RESOURCE AND PATIENT MANAGEMENT SYSTEM

Certified Electronic Record Checker

(BCER)

Technical Manual

Version 5.0
November 2021

Office of Information Resource Management
Division of Information Resource Management
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<th>Section</th>
<th>Page Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>6/23/2021</td>
<td>Arlis Acord</td>
<td>All</td>
<td>All</td>
<td>New version</td>
</tr>
</tbody>
</table>
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 Certified Electronic Health Record (EHR) 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>BCERECKA</td>
</tr>
<tr>
<td>BCERECKB</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>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 1020
- VA Kernel (XU) - v8.0 Patch 1020

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 10-1: Online help references

<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>
</tr>
</thead>
<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>
</table>
Contact Information

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

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Email:  itsupport@ihs.gov