RESOURCE AND PATIENT MANAGEMENT SYSTEM

Certified Electronic Record Checker

(BCER)

User Manual

Version 6.2
September 2023

Table of Contents

1.0   Introduction

The Certified Electronic Health Record (BCER) application is designed to check that the Indian Health Service (IHS) Resource and Patient Management System (RPMS) software versions and patch levels are at the minimum level required to meet the 2015 Edition Certified EHR Technology (CEHRT) including the 21st Century Cures Act requirements.

1.1   Feature Numbers Included in Release

76967 - Updates for (b)(10) EHI Export. Includes checks for 3 patches: ACHS v3.1 p30, BREH v1.0 and LR v5.2 p1052.

2.0   System Navigation

Not applicable.

3.0   Package Management

Not applicable.

4.0   Package Operation

The BCER application is simple and straightforward. A menu option has been provided to list any missing software installations.

BCER Version 6.2 also includes a menu option called Certification Installation Check [**BCERMENU**]. Users can also use the Certification Installation Check [**BCERMENU**] option to check whether all required RPMS software versions and patches have been installed.

In order to meet the 2015 Edition Certified EHR Technology (CEHRT) including the 21st Century Cures Act requirements, all patches or versions listed as "DO NOT HAVE" or "NOT INSTALLED" must be installed in your RPMS system.

If all patches or versions are installed, then you will get the list of all installations and a list of the IHS 2015 Certified HealthIT Certification Criteria/Clinical Quality Measures plus a message: ****This database has all installs released to date by IHS for 2015 Edition Certified EHR Technology (CEHRT) including CURES updates as indicated above. Check with your Promoting Interoperability Coordinator to identify the CEHRT requirements for any incentive or quality programs in which your facility or clinicians may participate.****

Install any missing patches or versions until all missing requirements are met. Once all the missing patches are installed, use the menu option to print out the report to save for your records.

Figure 4-1 is an example of the report where some patches are installed but others are not:

```
Select IHS Kernel <TEST ACCOUNT> Option: 13 Certification Installation Check


DEVICE: HOME//   Virtual


       Checking Environment for 2015 Certified Health IT (CHIT) Software
              Including applicable 2015 Edition CURES updates
        Resource and Patient Management System Electronic Health Record
           Certified Electronic Record Checker (BCER) Version 6.2


                       For: 2016 DEMO HOSPITAL


     HealthShare System version is 2017.2.2


     BMW Version 2022.3 is installed


     DTS Version IS at least DTS Version 50

You DO NOT HAVE patch BREH v1.0 installed!
You DO NOT HAVE patch LR*5.2*1052 installed!
```

```
You HAVE patch ACHS*3.1*30 installed
You HAVE patch AG*7.1*15 installed
You HAVE patch AMER*3.0*12 installed
You HAVE patch APCL*3.0*32 installed
You HAVE patch APCM v2.0 installed
You HAVE patch APSP*7.0*1028 installed
You HAVE patch AUM*21.0*5 installed
You HAVE patch AUPN*99.1*29 installed
You HAVE patch AUT*98.1*32 installed
You HAVE patch AVA*93.2*25 installed
You HAVE patch AVA*93.2*26 installed
You HAVE patch BCCD*2.0*1 installed
You HAVE patch BCOM v1.0 installed
You HAVE patch BCQM*1.0*9 installed
You HAVE patch BEDD*2.0*6 installed
You HAVE patch BI*8.5*19 installed
You HAVE patch BJPC*2.0*26 installed
You HAVE patch BPHR*2.1*4 installed
You HAVE patch BPRM*3.0*8 installed
You HAVE patch BQI*2.9*3 installed
You HAVE patch BSTS*2.0*3 installed
You HAVE patch BUSA*1.0*3 installed
You HAVE patch BYIM v3.0 installed
You HAVE patch DI*22.0*1020 installed
You HAVE patch EHR*1.1*34 installed
You HAVE patch RA*5.0*1008 installed
You HAVE patch TIU*1.0*1022 installed
You HAVE patch XT*7.3*1019 installed
You HAVE patch XU*8.0*1020 installed




** You do NOT have all installs needed for 2015 CHIT requirements and
the applicable 2015 Edition Cures updates. **
```

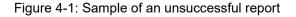Figure 4-1: Sample of an unsuccessful report

Figure 4-2 is an example of a successful report:

```
Select OPTION NAME: BCERMENU        Certification Installation Check
Certification Installation Check
DEVICE: HOME//   Virtual


      Checking Environment for 2015 Certified Health IT (CHIT) Software
            Including applicable 2015 Edition CURES updates
       Resource and Patient Management System Electronic Health Record
           Certified Electronic Record Checker (BCER) Version 6.2


                      For: 2019 DEMO HOSPITAL (INST)
                           2019 DEMO TRIBAL HOSPITAL
```

```
      HealthShare System version is 2017.2.2

      BMW Version 2022.3 is installed

      DTS Version IS at least DTS Version 50


You HAVE patch ACHS*3.1*30 installed
You HAVE patch AG*7.1*15 installed
You HAVE patch AMER*3.0*12 installed
You HAVE patch APCL*3.0*32 installed
You HAVE patch APCM v2.0 installed
You HAVE patch APSP*7.0*1028 installed
You HAVE patch AUM*21.0*5 installed
You HAVE patch AUPN*99.1*29 installed
You HAVE patch AUT*98.1*32 installed
You HAVE patch AVA*93.2*25 installed
You HAVE patch AVA*93.2*26 installed
You HAVE patch BCCD*2.0*1 installed
You HAVE patch BCOM v1.0 installed
You HAVE patch BCQM*1.0*9 installed
You HAVE patch BEDD*2.0*6 installed
You HAVE patch BI*8.5*19 installed
You HAVE patch BJPC*2.0*26 installed
You HAVE patch BPHR*2.1*4 installed
You HAVE patch BPRM*3.0*8 installed
You HAVE patch BQI*2.9*3 installed
You HAVE patch BREH v1.0 installed
You HAVE patch BSTS*2.0*3 installed
You HAVE patch BUSA*1.0*3 installed
You HAVE patch BYIM v3.0 installed
You HAVE patch DI*22.0*1020 installed
You HAVE patch EHR*1.1*34 installed
You HAVE patch LR*5.2*1052 installed
You HAVE patch RA*5.0*1008 installed
You HAVE patch TIU*1.0*1022 installed
You HAVE patch XT*7.3*1019 installed
You HAVE patch XU*8.0*1020 installed


**This database has all installs released to date by IHS for 2015
Edition Certified EHR Technology (CEHRT) including CURES updates as indicated
above. Check with your Promoting Interoperability Coordinator to identify
the CEHRT requirements for any incentive or quality programs in which your
facility or clinicians may participate.**

IHS 2015 Certified HealthIT Certification Criteria (includes Cures updates) /
Clinical Quality Measures include the following:
     > 170.315 (a)(1):  Computerized Provider Order Entry (CPOE) - Medications
     > 170.315 (a)(2):  CPOE - Laboratory
     > 170.315 (a)(3):  CPOE - Diagnostic Imaging
     > 170.315 (a)(4):  Drug-Drug, Drug-Allergy Interaction Checks for CPOE
     > 170.315 (a)(5):  Demographics
     > 170.315 (a)(9):  Clinical Decision Support
     > 170.315 (a)(10): Drug-Formulary and Preferred Drug List Checks
     > 170.315 (a)(12): Family Health History
     > 170.315 (a)(13): Patient-Specific Education Resources
```

```
     > 170.315 (a)(14): Implantable Device List
     > 170.315 (b)(1):  Transitions of Care (includes Cures updates)
     > 170.315 (b)(2):  Clinical Information Reconciliation and Incorporation (i
ncludes Cures updates)
     > 170.315 (b)(3):  Electronic prescribing (includes Cures updates)
     > 170.315 (b)(6):  Data Export
     > 170.315 (b)(7):  Security tags - summary of care - send  (includes Cures
updates)
     > 170.315 (b)(8):  Security tags - summary of care - receive  (includes Cur
es updates)
     > 170.315 (b)(10): Electronic Health Information export
     > 170.315 (c)(1):  Clinical quality measures (CQMs) - record and export
     > 170.315 (c)(2):  Clinical quality measures (CQMs) - import and calculate
     > 170.315 (c)(3):  Clinical quality measures (CQMs) - report (includes Cure
s updates for 2022)
     > 170.315 (d)(1):  Authentication, Access Control, Authorization
     > 170.315 (d)(2):  Auditable Events and Tamper-Resistance (includes Cures u
pdates)
     > 170.315 (d)(3):  Audit Report(s) (includes Cures updates)
     > 170.315 (d)(4):  Amendments
     > 170.315 (d)(5):  Automatic Access Time-out
     > 170.315 (d)(6):  Emergency Access
     > 170.315 (d)(7):  End-User Device Encryption
     > 170.315 (d)(8):  Integrity
     > 170.315 (d)(9):  Trusted Connection
     > 170.315 (d)(12): Encrypt authentication credentials (includes Cures updat
es)
     > 170.315 (d)(13): Multi-factor authentication (includes Cures updates)
     > 170.315 (e)(1):  View, Download, and Transmit to 3rd Party (includes Cure
s updates)
     > 170.315 (e)(2):  Secure Messaging
     > 170.315 (e)(3):  Patient Health Information Capture
     > 170.315 (f)(1):  Transmission to immunization registries
     > 170.315 (f)(2):  Transmission to Public Health Agencies - Syndromic Surve
illance
     > 170.315 (f)(3):  Transmission to public health agencies - reportable labo
ratory tests and value/results
     > 170.315 (f)(5):  Transmission to public health agencies - electronic case
 reporting (includes Cures updates)
     > 170.315 (g)(2):  Automated Measure Calculation
     > 170.315 (g)(3):  Safety-Enhanced Design
     > 170.315 (g)(4):  Quality Management System
     > 170.315 (g)(5):  Accessibility-Centered Design
     > 170.315 (g)(6):  Consolidated CDA Creation (includes Cures updates)
     > 170.315 (g)(7):  Application Access - Patient Selection
     > 170.315 (g)(8):  Application Access - Data Category Request
     > 170.315 (g)(9):  Application Access - All Data Request (includes Cures up
dates)
     > 170.315 (g)(10): Standardized API for patient and population services
     > 170.315 (h)(1):  Direct Project

IHS 2015 Certified HealthIT Certification Criteria Removed as part of the 21st C
entury Cures Act:
     > 170.315 (a)(10): Drug-Formulary and Preferred Drug List Checks
     > 170.315 (a)(13): Patient-Specific Education Resources
     > 170.315 (e)(2): Secure Messaging
     > 170.315 (g)(8): Application Access - Data Category Request
```

```
**This database has all installs released to date by IHS for 2015
Edition Certified EHR Technology (CEHRT) including CURES updates as indicated
above. Check with your Promoting Interoperability Coordinator to identify
the CEHRT requirements for any incentive or quality programs in which your
facility or clinicians may participate.**
```

Figure 4-2: Sample of a successful report

Appendix A   Rules of Behavior

The Resource and Patient Management (RPMS) system is a United States Department of Health and Human Services (HHS), Indian Health Service (IHS) information system that is **FOR OFFICIAL USE ONLY.** The RPMS system is subject to monitoring; therefore, no expectation of privacy shall be assumed. Individuals found performing unauthorized activities are subject to disciplinary action including criminal prosecution.

All users (Contractors and IHS Employees) of RPMS will be provided a copy of the Rules of Behavior (ROB) and must acknowledge that they have received and read them prior to being granted access to a RPMS system, in accordance IHS policy.

- For a listing of general ROB for all users, see the most recent edition of *IHS General User Security Handbook* (SOP 06-11a).

- For a listing of system administrators/managers rules, see the most recent edition of the *IHS Technical and Managerial Handbook* (SOP 06-11b).

Both documents are available at this IHS website: https://home.ihs.gov/security/index.cfm

> **Note**:   Users must be logged on to the IHS D1 Intranet to access these documents.

The ROB listed in the following sections are specific to RPMS.

A.1   All RPMS Users

In addition to these rules, each application may include additional ROBs that may be defined within the documentation of that application (e.g., Dental, Pharmacy).

A.1.1   Access

RPMS users shall:

- Only use data for which you have been granted authorization.

- Only give information to personnel who have access authority and have a need to know.

- Always verify a caller's identification and job purpose with your supervisor or the entity provided as employer before providing any type of information system access, sensitive information, or nonpublic agency information.

- Be aware that personal use of information resources is authorized on a limited basis within the provisions *Indian Health Manual* Part 8, "Information Resources Management," Chapter 6, "Limited Personal Use of Information Technology Resources."

RPMS users shall not:

- Retrieve information for someone who does not have authority to access the information.

- Access, research, or change any user account, file, directory, table, or record not required to perform their *official* duties.

- Store sensitive files on a PC hard drive, or portable devices or media, if access to the PC or files cannot be physically or technically limited.

- Exceed their authorized access limits in RPMS by changing information or searching databases beyond the responsibilities of their jobs or by divulging information to anyone not authorized to know that information.

A.1.2   Information Accessibility

RPMS shall restrict access to information based on the type and identity of the user. However, regardless of the type of user, access shall be restricted to the minimum level necessary to perform the job.

RPMS users shall:

- Access only those documents they created and those other documents to which they have a valid need-to-know and to which they have specifically granted access through an RPMS application based on their menus (job roles), keys, and FileMan access codes. Some users may be afforded additional privileges based on the functions they perform, such as system administrator or application administrator.

- Acquire a written preauthorization in accordance with IHS policies and procedures prior to interconnection to or transferring data from RPMS.

A.1.3   Accountability

RPMS users shall:

- Behave in an ethical, technically proficient, informed, and trustworthy manner.

- Log out of the system whenever they leave the vicinity of their personal computers (PCs).

- Be alert to threats and vulnerabilities in the security of the system.

- Report all security incidents to their local Information System Security Officer (ISSO).

- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.

- Protect all sensitive data entrusted to them as part of their government employment.

- Abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior, and information technology (IT) information processes.

A.1.4   Confidentiality

RPMS users shall:

- Be aware of the sensitivity of electronic and hard copy information and protect it accordingly.

- Store hard copy reports/storage media containing confidential information in a locked room or cabinet.

- Erase sensitive data on storage media prior to reusing or disposing of the media.

- Protect all RPMS terminals from public viewing at all times.

- Abide by all Health Insurance Portability and Accountability Act (HIPAA) regulations to ensure patient confidentiality.

RPMS users shall not

- Allow confidential information to remain on the PC screen when someone who is not authorized to that data is in the vicinity.

- Store sensitive files on a portable device or media without encrypting.

A.1.5   Integrity

RPMS users shall:

- Protect their systems against viruses and similar malicious programs.

- Observe all software license agreements.

- Follow industry standard procedures for maintaining and managing RPMS hardware, operating system software, application software, and/or database software and database tables.

- Comply with all copyright regulations and license agreements associated with RPMS software.

RPMS users shall not:

- Violate federal copyright laws.

- Install or use unauthorized software within the system libraries or folders.

- Use freeware, shareware, or public domain software on/with the system without their manager's written permission and without scanning it for viruses first.

A.1.6   System Logon

RPMS users shall:

- Have a unique User Identification/Account name and password.

- Be granted access based on authenticating the account name and password entered.

- Be locked out of an account after five successive failed login attempts within a specified time period (e.g., one hour).

A.1.7   Passwords

RPMS users shall:

- Change passwords a minimum of every 90 days.

- Create passwords with a minimum of eight characters.

- If the system allows, use a combination of alpha-numeric characters for passwords, with at least one uppercase letter, one lower case letter, and one number. It is recommended, if possible, that a special character also be used in the password.

- Change vendor-supplied passwords immediately.

- Protect passwords by committing them to memory or store them in a safe place (do not store passwords in login scripts or batch files).

- Change passwords immediately if password has been seen, guessed, or otherwise compromised, and report the compromise or suspected compromise to their ISSO.

- Keep user identifications (IDs) and passwords confidential.

RPMS users shall not:

- Use common words found in any dictionary as a password.

- Use obvious readable passwords or passwords that incorporate personal data elements (e.g., user's name, date of birth, address, telephone number, or social security number; names of children or spouses; favorite band, sports team, or automobile; or other personal attributes).

- Share passwords/IDs with anyone or accept the use of another's password/ID, even if offered.

- Reuse passwords. A new password must contain no more than five characters per eight characters from the previous password.

- Post passwords.

- Keep a password list in an obvious place, such as under keyboards, in desk drawers, or in any other location where it might be disclosed.

- Give a password out over the phone.

A.1.8   Backups

RPMS users shall:

- Plan for contingencies such as physical disasters, loss of processing, and disclosure of information by preparing alternate work strategies and system recovery mechanisms.

- Make backups of systems and files on a regular, defined basis.

- If possible, store backups away from the system in a secure environment.

A.1.9   Reporting

RPMS users shall:

- Contact and inform their ISSO that they have identified an IT security incident and begin the reporting process by providing an IT Incident Reporting Form regarding this incident.

- Report security incidents as detailed in the *IHS Incident Handling Guide* (SOP 05-03).

RPMS users shall not:

- Assume that someone else has already reported an incident. The risk of an incident going unreported far outweighs the possibility that an incident gets reported more than once.

A.1.10   Session Timeouts

RPMS system implements system-based timeouts that back users out of a prompt after no more than 5 minutes of inactivity.

RPMS users shall:

- Utilize a screen saver with password protection set to suspend operations at no greater than 10 minutes of inactivity. This will prevent inappropriate access and viewing of any material displayed on the screen after some period of inactivity.

A.1.11   Hardware

RPMS users shall:

- Avoid placing system equipment near obvious environmental hazards (e.g., water pipes).

- Keep an inventory of all system equipment.

- Keep records of maintenance/repairs performed on system equipment.

RPMS users shall not:

- Eat or drink near system equipment.

A.1.12   Awareness

RPMS users shall:

- Participate in organization-wide security training as required.

- Read and adhere to security information pertaining to system hardware and software.

- Take the annual information security awareness.

- Read all applicable RPMS manuals for the applications used in their jobs.

A.1.13   Remote Access

Each subscriber organization establishes its own policies for determining which employees may work at home or in other remote workplace locations. Any remote work arrangement should include policies that:

- Are in writing.

- Provide authentication of the remote user through the use of ID and password or other acceptable technical means.

- Outline the work requirements and the security safeguards and procedures the employee is expected to follow.

- Ensure adequate storage of files, removal, and nonrecovery of temporary files created in processing sensitive data, virus protection, and intrusion detection, and provide physical security for government equipment and sensitive data.

- Establish mechanisms to back up data created and/or stored at alternate work locations.

Remote RPMS users shall:

- Remotely access RPMS through a virtual private network (VPN) whenever possible. Use of direct dial in access must be justified and approved in writing and its use secured in accordance with industry best practices or government procedures.

Remote RPMS users shall not:

- Disable any encryption established for network, internet, and Web browser communications.

A.2   RPMS Developers

RPMS developers shall:

- Always be mindful of protecting the confidentiality, availability, and integrity of RPMS when writing or revising code.

- Always follow the IHS RPMS Programming Standards and Conventions (SAC) when developing for RPMS.

- Only access information or code within the namespaces for which they have been assigned as part of their duties.

- Remember that all RPMS code is the property of the U.S. Government, not the developer.

- Not access live production systems without obtaining appropriate written access and shall only retain that access for the shortest period possible to accomplish the task that requires the access.

- Observe separation of duties policies and procedures to the fullest extent possible.

- Document or comment all changes to any RPMS software at the time the change or update is made. Documentation shall include the programmer's initials, date of change, and reason for the change.

- Use checksums or other integrity mechanism when releasing their certified applications to assure the integrity of the routines within their RPMS applications.

- Follow industry best standards for systems they are assigned to develop or maintain and abide by all Department and Agency policies and procedures.

- Document and implement security processes whenever available.

RPMS developers shall not:

- Write any code that adversely impacts RPMS, such as backdoor access, "Easter eggs," time bombs, or any other malicious code or make inappropriate comments within the code, manuals, or help frames.

- Grant any user or system administrator access to RPMS unless proper documentation is provided.

- Release any sensitive agency or patient information.

A.3   Privileged Users

Personnel who have significant access to processes and data in RPMS, such as, system security administrators, systems administrators, and database administrators, have added responsibilities to ensure the secure operation of RPMS.

Privileged RPMS users shall:

- Verify that any user requesting access to any RPMS system has completed the appropriate access request forms.

- Ensure that government personnel and contractor personnel understand and comply with license requirements. End users, supervisors, and functional managers are ultimately responsible for this compliance.

- Advise the system owner on matters concerning information technology security.

- Assist the system owner in developing security plans, risk assessments, and supporting documentation for the certification and accreditation process.

- Ensure that any changes to RPMS that affect contingency and disaster recovery plans are conveyed to the person responsible for maintaining continuity of operations plans.

- Ensure that adequate physical and administrative safeguards are operational within their areas of responsibility and that access to information and data is restricted to authorized personnel on a need-to-know basis.

- Verify that users have received appropriate security training before allowing access to RPMS.

- Implement applicable security access procedures and mechanisms, incorporate appropriate levels of system auditing, and review audit logs.

- Document and investigate known or suspected security incidents or violations and report them to the ISSO, Chief Information Security Officer (CISO), and systems owner.

- Protect the supervisor, superuser, or system administrator passwords.

- Avoid instances where the same individual has responsibility for several functions (i.e., transaction entry and transaction approval).

- Watch for unscheduled, unusual, and unauthorized programs.

- Help train system users on the appropriate use and security of the system.

- Establish protective controls to ensure the accountability, integrity, confidentiality, and availability of the system.

- Replace passwords when a compromise is suspected. Delete user accounts as quickly as possible from the time that the user is no longer authorized system. Passwords forgotten by their owner should be replaced, not reissued.

- Terminate user accounts when a user transfers or has been terminated. If the user has authority to grant authorizations to others, review these other authorizations. Retrieve any devices used to gain access to the system or equipment. Cancel logon IDs and passwords and delete or reassign related active and backup files.

- Use a suspend program to prevent an unauthorized user from logging on with the current user's ID if the system is left on and unattended.

- Verify the identity of the user when resetting passwords. This can be done either in person or having the user answer a question that can be compared to one in the administrator's database.

- Shall follow industry best standards for systems they are assigned to and abide by all Department and Agency policies and procedures.

Privileged RPMS users shall not:

- Access any files, records, systems, etc., that are not explicitly needed to perform their duties.

- Grant any user or system administrator access to RPMS unless proper documentation is provided.

- Release any sensitive agency or patient information.

Acronym List

Acronym	Term Meaning
CHIT	Certified Health IT
CISO	Chief Information Security Officer
EHR	Electronic Health Record
HHS	Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
ID	Identification
IT	Information Technology
IHS	Indian Health Service
ISSO	Information System Security Officer
PC	Personal Computer
ROB	Rules of Behavior
RPMS	Resource and Patient Management System
SAC	Standards and Conventions
SOP	Standard Operating Procedure
VPN	Virtual Private Network

Contact Information

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

Phone: (888) 830-7280 (toll free)

Web: https://www.ihs.gov/itsupport/

Email: itsupport@ihs.gov