

Detail of Bugs Demonstrated to MAKE

OSCAR EMR works with the OSCAR community to ensure any bugs that are encountered are reported, investigated, triaged and resolved according to priority. Open collaboration across the OSCAR community is essential to this process, and Approved OSPs commit to compliance with this process through their Affiliation Agreement with OSCAR EMR.

The list of bugs below represents a sub-set of issues Indivica provided to OntarioMD in April 2014. OSCAR EMR reviewed each of the items at that time and requested additional information from Indivica for any bugs that could not be reproduced and that had not been reported elsewhere in the OSCAR community. OSCAR EMR has not received any additional information from Indivica to this date.

The table below provides a list of the bugs demonstrated to MAKE Solutions Inc. by Indivica. OSCAR EMR has added the following columns (highlighted in green) with our responses:

- Comments from OSCAR EMR – OSCAR EMR's response to Indivica's descriptions
- OSCAR EMR Severity – the severity rating applied using the OSCAR Community's bug classification system represented on SourceForge
- 12.1.1 (OSCAR EMR Response) – OSCAR EMR's findings upon review of the described issues using OSCAR 12.1.1 set-up and configured in compliance with the Affiliated Product requirements.

The following definitions apply to the terms used in this table to document OSCAR EMR's findings:

- Not a bug – means the software is working as designed; if this issue is important to users, OSCAR EMR welcomes contributions to enhance the design
- Not able to confirm – means OSCAR EMR cannot replicate the bug and the bug has not been reported elsewhere

Summary (from Indivica)	Description (from Indivica)	Comments from OSCAR EMR	Specification Requirement	Indivica Severity	MAKE Severity	OSCAR EMR Severity	12.1.1 Feb	12.1 +Patch	12.1.1 Dec	12.1.1 (OSCAR EMR Build 451)	Type
SECURITY - Documents can be uploaded as html exposing all of OSCAR to hackers	Documents can be uploaded into OSCAR as straight html. It has been demonstrated that someone can embed malicious code to essentially have free reign on the entire EMR. The malicious code would have the freedom to grab "ALL DATA" on the OSCAR server and upload it to anywhere on the internet. This also applies to users with minimal roles. *If users with administrative roles open a document with malicious code, there is essentially no limit to what can happen as a malicious document can be created in such a way that it can query a remote server for instructions on what to perform GIVING AN ATTACKER FULL CONTROL. There is no guess work by virtue of this being an open source project, an attacker can simply browse the public source to inform themselves on how to exactly hit each and every one of the administrative functions.*	a. Access to the system is credentialed b. The only way someone can add an inform is if they have been accepted as a trusted source c. Documents down loaded should be from known systems d. Degrees of risk can be managed with by OSP and the clients. i. OSP in consultation with client can restrict communication outside of OSCAR ii. We can provide a list of white listed sites that OSCAR needs to function e. If users are interested we could add a disclaimer that each time a document is uploaded, a disclaimer prompt reminds users to only download from trusted sources	Appendix A: 2.8	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security
Interactions are not displayed	Drug interactions are not displayed in the Rx module like they should be. Coumadin and Allopurinol interact, but there is no notice to the user given when they are both prescribed together.	Confirmed to be working in OSCAR 12.1.1	Appendix A: 2.1.3f, 2.1.3g	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	PT Safety
SECURITY - Measurement Groups - Any type of file can be uploaded as a style sheet.	Files that are uploaded as measurement group style sheets are not validated in any way as CSS. They can be any file including a binary. They can also be used to inject JavaScript into the measurement group webpage which then opens up the page to html injection as well as Ajax calls to transmit measurement data.	A trusted login is required to upload a file. A sample file would be needed to test if this were possible. OSCAR EMR has no examples of this and has not heard of this happening.	Appendix A: 2.8	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security
Measurements (SECURITY) - Link in mapping configuration goes to webpage that no longer exists	If you click on the following link when configuring measurement mapping: "NOTE: It is suggested that you use the RELMA application to help determine correct LOINC codes." it takes you to a webpage that no longer exists. This demonstrates that care is not taken in what links are provided to users. There exists a scenario where a malicious 3rd party can take ownership of an unused domain that OSCAR links to and log incoming IPs thus identifying clinics running OSCAR.	Resolved in Master, bug 2925 https://source.oscartools.org/8080/#/c/8500/	Appendix A: 2.8	Critical	Blocker	Low	Exists	Does Not Exist	Exists	Exists	Security
CMS v4.0 2.1.12 - NON COMPLIANCE - roles and security flaws	As shown in other tickets describing security flaws, the OSCAR system as given does not comply with CMS v4.0 under the 2.1.12 section. More specifically, since there exist methods for any user to run any query against all data in the EMR, there is no configuration of roles/security that meet 2.1.12 subsections g) and i)	This is not a bug. We are able to create a user that has limited rights.	Appendix A: 2.1.12g,i	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security
PRIVACY/SECURITY - Security by obscurity	OSCAR will make it appear as certain roles no longer have access to certain parts of the EMR. In reality all that has happened is that the links have been hidden or not shown. A lot of the functionality that is no longer visible can still be hit directly through a URL meaning that a wide array of functionality has zero permission checking.	Additional information on the links noted would be helpful in the investigation.	Appendix A: 2.1.12f,g,i	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Security
PRIVACY/SECURITY - Reports reachable by all users: CMS v4.0 2.1.12 h). Non	Reports module is reachable by all users. From here they are a mouse click away from any listed report.	We are able to create users that do not have rights to certain sections/reports.	Appendix A: 2.1.12f,h	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security
PRIVACY/SECURITY - Any user can use report by template	This admin tool is not protected by role checks. Any user can use any imported report, or in fact upload their own xml files containing any query they wrote.	This function has been removed in Master from reports and now can only be accessed with Administrative rights.	Appendix A: 2.1.12g,i	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security
PRIVACY/SECURITY - ABILITY TO QUERY ANYTHING IN THE DATABASE	There exists a report by example tool within Oscar than any logged in user can hit. This tool allows you to write any kind of select query on any table within the OSCAR database. IN LAYMAN'S TERMS: A receptionist, secretary, or some other minimally privileged user can search all medical content for all demographics on the system. This includes being able to search for keywords within ALL note content in the charts. Furthermore, you can query user and security records to retrieve unprotected pins and the hashed passwords of all users.	This feature works as designed, and is often part of the desired workflow for a clinic.	Appendix A: 2.8, 2.1.12g,i,j	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security

PRIVACY/SECURITY - Roles with access to master record can make administrative changes / see confidential information	Any role with access to master record can do the following by simply clicking on links with the mouse until it takes them to certain parts of the system. This includes secretary and receptionist roles which in practice have no business in this part of the system: 1. Create Consultations 2. Edit specialist entries 3. Edit specialist lists 4. View patient labs through the consultation module. 5. Modify meta data of labs (comments, filling, acks) of labs when viewing them through consultation module. 6. Look through eforms. 7. Use eforms to access patient medical data such as prescriptions and notes 8. Upload documents 9. Change meta data of uploaded documents. 10. Overwrite documents by reloading a different one. 11. Modify ticklers. 12. Delete ticklers. 13. Change/modify patient sets. 14. MODIFY DEMOGRAPHIC RECORDS 15. CREATE NEW DEMOGRAPHIC RECORDS 16. EXPORT DEMOGRAPHICS 17. Potentially spam faxes through hijacking of consultation module 18. Send messages to all users of system. 19. Search and identify all patients with a certain disease through the caseload view.	Roles access can be modified. Basic Admin is an example of a limited access role.	Appendix A: 2.8, 2.1.12g,I,j	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Security
Demographic Record - Concurrent editing is unsafe for data integrity	If two users are simultaneously editing a patient's master record, they will have no warning that another user is editing the same record. If they both modify the same fields, then the user who updates first will have their changes overwritten by the latter user with no warning what so ever. The delta between the two is not recorded.	The feature is currently working as designed, however, it could be improved by implementing a notice that a version has been saved since you opened the record.	Appendix A: 2.5.1c	Critical	Critical	NA	Exists	Does Not Exist	Exists	Not a bug	Data
Schedule - Double booking doesn't fit in schedule	When booking more than one appointment for a time slot, appointments will be unable to fit on the schedule page. For the OSCAR EMR versions, the default view has the issue, but there is a work around. The work around is not such that it would not be tolerated for any length of time.	This is not a mandatory field in CMS definition.	Appendix A: 2.1.10f	Critical	Critical	Low	Exists	Does Not Exist	Exists	Does Not Exist	Workflow
Consultations - Attaching labs does not work correctly.	In this example an attempt was made to attach 4 labs. Only 2 of them were attached and in a way which broke the Consultation Form. We were able to see the attachments on the Indivica code but couldn't even get to the consult after saving on the 12.1.1 (Feb) code. In 12.1.1 (Dec), there was a workaround but the workaround would prohibit faxing of the consultation with attachments	This has been logged on SourceForge as bug 3122 and has been fixed in 12.1.1.	Appendix A: 2.1.6b	Critical	Blocker	High	Exists	Does Not Exist	Exists	Does Not Exist	Data
DOCUMENT RACE CONDITION: CMS v4.0 Req 2.5.1 C	When linking uploaded documents to a patient's chart, there exists a race condition that can cause the document in question to be linked to a different patient incorrectly causing the document to show up in the other patients chart. This is a failure of concurrency handling as the code responsible for this takes a very naive approach in linking documents and can and will fail easily if there are multiple users using the OSCAR system at once. This bug causes this version of OSCAR to not meet the CMS v4.0 2.5.1 C requirement described as "c) Provides protection to maintain the integrity of clinical data during concurrent access."	Additional information required to be confirmed.	Appendix A: 2.5.1c, 2.8	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Pt Safety
GDML Lab parsing	You can upload GDML labs but the content of the lab shows up empty when you open the lab from Inbox. Tested with three labs and none displayed the content. Names of the three labs attached for future reference.	Additional information required to be confirmed.	Appendix A: 2.1.5, 2.4.2	Critical	Blocker	NA	Exists	Does Not Exist	Does Not Exist	Not able to replicate/not reported elsewhere	Interface
Some TDIS labs display error while opening	TDIS labs that have empty OBX segments in the raw HL7 file error out when you open them in the Inbox.	We do not support TDIS. This handler option can be removed.	Appendix A: 2.1.5	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Interface
OU reports failing to capture duplicate entries	OU reports will only print out the first instance per month for a given patient, when the reports themselves are supposed to contain all instances of OU visits each month. It impossible for this version of OSCAR to display the other entries for a patient.	Bug #2582: Commit has been merged into 12.1.1 branch: https://source.oscartools.org/8080/#/c/9052/	Appendix A: 2.4.1	Critical	Blocker	High	Exists	Does Not Exist	Exists	Does Not Exist	Data
Long Term meds cannot be unset as long term.	Once a drug has been set to long term it can not be unset. This issue was previously escalated to OMD by a client.	Confirmed to be working. Not a bug. Current workflow for this consists of deleting and re-adding the prescription.	Appendix A: 2.1.4a	Critical	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Data
Consultation creation - many buttons missing	when writing a consultation the buttons for "social history", "risk factor", and "medications" are missing from the "pertinent clinical information" and "significant concurrent problems" headings	Works as designed.		Major	Critical	NA	Exists	Does Not Exist	Exists	Not a bug	Workflow
Diabetes Flowsheet/Measurem ents Pastes Other Patient's Data to EChart	To reproduce: 1. Create two appointments. 2. Open one patient's chart. Create a set of CDM Indicators. Sign, Save, & Exit. 3. Open a second patient's chart. Open the Diabetes Flowsheet. Add some values, and then save. The result is pasted to the chart. The pasted result will be in the first patient's chart.	Confirmed bug fixed in OSCAR Master and OSCAR 12.1.1.	Appendix A: 2.1.2a, 2.5.1, 2.2.2, Appendix C: 2a, 3.1	Major	Blocker	High	Exists	Does Not Exist	Does Not Exist	Does Not Exist	Pt Safety
Preferences - Edit Billing Preference does not work.	Setting the default billing form in the provider preferences does not actually set the default billing form.	Cannot reproduce	Appendix A: 2.1.11b	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Workflow
EChart/Medications - Prescribed drugs are not listed in EChart under Medications	The complete list of Drugs that are prescribed to a patient are not listed under Medications on the EChart and is inconsistent with what is in the Medication Module.	Working as intended. Additional information required to determine the issue.	Appendix A: 2.1.4a	Major	Critical	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Pt Safety
Adding patient to Billing INR adds to wrong doctor in some case	When adding patient to INR list, even though you select the correct doctor, when checking the INR list after its on a different provider. For no good reason at all providers who have a leading 0 will not have the 0 inserted along with the rest of their provider no into the billinginr table. So since Dr. xxxxx's provider no is 12345, and the search query looks for 012345, nothing gets returned.	Additional information required, might be a bug, but cannot reproduce and has not been reported elsewhere.	Appendix A: 2.1.11a.g	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Data
Information from one patient's chart can appear in another patient's chart in the same session	The textOnEncounter variable is being stored in the session object as opposed to the request object. That means that it persists past the execution of the servlet and can be displayed on another page - it's not always cleared after it's been written to the JSP file.	Need specific situation, not an issue for current 12.1.1 users.	Appendix A: 2.5.1c	Major	Blocker	NA	Exists	Does Not Exist	Does Not Exist	Not able to replicate/not reported elsewhere	Pt Safety
Cannot search patient records by demographic number	In the "Search/Add Patient Records" window there is no option in the search by drop down menu to search the records by the patients demographic number.	This would be a feature request, as it is not a bug.		Major	Critical	NA	Exists	Does Not Exist	Exists	Not a bug	Workflow

Compose messages: Attaching demographic on page >= 2 is impossible	It's not possible to attach a demographic to a message if that demographic appears in page 2 or higher of the search results, because the demographic no link on the search results opens that patient's Master Record instead of linking them to the message.	Confirmed, however it has been assigned a low priority, and therefore not assigned by OSCAR EMR to be fixed.	Appendix A: 2.1.9d	Major	Critical	Low	Exists	Does Not Exist	Exists	Exists	Exists	Workflow
LABS - incomplete list of historic lab result values	Clicking on lab results do not display a full list of historic results for that test. For example, if a patient has labs from CML and GDML and you click on eGFR to see all the eGFR results of that patient regardless of the lab type, it does not display a full list of the results.	Working as designed. Could be a feature change.	Appendix A: 2.1.5f	Major	Critical	NA	Exists	Does Not Exist	Exists	Not a bug	Not a bug	Pt Safety
Inbox: Next appt date	Next appointment date will not show up when viewing items in the inbox. The space and header for it exist but it does not populate with any information.	Fixed in OSCAR 12.1.1		Major	Critical	Medium	Exists	Does Not Exist	Exists	Does Not Exist	Does Not Exist	Workflow
Discontinuing Drug	Discontinuing a drug only discontinues that specific prescription instead of all previous prescriptions, causing drugs to appear as if they haven't been discontinued.	Fixed in OSCAR 12.1.1	Appendix A: 2.2.1.2-4p	Major	Blocker	Medium	Exists	Does Not Exist	Exists	Does Not Exist	Does Not Exist	Pt Safety
Rotavirus	The "Rotavirus" prevention from OSCAR 10 was replaced with "ROT" in OSCAR v12, so if users migrated from 10 -> 12 they'd lose data; preventions that don't match a real prevention type in oscar are not displayed in the UI	No reported issue in OSCAR 12.1.1 user base.	Appendix A: 2.1.13b	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Not able to replicate/not reported elsewhere	Data
inbox can't count properly	In a system with 254286 labs and documents (180265 labs, 74021 docs) the inbox response with 78770 (77559 docs and it doesn't show the number of labs) then you can't scroll past the one page of links that shows up	Scrolling issue has been fixed in OSCAR 12.1.1, but the counting issue is a known issue.	Appendix A: 2.1.5a	Major	Blocker	High	Exists	Does Not Exist	Exists	Does Not Exist	Does Not Exist	Data
GDML Labs parse incorrectly.	It appears GDML labs are parsing incorrectly. The disciplines are not being set causing blank lab entries in the eChart.	Fixed in OSCAR 12.1.1	Appendix A: are not being set causing blank lab entries in the eChart.	Major	Blocker	High	Exists	Does Not Exist	Does Not Exist	Does Not Exist	Does Not Exist	Interface
Error uploading PFHT labs	Unable to upload PFHT labs with custom OBX value types such as "NUM".	Not currently supported by OSCAR EMR: if required for clients of Indivica, OSCAR EMR welcomes the fix to enable inclusion of this functionality	Appendix A: 2.1.5	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Not a bug	Interface
Error 500 while printing MDS labs	Cannot print MDS labs.	Fixed in OSCAR 12.1.1	Appendix A: 2.1.5h	Major	Critical	High	Exists	Does Not Exist	Does Not Exist	Does Not Exist	Does Not Exist	Workflow
EFORM Security Risk - SQL Injection	There exist a number of security holes in the eform system that could potentially allow an attacker to exploit through an SQL injection attack.	Any SQL injections that have been identified should be reported to us immediately. Failure to report this would constitute a serious oversight. No specific reports have been made to OSCAR EMR	Appendix A: 2.8	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Not able to replicate/not reported elsewhere	Security
Error uploading Clinical Connect labs	Can't upload Clinical Connect labs. Sample test file attached.	Test data required to confirm.	Appendix A: 2.1.5	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Not able to replicate/not reported elsewhere	Interface
Vascular Tracker form loses creation date on save.	When saving a vascular tracker form for a patient, the creation date of the form never gets saved to the database. When viewing the eChart afterwards there is just a blank space in the eChart where the form date should be.	No creation time but has edit time. Limited impact.	Appendix A: 2.5.2	Major	Critical	Low	Exists	Does Not Exist	Exists	Exists	Exists	Data
TDIS labs fail to route to CCed provider's Inbox	CCed providers are not displayed on the lab when you open it from the Inbox. They also do not route to the CCed provider's Inbox.	OSCAR EMR does not support this lab at this time. This could be added as a feature request.	Appendix A: 2.1.5p	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Not a bug	Interface
Physician selected medications passed to McMaster	The prescription module of 12.1.1 now contains a feature that, when invoked, sends the medication name to McMaster University. The program at McMaster University then sends back un-vetted physician description of how the medication should be used, dosage, indications etc.	The data sent is only ATC codes, and that information is not stored on the server. Users will only see advice from users they trust on the server. This feature has been part of the validated offering for the last two rounds.	Appendix A: 2.8, 2.1.4f,g,h	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Not a bug	Security
PHI being passed to external organization without patient consent. Inclusion of Explicitly Forbidden Software in the Release	Twice since the release of OSCAR v12.1 (Sept. 2012 and July 2013), the OSCAR Technical Committee discussed the integration of the 3rd party prescription application "ZoomMed" with the OSCAR software. Both times, the Technical Committee passed a motion noting that the ZoomMed module should be disabled in the OSCAR software due to concerns regarding the non-consented release of patient and prescription information from the EMR to the 3rd party prescription company, and the application's incompatibility with the OntarioMD specification. Both discussions at the Committee were informed by the lack of available functional information pertaining to the software module and a concern that the stated business model of ZoomMed is the sale of patient and prescription information to the pharmaceutical industry. The 12.1.1 release now contains significant new software changes relating to ZoomMed, added on Jan 24, 2014 by a McMaster University programmer and approved by another, apparently at the request of ZoomMed itself. No information beyond the changes within the software are available. This software addition, as well as being potentially illegal under PHIPA and incompatible with OntarioMD specification 4.1A, shows that there is a lack of process being followed by OSCAR EMR in its management of what is done by its own University's employees.	ZoomMed is an external prescriber - If the clinic wants to use this service, this is their choice. End users can turn this function on or off. This is off by default. Any user running Funding Eligible 12.1.1 has been instructed to have this feature turned off.	Appendix A: 2.8	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not a bug	Not a bug	Security
Doctor Lock Out	Section 12.7 of the OntarioMD "EMR Funding Eligibility Agreement - Local" states: "The Offerings shall be free of viruses and will not contain any contaminants or time bombs, including any codes or instructions that may be used to access, modify, delete, damage or disable any computer system introduced by the Vendor." In violation of this requirement, OSCAR v12.1.1 forces the user to sign a terms of use agreement in order to access the system.	Additional information required to be confirmed.	EMR Funding Eligibility Agreement: 12.7	Major	Blocker	NA	Exists	Does Not Exist	Exists	Not able to replicate/not reported elsewhere	Not able to replicate/not reported elsewhere	Security
Measurement observation date is incorrect.	When entering new measurements from the measurement window, the observation date of the last measurement is incorrect. The only way for a provider to discover the correct observation date is to manually sort through the eChart entries or to edit individual measurements.	Not a bug. Confirmed to be working as designed.	Appendix A: 2.1.3d,e	Major	Blocker	NA	Exists	Does Not Exist	Does Not Exist	Not a bug	Not a bug	Data
Alpha labs fail to upload	Alpha labs are failing to upload. There is an option to upload Alpha labs from the Lab Upload page but the parser for Alpha labs does not exist.	OSCAR EMR does not support this lab at this time. This could be added as a feature request.	Appendix A: 2.1.5	Major	Blocker	NA	Exists	Does Not Exist	Does Not Exist	Not a bug	Not a bug	Interface