



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Indian Health Service Emergency Department Dashboard

(BEDD)

Addendum to the Technical Manual

Version 2.0 Patch 2
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Preface

The purpose of this manual is to provide technical information about the Version 2.0 Patch 2 release of the Indian Health Service (IHS) Emergency Department Dashboard (EDD) application which has been developed and released for use in the Resource and Patient Management System (RPMS) BEDD namespace. This package is completely dependent upon the RPMS Emergency Room System (ERS) packages.

1.0 Introduction

The EDD is a tool that electronically enables facilities to run and manage their emergency and urgent care clinics. It is dependent upon the ERS in the AMER namespace. EDD was built on the ERS foundation to enhance patient flow and provider communication.

EDD can be set up to operate as a standalone icon on the staff computer or can be accessed from within the RPMS Electronic Health Record (EHR) application.

This manual provides IHS site managers with a technical description of the BEDD package routines, files, menus, cross references, globals, and other necessary information required to effectively manage the EDD system. The document has been updated to reflect changes released with BEDD Version 2.0 Patch 2.

All routines, files, options, and keys are namespaced, starting with the letters BEDD. The file number range for this package is 9002316 – 9002316.99; although currently there are no BEDD specific files, this file number range has been set aside for use by BEDD.

2.0 Orientation

The EDD application has no RPMS menu options for users. The only RPMS preparation specifically needed prior to installing the EDD application is that the AMER version 3.0 patch 9 must first be installed. After this patch is installed, the “BEDD0200.02.xml” XML build and “BEDD*2.0*2” Kernel Installation and Distribution System (KIDS) build can be installed. See the *Addendum to the Installation Guide and Release Notes* for details on server and client installation and configuration.

3.0 Implementation and Maintenance

The EDD is designed to work with RPMS by interfacing directly with the AMER application, which it accesses using the site's standalone Internet Information Services (IIS) web server.

3.1 General Information

Table 3-1 shows the prerequisite patch requirements to install BEDD Version 2.0, Patch 2.

Table 3-1: Prerequisite Patch Requirements

Package and Version	Associated Patch Designation(s)	Brief Patch Description
AMER VERSION 3.0	Patch 9	Update of AMER package containing bug fix.
VUECENTRIC FRAMEWORK 1.1V2	N/A	Contains utility utilized by BEDD to queue background print processes.
IHS EMERGENCY DEPARTMENT DASHBOARD 2.0	Patch 1	Previous BEDD iteration release containing enhancements and bug fixes.

3.2 System Requirements

Table 3-2 shows the versions of other packages that should be installed for the BEDD application to work properly. These packages have not been marked as required for this release as they will have already been installed in any RPMS environment.

Table 3-2: Module requirements

Module	Minimum Version
Veterans Administration (VA) FileMan (DI)	v22.0 Patch 1003
VA Kernel (XU)	v8.0 Patch 1015
IHS/VA Utilities (XB)	v3.0 through Patch 11
Patient Care Component PCC Data Entry (APCD)	v2.0 through Patch 10
IHS PCC Suite (BJPC)	v2.0 Patch 11
EHR 1.1	v1.1 Patch 14
Lexicon Utility (LEX)	v2.0 Patch 1003
Ensemble	v2012.2.5

3.3 Package-wide Variables

There are no package-wide BEDD variables in RPMS.

3.4 Security Keys

Access to BEDD is granted through the allocation of security keys, as listed in Table 3-3.

Table 3-3: Security Keys

Key Name	Description
BEDDZMGR	Users holding this key are allowed manager access to the EDD application
BEDDZDASH	Users holding this key are allowed user access to the EDD application
BEDDZWHITEBOARD	Users holding this key and the BEDDZMGR key are allowed to modify the BEDD Whiteboard custom settings

4.0 BEDD Menu

BEDD is a separate GUI application and, therefore, has no RPMS menus or options.

5.0 Routine Descriptions

The BEDD Patch 2 release delivers a number of new and modified routines. Routines are delivered as part of a standard KIDS release as well as components in a XML file release.

5.1 Routine List

5.1.1 Kernel Installation and Distribution System (KIDS)

- BEDD2P02
- BEDDADM
- BEDDCPRT
- BEDDPCC
- BEDDPLKP
- BEDDPRT
- BEDDUTID
- BEDDUTIL

5.1.2 XML File Release

- BEDD2X02
- BEDDRPT
- BEDDUTW
- BEDDUTW1

5.2 Routines with Description

Table 5-1 contains a listing of the BEDD routines and a description of each.

Table 5-1: Routines and descriptions

Routine	Description	Patch 2
BEDD2ENV	Version 2.0 environmental checking routine	No
BEDD2P01	Version 2.0 Patch 1 environmental checking and post-installation routine	No
BEDD2P02	Version 2.0 Patch 2 environmental checking and post-installation routine	Yes
BEDD2PST	Version 2.0 post-installation routine	No

Routine	Description	Patch 2
BEDD2X01	Routine stub to verify that version 2.0 Patch 1 XML build was loaded	No
BEDD2X02	Routine stub to verify that version 2.0 Patch 2 XML build was loaded	Yes
BEDD2XML	Routine stub to verify that version 2.0 XML build was loaded	No
BEDDADM	BEDD IN patient admission routine	Yes
BEDDCPRT	BEDD IN custom print routine	Yes
BEDDEHR	Contains code to change the EHR patient and visit	No
BEDDEHRS	Patient-routing slip generator	No
BEDDGET	Utility function routine	No
BEDDINJ	Patient injury handling routine	No
BEDDMREC	Patient medication reconciliation report	No
BEDDPCC	BEDD IN visit creation logic	Yes
BEDDPLKP	BEDD IN patient lookup	Yes
BEDDPOV	Purpose of visit handling routine	No
BEDDPRT	BEDD IN document printing	Yes
BEDDPREF	Setup user preference handling	No
BEDDRPT	Generates EDD reports	Yes
BEDDSYNC	Routine to synchronize BEDD with AMER	No
BEDDTRPT	BEDD EDD triage report	No
BEDDUTID	Contains functions which integrate the dashboard with RPMS	Yes
BEDDUTIF	Print formatting – currently not utilized but included for future use	No
BEDDUTIL	Contains additional functions that integrate the dashboard with RPMS	Yes
BEDDUTIS	Discharge from BEDD and AMER	No
BEDDUTIU	Contains additional functions that integrate the dashboard with RPMS	No
BEDDUTL1	Decision to admit date handling	No
BEDDUTW	Various room and bed management functions	Yes
BEDDUTW1	Various dashboard functions	Yes

5.3 Function List

The following list contains each KIDS function name and a description of what each produces.

1. ACMP^BEDDUTIU: Returns a list of ambulance company names.
2. \$\$ADATE^BEDDADM: Convert user entered admit date/time to correct format.
3. \$\$ADMCHK^BEDDUTIU: Returns whether or not the patient is already admitted.

4. ADDDX^BEDDUTID: Original function to add new International Classification of Diseases (ICD) code set 10 entry to the V POV file.
5. \$\$ADMAMB^BEDDUTIU: Returns the ambulance billing number for the patient visit.
6. \$\$ADMAMC^BEDDUTIU: Returns the admission ambulance company for a patient visit.
7. \$\$ADMAMN^BEDDUTIU: Returns the ambulance number for the visit admission.
8. \$\$ADMCMP^BEDDUTIU: Returns the visit's presenting complaint.
9. \$\$ADMDTM^BEDDUTIU: Returns the current admission date and time value for a patient visit.
10. \$\$ADMFTRN^BEDDUTIU: Returns the admission transferred from for a patient visit.
11. \$\$ADMMAT^BEDDUTIU: Returns whether the medical attendant was present for the admission.
12. \$\$ADMMOT^BEDDUTIU: Returns the admission mode of transport for a patient visit.
13. \$\$ADMTRN^BEDDUTIU: Returns the admission transferred value for a patient visit.
14. \$\$ADMVTP^BEDDUTIU: Returns the admission visit type.
15. \$\$AGE^BEDDUTID: Returns the patient's age.
16. \$\$AMVISIT^BEDDPCC: Creates PCC visit. Called by \$\$VISIT^BEDDPCC.
17. \$\$AUTH^BEDDUTIL: Returns whether the user has been granted access to the EDD.
18. BEDDED^BEDDUTW: Returns EDD information for a visit.
19. BEDDLST^BEDDUTIL: Returns a list of patients currently on the EDD.
20. BLDACMP^BEDDADM: Returns a list of ambulance companies.
21. BLDMTRN^BEDDADM: Returns a list of transport modes.
22. BLDTFRM^BEDDADM: Returns a list of transfer from choices.
23. BLDTMOD^BEDDADM: Returns a list of transport means choices.
24. BLDTRG^BEDDUTIL: Returns a list of triage acuities.

25. BLDVTYP^BEDDADM: Returns list of visit types
26. \$\$CCLN^BEDDUTID: Returns clinic mnemonic.
27. \$\$CHECKAV^BEDDUTIL: Validates the ACCESS and VERIFY code entries and returns DUZ information.
28. \$\$CHECKWB^BEDDPREF: Checks Whiteboard login credentials.
29. \$\$CHGENC^BEDDEHR: Function which changes the EHR visit to the selected visit.
30. \$\$CHGPAT^BEDDEHR: Function which changes the EHR patient to the selected patient.
31. \$\$CLIN^BEDDADM: Return the clinic mnemonic
32. CLIN^BEDDUTID: Returns list of clinics.
33. \$\$CLIN^BEDDUTIU: Returns the clinic internal entry number.
34. CONS^BEDDUTIU: Returns list of consult types.
35. CUSTOM^BEDDPRT: Front end to print custom document.
36. \$\$DATE^BEDDPLKP: Date and time conversion function.
37. \$\$DATE^BEDDUTIL: Converts standard date and time to FileMan date and time.
38. \$\$DATE^BEDDUTIU: Converts external date to FileMan.
39. \$\$DC^BEDDUTIS: Discharges the patient from the AMER and EDD.
40. \$\$DECADM^BEDDUTL1: Return decision to admit date.
41. \$\$DEFMTRN^BEDDADM: Returns IEN of “PRIVATE VEHICLE TRANSFER” entry.
42. \$\$DEFTMOD^BEDDADM: Returns IEN of “PRIVATE VEHICLE/WALK IN” entry.
43. \$\$DEFVTYP^BEDDADM: Returns IEN of “UNSCHEDULED” visit type.
44. \$\$DEL^BEDDPOV: Delete a V POV entry.
45. DEVLST^BEDDUTIU: Returns a list of RPMS devices.
46. DISP^BEDDUTID: Returns a list of dispositions.
47. \$\$DPCP^BEDDUTIL: Returns the patient’s designated primary care provider.

48. \$\$DPCP^BEDDUTW: Returns the PtDFN field value.
49. \$\$DSAVE^BEDDUTID: Saves patient discharge information.
50. \$\$DSPINFO^BEDDUTW: Returns the BEDD.EDVISIT info value for a patient visit.
51. \$\$DSUM^BEDDUTID: Returns if discharge summary global is defined.
52. \$\$DT^BEDDUTIS: Calculates the difference between two times.
53. \$\$DTCHK^BEDDUTIU: Date checking function.
54. \$\$DTCMP^BEDDUTIU: Adds or subtracts days from the supplied date.
55. \$\$DVLEN^BEDDADM: Returns an IEN of a specified printer.
56. DVLIST^BEDDADM: Returns of list of printers.
57. DX^BEDDUTID: Returns an array of EDD ICD-10 code entries for a patient.
58. \$\$DXCNT^BEDDUTIS: Gets a count of EDD ICD-10 codes for a patient visit.
59. DXLKP^BEDDPOV: ICD Lexicon lookup.
60. DXLKP^BEDDUTID: Returns list of ICD-10 codes meeting the specified search criteria.
61. EDCON^BEDDUTID: Returns an array of EDD consults for a patient.
62. \$\$EDCNT^BEDDUTIS: Gets a count of EDD consults for a patient visit.
63. EDSYS^BEDDUTW: Loads system variables for AMER admission.
64. EMBCARD^BEDDUTW: Print Embossed Cards
65. \$\$EMV^BEDDUTID: Returns the V EMERGENCY VISIT RECORD entry.
66. EN^BEDDCPRT: Front end for custom BEDD IN print routine.
67. EN^BEDDEHRS: Prints patient routing slip.
68. EN^BEDDMREC: Prints patient medication reconciliation.
69. \$\$ESAVE^BEDDUTID: Performs dashboard board edit page save.
70. \$\$FMTE^BEDDUTIL: Return external date and time.
71. \$\$FM2HD^BEDDUTIL: Converts FileMan date and time to \$H date portion.
72. \$\$FM2HT^BEDDUTIL: Converts FileMan date and time to \$H time portion.

73. \$\$FMTE^BEDDUTIL: Converts FileMan date and time to external date and time.
74. FND^BEDDPLKP: BEDD IN patient lookup.
75. \$\$FNDDX^BEDDUTW: Returns whether an ICD-10 code has been entered for a patient visit.
76. \$\$FNDNARR^BEDDPOV: File narrative and return IEN.
77. \$\$FNOW^BEDDUTIL: Returns the current FileMan date and time.
78. \$\$GCLINIC^BEDDADM: Returns the visit clinic
79. \$\$GETCC^BEDDUTIL: Returns the chief complaint for the patient for the visit.
80. \$\$GETF^BEDDUTIL: Returns the specified FileMan field and file value.
81. \$\$GETOSTAT^BEDDUTIL: Get order summary by package type.
82. \$\$GETPOV^BEDDPOV: Get POV for a visit.
83. \$\$HLK^BEDDPLKP: Returns HRN for a location.
84. \$\$HTIME^BEDDUTID: Given seconds portion of \$H value, return time.
85. \$\$HRNL^BEDDPLKP: Returns list of HRNs.
86. ICAU^BEDDUTIU: Returns a list of injury causes.
87. ICD^BEDDPOV: Return ICD information
88. IMES^BEDD2ENV: Display install message to screen
89. INJFLD^BEDDINJ: Update specific BEDD injury field.
90. INJURY^BEDDINJ: Returns injury-related information.
91. INST^BEDDUTID: Returns list of follow-up instructions.
92. \$\$ISINJ^BEDDINJ: Returns whether visit is injury related or not.
93. \$\$ISINJURY^BEDDUTW: Returns whether visit is injury related.
94. \$\$KEYCK^BEDDUTID: Returns if the user has the BEDDZMGR key.
95. LABEL^BEDDPRT: Print labels.
96. LIST^BEDDPOV: Return list of V POV entries for a visit.
97. LKLST^BEDDUTW: Returns a list of locked entries on the EDD.
98. LOADSYS^BEDDUTW: Returns a list of EDD system values.

99. LOG^BEDDUTIU:
100. \$\$LUPREF^BEDDPREF: Returns user preferences for a site/user.
101. \$\$MDTRN^BEDDUTID: Updates the MODE OF TRANSPORT for a patient visit.
102. \$\$MINWTG^BEDDUTIL: Calculates difference in minutes between specified value and \$H.
103. MREC^BEDDPRT: Print Med Rec Report
104. MTRN^BEDDUTIU: Returns a mode of transport list values.
105. \$\$NADM^BEDDADM: Creates new ER ADMISSION and VISIT record entries.
106. \$\$NARR^BEDDUTIU: Returns the internal entry number for the provider narrative.
107. \$\$NEW^BEDDADM: Create new EDD class record.
108. \$\$NEW^BEDDUTW: Logs new visit on the EDD and returns the new internal entry number.
109. \$\$NMFRMT^BEDDPREF: Formats a patient's name for display.
110. PCCPRV^BEDDUTIS: Log consult providers in V PROVIDER.
111. PLABEL^BEDDPRT: Label background process entry point.
112. \$\$PLCHLD^BEDDUTID: Returns information for default ".9999" ICD-10 code.
113. PMREC^BEDDPRT: Med Rec background process entry point.
114. \$\$PPR^BEDDUTIL: Returns the primary provider.
115. \$\$PRCNT^BEDDUTIS: Gets a count of EDD procedures for a patient visit.
116. \$\$PRIMDX^BEDDUTID: Retrieves/Saves the primary ICD-10 code.
117. PROC^BEDDUTID: Returns an array of EDD procedures for a patient.
118. PROC^BEDDUTIU: Returns a list of EDD procedures.
119. PROUTE^BEDDPRT: Print patient routing slip
120. PROV^BEDDUTID: Returns list of providers.
121. PRTSLIP^BEDDPRT: Patient routing slip background process entry point.

122. \$\$PTALG^BEDDUTIL: Returns a list of the allergies for a patient.
123. \$\$PTPCP^BEDDUTIL: Returns a patient's primary care provider.
124. PTRROUTE^BEDDPRT: Routing slip background process entry point.
125. QUE^BEDDEHRS: Queue routing slip print.
126. QUE^BEDDMREC: Queue med rec report.
127. RMAV^BEDDUTW: Checks room availability.
128. \$\$RMCHK^BEDDUTW: Returns whether the specified room is occupied by anyone other than the patient.
129. \$\$RMLST^BEDDUTW: Returns the last room occupied by a patient for a visit.
130. ROUTE^BEDDPRT: Print routing slip.
131. SAFE^BEDDUTIU: Returns a list of safety measures.
132. \$\$\$SAVE^BEDDPOV: Adds/updates V POV entry.
133. \$\$\$SAVEADM^BEDDADM: Admits a patient to the EDD
134. SAVEDX^BEDDUTW: Saves the diagnosis information into the Cache class.
135. SCEN^BEDDUTIU: Returns a list of injury settings.
136. \$\$\$SCLN^BEDDUTID: Returns converted clinic internal entry number.
137. \$\$\$SENS^BEDDPLKP: Returns whether patient is sensitive or not.
138. SITE^BEDDUTIL: Returns a list of sites from the MEDICAL CENTER DIVISION (#40.8) file.
139. \$\$\$NAME^BEDDUTIL: Returns the file site name of the specified entry.
140. START^BEDDEHRS: Display routing slip.
141. START^BEDDMREC: Display med rec report.
142. \$\$\$SUPREF^BEDDPREF: Saves user preferences for a site/user.
143. TFRM^BEDDUTIU: Returns a list of Transfer from values.
144. \$\$TKO^BEDDPLKP: Strips trailing character off of string.
145. \$\$TODLH^BEDDUTIL: Converts external date to \$H format.
146. \$\$TRGUPD^BEDDUTIL: Updates visit triage information.

- 147. TRNF^BEDDUTID: Returns list of transfer facilities.
- 148. UPDINJ^BEDDINJ: Update BEDD injury information.
- 149. \$\$UPPER^BEDDUTID: Converts string to uppercase.
- 150. UPPRV^BEDDUTW: Saves the primary provider.
- 151. \$\$VISIT^BEDDPCC: Create PCC visit.
- 152. VTYP^BEDDUTIU: Returns a list of EDD visit types.
- 153. \$\$WACCESS^BEDDPREF: Returns whether a user can edit the Whiteboard settings.
- 154. \$\$WBPREF^BEDDPREF: Saves Whiteboard settings.
- 155. \$\$XCLIN^BEDDUTIL: Returns the external clinic value.
- 156. \$\$XDATE^BEDDUTID: Converts external date and time to FileMan date and time.
- 157. \$\$XNOW^BEDDUTIL: Returns current external date and time.

6.0 Classes

6.1 List of Emergency Department Dashboard (EDD) Classes

A list of the new classes with the EDD Application is in Table 6-1. All of the specified class names exist within the BEDD package.

Table 6-1: List of Emergency Department Dashboard Classes and Descriptions

Class Name	Description
BEDD.EDConsults	Main storage for EDD Consult Patient Data
BEDD.EDDiagnosis	Holds diagnosis information for the patient visit that will be sent to the patient record
BEDD.EDInjury	Main storage for EDD Injury Patient Data
BEDD.EDProc	Main storage for EDD Procedure Patient Data
BEDD.EDRooms	Main storage for EDD Room Data
BEDD.EDRoomUse	Main storage for EDD Room Use Data
BEDD.EDSYSTEM	Main storage for EDD System Data
BEDD.EDUserPreferences	Storage for individual user preferences
BEDD.EDVISIT	Main storage for EDD Visa
BEDD.EDWarning	Main storage for EDD Warning Data – <i>Currently not implemented</i>
BEDDAPPL.EDManager	%Zen EDD Manager page stylesheet
BEDDAPPL.EDMenu	%Zen EDD Menu page stylesheet
BEDDAPPL.EDRoom	%Zen EDD Room page stylesheet
BEDDAPPL.EDRoomModel	%Zen Data Model for EDD Rooms
BEDDAPPL.EDSystem	%Zen EDD System stylesheet
BEDDAPPL.EDSystemModel	%Zen Data Model for EDD System
BEDDAPPL.EDWarning	%Zen stylesheet for EDD Dashboard Warnings
BEDDAPPL.EDWarningModel	%Zen Data Model for EDD Dashboard Warnings

6.2 Method List – BEDD Package

1. BEDD.EDConsults.CmbDt: Returns the combined check-in date and time.
2. BEDD.EDConsults.CmbNotify: Returns the combined check in date and time.
3. BEDD.EDConsults.GetAge; Returns the patient's age.
4. BEDD.EDConsults.GetChart; Returns the patient chart number.
5. BEDD.EDConsults.GetCIDT; Returns the check-in date.

6. BEDD.EDConsults.GetCITm: Returns the check-in time.
7. BEDD.EDConsults.GetCN; *Not utilized in current version.*
8. BEDD.EDConsults.GetCNS; *Not utilized in current version.*
9. BEDD.EDConsults.GetDOB: Returns the patient's date of birth.
10. BEDD.EDConsults.GetCN; *Not utilized in current version.*
11. BEDD.EDConsults.GetName: Returns the check-in date.
12. BEDD.EDConsults.GetSex; Returns the patient's sex.
13. BEDD.EDProc.GetName: Returns the patient's name.
14. BEDD.EDProc.GetStfN: Returns the procedure staff.
15. BEDD.EDProc.GetChart: Returns the patient's chart.
16. BEDD.EDProc.GetAge: Returns the patient's age.
17. BEDD.EDProc.GetSex: Returns the patient's sex.
18. BEDD.EDProc.GetCIDt: Returns the visit check in date.
19. BEDD.EDProc.CalcTime: Calculates the procedure time spent.
20. BEDD.EDProc.GetCITm: Returns the visit check in time.
21. BEDD.EDProc.CmbDt: Returns the combined check in date and time.
22. BEDD.EDProc.CmbDtT: Returns the combined procedure date and time.
23. BEDD.EDProc.GetDOB: Returns the patient's date of birth.
24. BEDD.EDProc.GetProcN: Returns the procedure name.
25. BEDD.EDSYSTEM.GetName: Returns site name.
26. BEDD.EDSYSTEM.GetPName: Returns site name.
27. BEDD.EDVISIT.GetName: Returns the patient's name.
28. BEDD.EDVISIT.GetProvN: Returns the provider's name.
29. BEDD.EDVISIT.GetDispN: Returns the disposition.
30. BEDD.EDVISIT.GetInjC: Returns the injury cause.
31. BEDD.EDVISIT.GetInjS: Returns the injury setting.
32. BEDD.EDVISIT.GetPtComplaint: Returns the visit complaint.

33. BEDD.EDVISIT.GetDecAdmit: Returns decision to admit date.
34. BEDD.EDVISIT.GetPtStat: Returns the patient's status (check-in, triage, in room, pending).
35. BEDD.EDVISIT.GetCIDt: Returns the patient's check in date.
36. BEDD.EDVISIT.GetCITm: Returns the patient's check in time.
37. BEDD.EDVISIT.GetTrgA: Returns the visit triage acuity.
38. BEDD.EDVISIT.GetTrgDt: Returns the visit triage date.
39. BEDD.EDVISIT.GetTrgDtTm: Returns the visit triage date and time.
40. BEDD.EDVISIT.GetAdPvDtm: Returns the visit admitting provider date and time.
41. BEDD.EDVISIT.GetAM: Returns the visit mode of transport.
42. BEDD.EDVISIT.GetTrgTm: Returns the visit triage time.
43. BEDD.EDVISIT.GetTrgN: Returns the visit triage nurse.
44. BEDD.EDVISIT.GetTrgC: Returns the visit triage clinic type.
45. BEDD.EDVISIT.GetDisp: Returns the visit disposition.
46. BEDD.EDVISIT.GetDCN: Returns the visit discharge nurse.
47. BEDD.EDVISIT.GetDCP: Returns the visit discharge provider.
48. BEDD.EDVISIT.GetDCDtTm: Returns the visit discharge date and time.
49. BEDD.EDVISIT.GetDCDt: Returns the visit discharge date.
50. BEDD.EDVISIT.GetDCTm: Returns the visit discharge time.
51. BEDD.EDVISIT.GetCln: Returns the visit discharge clinic.
52. BEDD.EDVISIT.GetERCC: Returns the presenting complaint for the visit.
53. BEDD.EDVISIT.CmbDt: Returns the combined check in date and time.
54. BEDD.EDVISIT.GetCC: Returns the chief complaint.
55. BEDD.EDVISIT.GetDC: Returns the visit disposition.
56. BEDD.EDVISIT.GetPrimN: Returns the primary nurse for the visit.
57. BEDD.EDVISIT.GetICDN: Returns the ICD-10 code.

- 58. BEDD.EDVISIT.GetAdmPrv: Returns the admitting provider.
- 59. BEDD.EDVISIT.GetSex: Returns the patient's sex.
- 60. BEDD.EDVISIT.GetDOB: Returns the patient's date of birth.
- 61. BEDD.EDVISIT.GetAge: Returns the patient's age.
- 62. BEDD.EDVISIT.GetChart: Returns the patient's chart.
- 63. BEDD.EDVISIT.GetWtg: Returns the visit wait time based on their status.
- 64. BEDD.EDVISIT.GetPtStatN: Returns the visit external status.
- 65. BEDD.EDVISIT.GetVD: Returns the total visit duration.
- 66. BEDD.EDVISIT.GetInstN: Returns the follow-up instructions.
- 67. BEDD.EDVISIT.GetInd: Returns the industry – *not implemented*.
- 68. BEDD.EDVISIT.GetOcc: Returns the occupation – *not implemented*.
- 69. BEDD.EDVISIT.GetFinA: Returns the final acuity.

7.0 Cache Server Page (CSP) Files

7.1 List of EDD Cache Server Pages

A list and description of the new CSP pages for the EDD Application is shown in Table 7-1. All of the specified class names exist within the BEDD package.

Table 7-1: List of EDD Cache Server Page Files

CSP Page Name	Description
BEDD	Main Emergency Department Dashboard screen
BEDDAdmit	BEDD IN patient admission page
BEDDASRPT	Admissions Summary Report
BEDDCITMRPT	Check-In Summary by Hour Report
BEDDCLOGRPT	Central Log Report
BEDDCONS	Emergency Department Consult Worksheet
BEDDDC	Main Discharge Screen
BEDDDCTMRPT	Discharge Summary by Discharge Hour Report
BEDDDIAG	Diagnosis Page Worksheet
BEDDEDC	Discharge Listing
BEDDEDCV	Discharge Summary
BEDDEDIT1	Edit Page
BEDDIL	Invalid Login Page
BEDDINJ	Injury Worksheet
BEDDLCKIT	Locking Page
BEDDLCKREL	Locked Records Listing
BEDDLogin	Main Entry/Login Page
BEDDLogin1	ACCESS/VERIFY Page
BEDDLOS RPT	Length of Stay by Acuity
BEDDPROC	Procedure Page
BEDDRMTMRPT	Room Utilization by Hour
BEDDRPTMNU	Main Report Menu Page
BEDDTRG	Triage Report
BEDDUA	Unauthorized Access Page
BEDDUNLOCK	Unlock Record Page

8.0 Files and Tables

- File List: There are no RPMS files or tables included in the BEDD application.
- File Access: N/A
- Cross References: N/A
- Table File: N/A
- File Diagram or Flowchart: N/A

9.0 External Relations

9.1 External Calls

The BEDD package utilizes the external calls in Figure 9-1.

Routine	is Invoked by:
^%DT	BEDDADM, BEDDPLKP, BEDDUTID, BEDDUTIL
C^%DTC	BEDDUTIL
NOW^%DTC	BEDDADM, BEDDUTIL
^%ZISC	BEDDPRT
^%ZTER	BEDDADM, BEDDPLKP, BEDDPRT, BEDDUTID, BEDDUTIL
HDR^AG	BEDDUTIL
PHDR^AG	BEDDUTIL
DFN^AGCARD	BEDDUTIL
START^AMERCLP	BEDDPRT
\$\$POV^AMERUTIL	BEDDUTID
VER^AMERVER	BEDDADM, BEDDUTID
\$\$GETOPIEN^AMERVSIT	BEDDPCC
\$\$GETVOPTN^AMERVSIT	BEDDPCC
VSITDIE^AMERVSIT	BEDDPCC
GETVISIT^APCDAPI4	BEDDPCC
\$\$AGE^AUPNPAT	BEDDUTID
MOD^AUPNVISIT	BEDDUTID
\$\$ICDDX^AUPNVUTL	BEDDUTID
XML^BEDD2X02	BEDD2P02
EN^BEDDEHRS	BEDDUTIL
START^BEDDEHRS	BEDDPRT
EN^BEDDMREC	BEDDUTIL
START^BEDDMREC	BEDDPRT
\$\$VISIT^BEDDPCC	BEDDADM
DXLKP^BEDDPOV	BEDDUTID
\$\$MDTRN^BEDDUTID	BEDDUTIL
\$\$DATE^BEDDUTIL	BEDDUTIL
\$\$FMTE^BEDDUTIL	BEDDADM, BEDDPLKP, BEDDUTID
\$\$FNOW^BEDDUTIL	BEDDUTIL
\$\$GETF^BEDDUTIL	BEDDUTID
\$\$PTPCP^BEDDUTIL	BEDDUTIL
DC^BEDDUTIS	BEDDUTID
\$\$DATE^BEDDUTIU	BEDDADM, BEDDUTIL
LOG^BEDDUTIU	BEDDADM, BEDDPRT
\$\$NEW^BEDDUTW	BEDDUTIL
BEDDED^BEDDUTW	BEDDUTIL
EDSYS^BEDDUTW	BEDDUTIL
RMAV^BEDDUTW	BEDDUTIL
SAVEDX^BEDDUTW	BEDDUTID
UPPRV^BEDDUTW	BEDDUTIL
BLDTRG^BEDDUTW1	BEDDUTIL
SINGLE^BSDROUT	BEDDPRT
\$\$DIV^BSDU	BEDDPRT
\$\$QUEUE^CIAUTSK	BEDDPRT
DEVICE^CIAVUTIO	BEDD2P02
SETLOG1^DGSEC	BEDDUTIL
^DIC	BEDD2P02, BEDDUTID, BEDDUTIL
FIND^DIC	BEDDPLKP
IX^DIC	BEDD2P02
FILE^DICN	BEDDADM, BEDDUTID


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FILE^DIE                BEDDADM , BEDDUTID
$$IENS^DILF             BEDDUTID
$$GET1^DIQ              BEDDADM , BEDDPLKP , BEDDPRT , BEDDUTID , BEDDUTIL
$$IMP^ICDEXA            BEDDUTID
$$MAIN^TIULADR          BEDDUTIL
EN^XBNEW                BEDDPRT
$$DT^XLFD              BEDDUTIL
$$FMTE^XLFD             BEDDUTIL
$$FMTH^XLFD             BEDDUTIL
$$HDIFF^XLFD            BEDDUTIL
$$HTE^XLFD              BEDDUTID
$$NOW^XLFD              BEDDPLKP
$$REMDBL^XLFFNAME1     BEDDPLKP
$$SUP^XLFSTR            BEDDPLKP
$$VERSION^XPDUTL        BEDDUTID
BMES^XPDUTL             BEDD2P02
DUZ^XUP                  BEDDADM , BEDDPLKP , BEDDPRT , BEDDUTID
$$CHECKAV^XUS           BEDDUTIL

*****   END   *****
    
```

Figure 9-1: BEDD External Calls

9.2 Callable Routines

Table 9-1 lists Callable Entry points and their descriptions.

Table 9-1: Callable Entry Points

Routine Called	Description
10^BEDDUTIF	10 Point print
12^BEDDUTIF	12 Point print
ACMP^BEDDUTIU	Return ambulance company name list
\$\$ADATE^BEDDADM	Convert user entered admit date/time to correct format
ADDDX^BEDDUTID	Add DX TO V POV FILE
\$\$ADMAMB^BEDDUTIU	Return admission ambulance billing
\$\$ADMAMC^BEDDUTIU	Return admission ambulance company
\$\$ADMAMN^BEDDUTIU	Return admission ambulance number
\$\$ADMCHK^BEDDUTIU	Determine if patient is already admitted
\$\$ADMCMP^BEDDUTIU	Return presenting complaint
\$\$ADMDTM^BEDDUTIU	Return current admission date/time
\$\$ADMFTRN^BEDDUTIU	Return admission transferred from
\$\$ADMMAT^BEDDUTIU	Return admission medical attendant present
\$\$ADMOT^BEDDUTIU	Return admission mode of transport
\$\$ADMTRN^BEDDUTIU	Return admission transferred
\$\$ADMVTP^BEDDUTIU	Return admission visit type
\$\$AGE^BEDDUTID	Return Patients Age

Routine Called	Description
\$\$ALIAS^BEDDPLKP	Return patient alias
ALST^BEDDRPT	Assemble list of information for date range
AS^BEDDRPT	Set up entry for Admission Summary
\$\$ASAVE^BEDDUTIU	Not implemented
\$\$AUTH^BEDDUTIL	Authenticate User for ED Access
BEDDED^BEDDUTW	Retrieve information from BEDD.EDVISIT entry
BEDDLST^BEDDUTIL	Return list of dashboard patients
BLDACMP^BEDDADM	Returns a list of ambulance companies
BLDMTRN^BEDDADM	Returns a list of transport modes
BLDTRFM^BEDDADM	Returns a list of transfer from choices
BLDTMOD^BEDDADM	Returns a list of transport means choices
BLDTRG^BEDDUTIL	Build list of acuity values
BLDTRG^BEDDUTW1	Return list of triage entries
BLDVITYP^BEDDADM	Build visit type array
BOLD^BEDDUTIF	Print bold
\$\$CCLN^BEDDUTID	Return Clinic Mnemonic
\$\$CHECKAV^BEDDUTIL	Access/Verify authentication
CHGENC^BEDDEHR	Function which changes the EHR visit to the selected visit
CHGPAT^BEDDEHR	Function which changes the EHR patient to the selected patient
CHKDATA^BEDDUTW	Save primary provider and assigned provider
CHKDATA^BEDDUTW1	Save provider information
CHKLK^BEDDUTW	Check and unlock record, if needed
CHKLK^BEDDUTW1	Check and possibly unlock visit record
CI^BEDDRPT	Check in summary by hour
CL^BEDDRPT	Set up entry for Central Log
CLIN^BEDDUTID	Return List of Applicable Clinics
\$\$CLIN^BEDDUTIU	Return clinic ^AMER(3) IEN
CONS^BEDDUTIU	Return list of consult types
CONSQRY^BEDDUTIS	Perform query to gather EDD consults for a visit
\$\$DATE^BEDDPLKP	Date and time conversion function
\$\$DATE^BEDDUTIL	Convert standard dt/time to FileMan dt/time
\$\$DATE^BEDDUTIU	Convert external date to FileMan
DCUPDATE^BEDDUTIS	Discharge a Reversed DC
DEFMTRN^BEDDADM	Returns IEN of "PRIVATE VEHICLE TRANSFER" entry.
DEFTMOD^BEDDADM	Returns IEN of "PRIVATE VEHICLE/WALK IN" entry
\$\$DEFVTYP^BEDDADM	Returns IEN of "UNSCHEDULED" visit type

Routine Called	Description
DEVLST^BEDDUTIU	Return list of devices
DI^BEDDRPT	Discharge summary by hour
DIAGQ^BEDDUTIS	Perform query to gather EDD diagnosis entries for a visit
DISCH^BEDDUTW	Update discharge information from RPMS
DISP^BEDDUTID	Return List of Dispositions
DLST^BEDDUTW	Assemble list of discharges for date ranges
DLST^BEDDRPT	Assemble list of Discharges for Date ranges
\$\$DPCP^BEDDUTIL	Get patient's DPCP
\$\$DPCP^BEDDUTW	Return patient DFN
\$\$DSAVE^BEDDUTID	Dashboard Discharge Screen Save
\$\$DSPINFO^BEDDUTW	Retrieve BEDD.EDVISIT info value
\$\$DSUM^BEDDUTID	Return if Discharge Summary Global is defined
\$\$DT^BEDDUTIS	Calculate time difference
\$\$DTCHK^BEDDUTIU	Date checking function
\$\$DTCMP^BEDDUTIU	Add or subtract days from supplied date
DX^BEDDUTID	Get list of ER DX'S
\$\$DXLKP^BEDDPOV	Lookup to file 80
DXLKP^BEDDUTID	Lookup to File 80 (DX)
EDCON^BEDDUTID	Get list of ER Consults
EDSYS^BEDDUTW	Load system variables for AMER admission
\$\$EMV^BEDDUTID	Return V EMERGENCY VISIT RECORD entry
EN^BEDDCPRT	Front end for custom BEDD IN print routine
EN^BEDDEHRS	Front end to print patient routing slip
EN^BEDDMREC	Front end to patient medication reconciliation report
EN^BEDDTRPT	Front end for the patient triage report
END^BEDDMREC	Med Rec report cleanup
FND^BEDDPLKP	Patient lookup
ERR^BEDDUTID	Capture error
ERR^BEDDUTIU	Capture error
\$\$ESAVE^BEDDUTID	Dashboard Edit Screen Save
\$\$FM2HD^BEDDUTIL	Convert FileMan date/time to \$H date portion
\$\$FM2HT^BEDDUTIL	Convert FileMan date/time to \$H time portion
\$\$FMTE^BEDDUTIL	Convert FileMan to standard external date/time
\$\$FNDDX^BEDDUTW	Locate DX code in patient visit
\$\$FNOW^BEDDUTID	Return Current FileMan Date and Time
\$\$GETCC^BEDDUTIL	Return V NARRATIVE TEXT

Routine Called	Description
\$\$GETCHIEF^BEDDGET	Get V NARRATIVE TEXT entry
\$\$GETDX^BEDDPOV	Retrieve V POV information for a particular entry
\$\$GETF^BEDDUTIL	Return value from specified field in a file
\$\$GETOSTAT^BEDDUTIL	Get Order Summary By Pack Type
GSITE^BEDDUTW	Retrieve individual site info
HDR^BEDDEHRS	Display report header
HDR^BEDDMREC	Display Med Rec report header
\$\$HLK^BEDDPLKP	Returns HRN for a location
\$\$HRNL^BEDDPLKP	Returns list of HRNs
\$\$HTIME^BEDDUTID	Given seconds portion of \$H value, return time
\$\$ICAU^BEDDUTIU	Return list of injury causes
\$\$IND^BEDDUTIL	Return the industry (not implemented)
\$\$INJCAUSE^BEDDUTIL	Return cause of injury
\$\$INJSTG^BEDDUTIL	Return injury setting
INST^BEDDUTID	Return list of Follow-up Instructions
\$\$INSTALLD^BEDD2ENV	Returns whether passed in build is installed
\$\$INSTALLD^BEDD2P01	Returns whether passed in build is installed
\$\$INSTALLD^BEDD2P02	Returns whether passed in build is installed
\$\$LEX^BEDDPOV	Lexicon lookup
\$\$LIST^BEDDPOV	Return list of POVs
\$\$KEYCK^BEDDUTID	Determine if user has BEDDZMGR Key
LKLST^BEDDUTW	Assemble list of locked records
LKLST^BEDDUTW1	Get any locked records
LOADSYS^BEDDUTW	Load system variables
LOG^BEDDUTIU	Log entry into BUSA
LOGSEC^BEDDUTIL	Updates an entry in the DG SECURITY LOG (#38.1) file
\$\$LUPREF^BEDDPREF	Return user preferences for a site/user
\$\$MDTRN^BEDDUTID	Update Patient's MODE OF TRANSPORT
\$\$MINWTG^BEDDUTIL	Calculate difference in minutes from \$H
MTRN^BEDDUTIU	Return mode of transport list
\$\$NARR^BEDDUTIU	Get provider narrative IEN
NEW^BEDDADM	Create new EDD class record
NEW^BEDDUTIL	Admits a patient to the EDD
NEW^BEDDUTW	Add new admission to dashboard
NONBOLD^BEDDUTIF	Print normal density
NUNDLN^BEDDUTIF	No Underline

Routine Called	Description
\$\$OCC^BEDDUTIL	Return the occupation – not implemented
P10^BEDDUTIF	10 PITCH, 6 LINES/INCH, 60 LINES PER PAGE
P12^BEDDUTIF	12 PITCH,6 LINES/INCH,60 LINES PER PAGE
\$\$PLCHLD^BEDDUTID	Look for Diagnosis Default
POV^BEDDUTIU	Log ER VISIT Provider entries in the V POV (#9000010.07) file
\$\$PPR^BEDDUTIL	Return the Primary Provider
\$\$PRIMDX^BEDDUTID	Retrieve/Save the Primary EHR DX
PROC^BEDDUTID	Get list of ER Procedures Performed
PROC^BEDDUTIU	Return list of ER Procedures
PROCQ^BEDDUTIS	Perform query to gather EDD procedures for a visit
PROV^BEDDUTID	Return List of Providers
PRPOV^BEDDUTIU	Log ER Procedure provider entries in the V PROVIDER (#9000010.06) file
PRV^BEDDUTIU	Log ER VISIT Provider entries in the V PROVIDER (#9000010.06) file
\$\$PTALG^BEDDUTIL	Return patient allergies
\$\$PTPCP^BEDDUTIL	Return patient primary care provider
RMAV^BEDDUTW	Check room availability
\$\$RMCHK^BEDDUTW	Return whether room is occupied
\$\$RMLST^BEDDUTW	Return patient's last room occupied
RMRMV^BEDDUTW	Make patient's room unoccupied
RMRPT^BEDDRPT	Assemble Room Information by Date Range
RTRN^BEDDMREC	Force RETURN entry
RU^BEDDRPT	Room Use Report
SAFE^BEDDUTIU	Return list of safety measures
SAVEDX^BEDDUTW	Save the diagnosis information into the class
SCEN^BEDDUTIU	Return list of injury settings
\$\$SCLN^BEDDUTID	Convert Clinic
\$\$SECWTG^BEDDUTIL	Calculate difference in seconds from \$H
\$\$SENS^BEDDPLKP	Returns whether patient is sensitive or not
SINIT^BEDDUTW	Initialize the site settings
SITE^BEDDUTIL	Return list of sites
\$\$SNAME^BEDDUTIL	Return site name
SPOV^BEDDUTIU	Log the specified purpose of visit in V POV (#9000010.07) file
SPRV^BEDDUTIU	Log the specified provider in the V PROVIDER (#9000010.06) file
\$\$SUPREF^BEDDPREF	Save user preferences for a site/user
SYNC^BEDDSYNC	Sync BEDD with AMER/PCC

Routine Called	Description
TFRM^BEDDUTIU	Return list of transfer from values
\$\$TKO^BEDDPLKP	Strips trailing character off of string
\$\$TODLH^BEDDUTIL	Convert external date to \$H
TRNF^BEDDUTID	Return List of Transfer Facilities
\$\$TRGUPD^BEDDUTIL	Update ER ADMISSION TRIAGE NURSE/ADMITTING PROV/ACUITY
UNLK^BEDDUTW	Unlock all records
UNDLN^BEDDUTIF	Underline
\$\$UPPER^BEDDUTID	Convert to uppercase
UPPRV^BEDDUTW	Save the primary provider
UPPRV^BEDDUTW1	Update provider
VERENTRY^BEDDUTIS	Create V EMERGENCY VISIT RECORD entry
\$\$VISIT^BEDDPCC	Create PCC visit
VTYP^BEDDUTIU	Return list of ER Visit Types
\$\$WACCESS^BEDDPREF	Return whether user can edit the whiteboard settings
\$\$WBPREF^BEDDPREF	Save Whiteboard information
\$\$XCLIN^BEDDUTIL	Create ED Entry
\$\$XDATE^BEDDUTID	Convert External Date to FileMan
\$\$XNOW^BEDDUTID	Return current external date and time

9.3 Published Entry Points

There are no published entry points in the BEDD package.

9.4 Exported Options

There are no exported options included with the BEDD package.

10.0 Internal Relations

All functions within this application work independently. There are no documented internal relations in the BEDD package.

11.0 Archiving and Purging

There is no archiving or purging in the BEDD package.

12.0 Documentation Resources

The BEDD package is not a part of RPMS and does not utilize its own menus or FileMan data structures.

This section describes a few methods to generate online technical documentation.

13.0 SAC Requirements and Exemptions

There are no SAC exemptions required for the BEDD package.

Glossary

ICD Codes

One of several code sets used by the healthcare industry to standardize data. The International Classification of Disease (ICD) codes are an international diagnostic coding scheme. In addition to diseases, ICD also includes several families of terms for medical-specialty diagnoses, health status, disablements, procedures, and reasons for contact with Health Care Providers (HCPs). IHS currently uses ICD-10 for coding.

Office of Information Technology (OIT)

The organization within IHS that is responsible for developing and maintaining RPMS and related IT functions.

Purpose of Visit (POV)

In RPMS, ICD codes and narrative describing the patient's purpose of visit are documented in PCC V POV.

Resource and Patient Management System (RPMS)

An IHS program that incorporates a series of integrated software components that include clinical, administrative, and financial functions.

RPMS Patient Care Component (PCC)

Refers to functions within RPMS as a clinical data repository, storing visit-related data about a patient.

Acronym List

Acronym	Term Definition
APCD	PCC Data Entry
CSP	Cache Server Page
DI	VA FileMan
EDD	Emergency Department Dashboard
EHR	Electronic Health Record
ERS	Emergency Room System
HCP	Health Care Provider
ICD	International Classification of Diseases
IHS	Indian Health Service
IIS	Internet Information Services
KIDS	Kernel Installation and Distribution System
OIT	Office of Information Technology
PCC	Patient Care Component
POV	Purpose of Visit
RPMS	Resource and Patient Management System
XML	eXtensible Markup Language

Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

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

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