RESOURCE AND PATIENT MANAGEMENT SYSTEM

Certified Electronic Record Checker

(BCER)

Technical Manual

Version 6.2
September 2023

Office of Information Technology
Division of Information Technology
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<td>All</td>
<td>All</td>
<td>New version</td>
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Preface

This package examines Resource and Patient Management System (RPMS) software packages to verify that the version and patch level is at the minimum level required to meet the 2015 Edition Certified EHR Technology (CEHRT) including the 21st Century Cures Act requirements.
1.0 **Introduction**

This manual provides IHS site managers with a technical description of the Certified Electronic Record Checker routines, files, menus, cross references, globals, and other necessary information required to effectively manage the system.

All routines, files, options, and keys are namespaced starting with the letters “BCER.”

There are no files associated with this package.
2.0 Orientation

Not applicable.
3.0 Implementation and Maintenance

3.1 General Information
Not applicable.

3.2 System Requirements
None.

3.3 Package-wide Variables
None.

3.4 Security Keys
Table 3-1: Security Keys and descriptions

<table>
<thead>
<tr>
<th>Key Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
</tr>
</tbody>
</table>
4.0 Menu

BCERMENU.
5.0 Routine Descriptions

This section includes a table that lists BCER routines and their descriptions.

5.1 Routine List

Table 5-1: List of routines

<table>
<thead>
<tr>
<th>Routine</th>
<th>Routine</th>
<th>Routine</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEREC41</td>
<td>BCERECK2</td>
<td>BCERECK3</td>
</tr>
<tr>
<td>BCERECK4</td>
<td>BCERECK5</td>
<td>BCERECK6</td>
</tr>
<tr>
<td>BCEREC61</td>
<td>BCEREC62</td>
<td>BCERECKA</td>
</tr>
<tr>
<td>BCERCKB</td>
<td>BCERENCK</td>
<td>BCEROPT</td>
</tr>
</tbody>
</table>

5.2 Routines with Description

Table 5-2: List of routines with descriptions

<table>
<thead>
<tr>
<th>Routine</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCEREC41</td>
<td>Main routine for the EHR checker for Version 4.1</td>
</tr>
<tr>
<td>BCERECK2</td>
<td>KIDS environment check routine for Version 2.0</td>
</tr>
<tr>
<td>BCERECK3</td>
<td>Main routine for the EHR checker for Version 3.0</td>
</tr>
<tr>
<td>BCERECK4</td>
<td>Main routine for the EHR checker for Version 4.0</td>
</tr>
<tr>
<td>BCERECK5</td>
<td>Main routine for the EHR checker for Version 5.0</td>
</tr>
<tr>
<td>BCERECK6</td>
<td>Main routine for the EHR checker for Version 6.0</td>
</tr>
<tr>
<td>BCEREC61</td>
<td>Main routine for the EHR checker for Version 6.1</td>
</tr>
<tr>
<td>BCEREC62</td>
<td>Main routine for the EHR checker for Version 6.2</td>
</tr>
<tr>
<td>BCERECKA</td>
<td>KIDS check routine for Version 2.0</td>
</tr>
<tr>
<td>BCERECKB</td>
<td>Main routine (part II) for the EHR checker for Version 2.0</td>
</tr>
<tr>
<td>BCERENCK</td>
<td>KIDS check routine for Version 1.0</td>
</tr>
<tr>
<td>BCEROPT</td>
<td>Routine used by menu option</td>
</tr>
</tbody>
</table>
6.0 Files and Tables

6.1 File List

Table 6-1: File list and descriptions

<table>
<thead>
<tr>
<th>File #</th>
<th>Filename</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

6.2 File Access

Table 6-2: File access information

<table>
<thead>
<tr>
<th>File #</th>
<th>Filename</th>
<th>GL</th>
<th>RD</th>
<th>WR</th>
<th>LYG</th>
<th>DD</th>
<th>DEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not Applicable</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6.3 Cross References

Not applicable.

6.4 Table File

Table 6-3: Table file information

<table>
<thead>
<tr>
<th>Field #</th>
<th>Field Name</th>
<th>Subscript</th>
<th>Piece</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not Applicable</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6.5 File Diagram or Flowchart

Not applicable.
7.0 External Relations

Minimum versions needed:

- VA FileMan (DI) – v22.0 Patch 1018
- VA Kernel (XU) – v8.0 Patch 1018

7.1 Callable Routines

Table 7-1: Callable routines and descriptions

<table>
<thead>
<tr>
<th>Routine Called</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7.2 Published Entry Points

Table 7-2: Published routines and descriptions

<table>
<thead>
<tr>
<th>Routine</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7.3 Exported Options

Table 7-3: Exported option name and description

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCERMENU</td>
<td>To run checker for current version of BCER without having to install KIDS repeatedly</td>
</tr>
</tbody>
</table>
8.0 Internal Relations

None.
9.0 Archiving and Purging

None.
10.0 Documentation Resources
This section describes a few methods to generate online technical documentation.

10.1 System Documentation
Online VPS system documentation can be generated through the use of several Kernel options, including, but not limited to:

- %INDEX
- Menu Management
- Inquire Option
- Print Option File
- VA FileMan
- Data Dictionary Utilities
- List File Attributes

For more option listings and further information about other utilities that supply online technical information, see the Decentralized Hospital Computer Program (DHCP) Kernel Reference manual.

10.1.1 %INDEX
The %INDEX option analyzes the structure of a routine to determine in part, if the routine adheres to RPMS programming standards. The output can include the following components:

- Compiled list of errors and warnings
- Routine listing
- Local variables
- Global variables
- Naked globals
- Label references
- External references
- Running %INDEX for a specified set of routines allows users to discover any deviations from RPMS programming standards that exist, and to see how routines interact with one another (i.e., which routines call or are called by other routines).

- To run %INDEX for the VPS system.
- At the “Routine(s)?” prompt, type the BCER namespace.
10.1.2 Inquire Options
The Inquire menu management option provides the following information about a specified option:

- Option name
- Menu text
- Option description
- Type of option
- Lock (if any)

In addition, all items on the menu are listed for each menu option. To secure information about Certified Electronic Record Checker options, specify the BCER namespace.

10.1.3 Print Option File
The Print Option File utility generates a listing of options from the Option file (#19). Users can print all of the entries or a single option or range of options.

10.1.4 List File Attributes
This VA FileMan option allows users to generate documentation pertaining to files and file structure. The standard format of this option provides the following data dictionary information for a specified file:

- File name and description
- Identifiers
- Cross-references
- Files pointed to by the file specified
- Files that point to the file specified
- Input, print, and sort templates

In addition, the following applicable data is supplied for each field in the file:

- Field name, number, title, and description
- Global location
- Help prompt
- Cross-references
- Input transform
- Date last edited
• Notes
Using the Global Map format of this option generates an output that lists the
following information:
• All cross-references for the file selected
• Global location of each field in the file
• Input, print, and sort templates
For a comprehensive listing of Certified Electronic Record Checker files, see
Section 6.0.

10.2 Online Help
In addition to system documentation, RPMS includes special help displays for most
menu options and data entry prompts. Typing a single question mark (?) at the
“Select . . . Option” prompt displays information related to the current option. Refer
to Table 10-1 for more information.

<table>
<thead>
<tr>
<th>Typing . . .</th>
<th>Displays . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>One question mark (?)</td>
<td>A list of all options accessible from the current option.</td>
</tr>
<tr>
<td>Two question marks (??)</td>
<td>A list of all accessible options and their formal names</td>
</tr>
<tr>
<td>Three question marks (???)</td>
<td>A brief description for each option in a menu.</td>
</tr>
<tr>
<td>One question mark (?) followed by an option name (?OPTION)</td>
<td>Extended help, if available, for that option</td>
</tr>
</tbody>
</table>
11.0 SAC Requirements and Exemptions

None.
## Acronym List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Term Meaning</th>
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<tbody>
<tr>
<td>CHIT</td>
<td>Certified Health IT</td>
</tr>
<tr>
<td>EHR</td>
<td>Electronic Health Record</td>
</tr>
<tr>
<td>IHS</td>
<td>Indian Health Service</td>
</tr>
<tr>
<td>RPMS</td>
<td>Resource and Patient Management System</td>
</tr>
</tbody>
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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