

Proposal for OpenEMR to meet the Centers for Medicare and Medicaid's Meaningful Use Stage 2.

§170.314(d)(3) Audit report(s)

Enable a user to create an audit report for a specific time period and to sort entries in the audit log according to each of the data specified in the standards at §170.210(e)

§ 170.210(e)(1)(i) - The audit log must record the information specified in sections 7.2 through 7.4, 7.6, and 7.7

- 7.2 Date and Time of Event—The exact date and time of the access event and the exit event.
- 7.3 Patient Identification—Unique identification of the patient to distinguish the patient and his/her health information from all others.
- 7.4 User Identification—Unique identification of the user of the health information system.
- 7.6 Type of Action (additions, deletions, changes, queries, print, copy)—Specifies inquiry, any changes made (with pointer to original data state), and a delete specification (with a pointer to deleted information).
- 7.7 Identification of the Patient Data that is Accessed

§ 170.210(e)(1)(ii) - The date and time must be recorded in accordance with the standard specified at § 170.210(g).

§ 170.210(e)(2)(i) - The audit log must record the information specified in sections 7.2 and 7.4 of the standard specified at § 170.210(h) when the audit log status is changed.

- 7.2 Date and Time of Event—The exact date and time of the access event and the exit event.
- 7.4 User Identification—Unique identification of the user of the health information system.

OpenEMR Columbia University

hitny.org/openemr/interface/main/main_screen.php?auth=login&site=default

NEW PATIENT CLEAR ACTIVE PATIENT

Patient: **Amanda Aardvark (555)** DOB: 2001-01-01 Age: 12

Encounter History

Home | Manual | Logout

David Merle

Logs Viewer

Start Date: 2012-12-06 End Date: 2013-12-06 Patient: Click To Select

User: All Name of Events: view Type of Events: All

Include Checksum: [Refresh]

Date	Event	User	Certificate User	Group	PatientID	Success	Comments
2013-12-06 11:26:56	view	dd200		Default	0	1	1249
2013-12-06 11:27:50	view	dd200		Default	0	1	1201
2013-12-06 11:33:54	view	dd200		Default	0	1	17
2013-12-06 11:33:59	view	dd200		Default	0	1	1000
2013-12-06 11:41:32	view	dd200		Default	0	1	641
2013-12-06 11:41:44	view	dd200		Default	0	1	272
2013-12-06 11:42:49	view	dd200		Default	0	1	1000
2013-12-06 11:44:07	view	dd200		Default	0	1	0
2013-12-06 11:44:32	view	dd200		Default	0	1	1258
2013-12-06 18:46:39	view	dpm2107		Default	0	1	1248
2013-12-06 18:46:40	view	dpm2107		Default	0	1	1248
2013-12-06 18:52:26	view	dpm2107		Default	0	1	1248

Currently, the audit report only records the access event. Proposal: The date and time of all exit events should be recorded. The audit report should be sortable by date and time.

Currently, the audit report does not allow for the audit of unique patient identification. The ability to audit unique identification and sort should be added.

Currently, the audit report does not allow for the audit of all users of the system.

OpenEMR should have a user log that lists user name, user ID number, user start date, user status and termination date. The audit report should be sortable on any of these items.

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NEW PATIENT CLEAR ACTIVE PATIENT Patient: Amanda Aardvark (555) DOB: 2001-01-01 Age: 12 Encounter History Home | Manual Logout David Merle

Logs Viewer

Start Date: 2012-12-06 End Date: 2013-12-06 Patient: Click To Select
 User: All Name of Events: All Type of Events: update
 Include Checksum: [Refresh]

Date	Event	User	Certificate User	Group	PatientID	Success	Comments
2013-12-05 19:07:09	security-administration-update				0	1	UPDATE users SET password=NoLongerUsed WHERE username=? AND id=? ('d12143','110')
2013-12-06 11:45:05	other-update	dd200		Default	0	1	UPDATE user_settings SET setting_value=? WHERE setting_user=? AND setting_label=? ('0','111','vitals_ps_expand')
2013-12-06 11:45:07	other-update	dd200		Default	0	1	UPDATE user_settings SET setting_value=? WHERE setting_user=? AND setting_label=? ('1','111','vitals_ps_expand')
2013-12-06 18:52:43	patient-record-update	dpm2107		Default	1248	1	UPDATE patient_data SET date = NOW(), 'id' = '1254', 'title' = 'Ms', 'fname' = 'Amanda', 'mname' = 'Aardvark', 'pubpid' = '555', 'DOB' = '2001-01-01', 'sex' = 'Female', 'ss' = '999887777', 'drivers_license' = '', 'status' = 'single', 'genericname1' = '', 'genericname2' = '', 'genericname3' = '', 'street' = '', 'city' = '', 'state' = '', 'postal_code' = '', 'country_code' = '', 'mothersname' = '', 'guardiansname' = '', 'contact_relationship' = '', 'phone_contact' = '', 'phone_home' = '', 'phone_biz' = '', 'phone_cell' = '', 'email' = '', 'providerID' = '', 'ref_providerID' = '', 'pharmacy_id' = '0', 'hipaa_notice' = '', 'hipaa_voice' = '', 'hipaa_message' = '', 'hipaa_mail' = '', 'hipaa_allowsms' = '', 'hipaa_allowemail' = '', 'allow_imm_reg_use' = '', 'allow_imm_info_share' = '', 'allow_health_info_ex' = '', 'allow_patient_portal' = '', 'occupation' = '', 'language' = 'greek', 'ethnicity' = '', 'race' = '', 'financial_review' = '0000-00-00 00:00:00', 'family_size' = '', 'monthly_income' = '', 'homeless' = '', 'interpreter' = '', 'migrantseasonal' = '', 'referral_source' = '', 'vfc' = '', 'deceased_date' = '0000-00-00 00:00:00', 'deceased_reason' = '' WHERE id = '1254'
2013-12-06 18:52:43	patient-record-update	dpm2107		Default	1248	1	UPDATE insurance_data SET 'type' = 'primary', 'provider' = '', 'policy_number' = '', 'group_number' = '', 'plan_name' = '', 'subscriber_name' = '', 'subscriber_mname' = '', 'subscriber_fname' = '', 'subscriber_relationship' = '', 'subscriber_ss' = '', 'subscriber_DOB' = '0000-00-00', 'subscriber_street' = '', 'subscriber_postal_code' = '', 'subscriber_city' = '', 'subscriber_state' = '', 'subscriber_country' = ''

OpenEMR provides the SQL query string for all database transactions instead of a report or log, nor does it show the pre-modified data state. OpenEMR should be modified to record the date, time, user, record modified, previous value, and current value in a searchable report.

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OpenEMR does not currently produce a sortable audit log that would allow for identifying which users viewed which patient data. The functionality should be added and allow for sorting.