas. CIS/ARK systems are medical device applications made by multiple vendors. The data transmission between VistA/CPRS and the CIS/ARK system is accomplished either through software that was developed at an individual facility or VISN, previously contracted vendor software, or the DataBridge Interface software developed by Document Storage Systems (DSS).

With regard to Incident 1, VistA/CPRS allows use of the 1U4N trait as an acceptable search criterion for patient identification; however, the VHA Identity Management Program has reported that up to 30% of patients at

any given VHA facility don't have a unique 1U4N trait. Unlike the CIS/ARK systems, VistA/CPRS has minimized the risk of incorrect patient identification and selection by presenting a pop-up selection menu when more than one patient with the same 1U4N trait is identified.

With regard to Incident 2: Within a local VistA system, the DFN is the authoritative identifier for a patient record. However, when patients are admitted into more than one facility within the VA, that local DFN is only unique for the patient within the local VistA system that generated the DFN. The CIS/ARK system uses a database that can span across multiple VistA systems. Since the DFN is only unique within a local VistA system, information for a patient with an assigned DFN from one facility can overwrite another patient's record in the CIS/ARK system with the same DFN assigned from a different facility. The following flowchart illustrates how overwriting of the records can occur.



Correct electronic identification of patients must be validated for patients who were first admitted in one VistA system, and then admitted to another facility which uses a different VistA system. Correct identification should be managed by integrating with the Identity Management Services and using the Master Veteran Index (MVI) for unique identification of a Veteran across all VA facilities (Reference 1). The Integration Control Number (ICN) created from the MVI is the unique enterprise identifier for each individual Veteran within the VA.

Actions: **The Facility Director (or designee)** shall ensure the following actions are completed:

1. By Close of Business (COB) April 9, 2012, the following actions must be completed:

   1a. The **Chief Health Informatics Officer (CHIO) or designee,** with assistance from the VISN CIS/ARK Program Manager, shall determine if CIS/ARK applications have been or are being installed at their facility. If yes, proceed to Action 1b and 1c. If not, proceed to Action 2.

   1b.The **CHIO or designee,** with assistance from the National Clinical Information Support Team (CST) and VISN CIS/ARK Program Manager, shall ensure that patient identity in CIS/ARK systems is established and patients are selected from lookup functions using two FULL patient identifiers: the Veterans FULL legal name (including middle name if one exists), along with either FULL social security number (SSN), FULL date of birth (DOB), or Gender (only if FULL SSN or FULL DOB are unavailable).

   1c. The **CHIO or designee,** with assistance from the CST and VISN CIS/ARK Program Manager, shall determine if the CIS/ARK system communicates with VistA/CPRS. If yes proceed to Action 1d. If not, proceed to Action 2.

   1d. The **CHIO or designee,** with assistance from the CST and the VISN CIS/ARK Program Manager, shall assure that patient identification between the CIS/ARK and VistA/CPRS is established using the MVI or the facility ID number in combination with the DFN (see Reference 1). Validation testing of the information transfer between the CIS/ARK system and VistA/CPRS must also be performed according to the document "Management of Issue 4, Incorrect or Overwritten VistA Data in CIS" at the CIS/ARK SharePoint site.

   VistA downtime procedures must also be developed and shall include guidelines for the user to manually enter the Veterans identity traits during the VistA downtime. The procedures shall also include a plan to perform identity reconciliation for a patient added to a CIS/ARK during a VistA downtime once VistA operations have been restored.

2. By COB April 14, 2012, the **Patient Safety Manager** will document on the VHA Hazard Alerts and Recalls website that facility leadership has reviewed and implemented these actions or that certain actions are not applicable to your facility.

Additional Information:

CIS/ARK information:

The process for the VISN-wide acquisition, installation and sustainment of new CIS/ARK systems, including full testing methodology, prior to Go-Live status, is fully described on the CIS/ARK SharePoint site (see Reference 2). A National Clinical Information Systems Support Team (CST) was delegated authority by the DUSHOM in September 2008 to coordinate acquisition, implementation, testing, and sustainment of these CIS/ARK systems (supporting memos can be found on the CIS/ARK Sharepoint site). A July 2010 memorandum of understanding (MOU) signed between the Veterans Health Administration and the Department of Veterans Affairs Office of Information and Technology (OIT) requires each VISN to validate the DataBridge Interface for each installation according to the VISN Implantation Plan as described on the CIS/ARK SharePoint site.

NOTE: The CST has determined that the materials on the SharePoint site relating to the Management of Issues are accurate and adequate to accomplish the Validation testing for information transfers, at this time, but note these are dynamic documents subject to change as VISN's continue testing and implementations.

During the CIS/ARK implementation and sustainment, any errors, malfunctions, problems or issues, as well as final full successful testing must be reported as described by the "Management of Issue 4, Incorrect or Overwritten VistA Data in CIS" document on the CIS/ARK Sharepoint Site. This must include User Acceptance Testing (UAT) with local Healthcare Identity Management (HCIdM) staff.

Patient Identity information:
Details of the policies and procedures for Healthcare Identity Management are in Reference 1. The specific MVI Identity Management services integration solution and usage of the ICN within the CIS/ARK systems is currently being addressed.

Source: VA Medical Centers

References:
1) VA Identity Management Policy (VAIQ 7011145) issued June 28, 2010
2) ARK/ICU CIS SharePoint site

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