

#### RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Certified Electronic Record Checker**

(BCER)

# **Technical Manual**

Version 8.2 November 2024

Office of Information Technology Division of Information Technology

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# **Revision History**

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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 ONC Certification Criteria for Health IT.

## 1.0 Introduction

This manual provides Indian Health Service (IHS) site managers with a technical description of the Certified Electronic Record Checker (BCER) 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

Key Name	Description
None	N/A

# 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

Routine	Routine	Routine
BCEREC41	BCEREC61	BCEREC62
BCEREC81	BCEREC82	BCERECK2
BCERECK3	BCERECK4	BCERECK5
BCERECK6	BCERECK7	BCERECK8
BCERECKA	BCERECKB	BCERENCK
BCEROPT	-N/A	-N/A

## 5.2 Routines with Description

Table 5-2: List of routines with descriptions

Routine	Description
BCEREC41	Main routine for the EHR checker for Version 4.1
BCEREC61	Main routine for the EHR checker for Version 6.1
BCEREC62	Main routine for the EHR checker for Version 6.2
BCEREC81	Main routine for the EHR checker for Version 8.1
BCEREC82	Main routine for the EHR checker for Version 8.2
BCERECK2	Main routine for the EHR checker for Version 2.0
BCERECK3	Main routine for the EHR checker for Version 3.0
BCERECK4	Main routine for the EHR checker for Version 4.0
BCERECK5	Main routine for the EHR checker for Version 5.0
BCERECK6	Main routine for the EHR checker for Version 6.0
BCERECK7	Main routine for the EHR checker for Version 7.0
BCERECK8	Main routine for the EHR checker for Version 8.0
BCERECKA	KIDS check routine for Version 2.0
BCERECKB	Main routine (part II) for the EHR checker for Version 2.0
BCERENCK	KIDS check routine for Version 1.0
BCEROPT	Routine used by menu option

## 6.0 Files and Tables

### 6.1 File List

Table 6-1: File list and descriptions

File #	Filename	Description
None	Not Applicable	Not Applicable

### 6.2 File Access

Table 6-2: File access information

File #	Filename	GL	RD	WR	LYG	DD	DEL
None	Not Applicable	N/A	N/A	N/A	N/A	N/A	N/A

### 6.3 Cross References

Not applicable.

### 6.4 Table File

Table 6-3: Table file information

Field #	Field Name	Subscript	Piece	Type
None	Not Applicable	N/A	N/A	N/A

# 6.5 File Diagram or Flowchart

Not applicable.

### 7.0 External Relations

Minimum versions needed:

- VA FileMan (DI)–v22.0 p1018
- VA Kernel (XU)–v8.0 p1018

### 7.1 Callable Routines

Table 7-1: Callable routines and descriptions

Routine Called	Description
None	N/A

### 7.2 Published Entry Points

Table 7-2: Published routines and descriptions

Routine	Description
None	N/A

# 7.3 Exported Options

Table 7-3: Exported option name and description

Option Name	Description
BCERMENU	To run checker for current version of BCER without having to install KIDS repeatedly.

# 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

Typing	Displays		
One question mark (?)	A list of all options accessible from the current option.		
Two question marks (??)	A list of all accessible options and their formal names		
Three question marks (???)	A brief description for each option in a menu.		
One question mark (?) followed by an option name (?OPTION)	Extended help, if available, for that option		

# 11.0 SAC Requirements and Exemptions

None.

# **Acronym List**

Acronym	Term Meaning
CEHRT	Certified EHR Technology
EHR	Electronic Health Record
IHS	Indian Health Service
RPMS	Resource and Patient Management System

# **Contact Information**

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

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