



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Well Child Module**

(VEN)

## **User Manual**

Version 2.6 Patch 7  
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Division of Information Technology

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## **Preface**

This document provides a review of the VEN Well Child components for use in Electronic Health Record (EHR).

## 1.0 Introduction

### 1.1 Background

From an information systems perspective, well-child care is one of the most common yet complex clinical services. Traditionally, the well-child record has been captured on a series of special encounter forms—each form corresponds to a specific age from birth through adolescence. For example, several commonly-used record sets contain forms for two weeks, two months, four months, six months, 12 months, etc. Each form in the set contains age-specific guidelines for developmental screening, anticipatory guidance, examinations, immunizations, and nutritional counseling.

Ideally, children are scheduled for appointments corresponding to the encounter forms' ages. As a result, the guidelines and reminders on the form precisely match the child's age. Experience tells us that this precision is rarely if ever, achieved. When synchronization is lost, it becomes more difficult to maintain standardized care. What do we do with the child who comes in for a six-month checkup at eight months? What about the infant who arrives on time for a six-month checkup but receives incomplete care on the four-month visit? How do illness and unusual social circumstances affect the guidelines? How can providers keep up with the hundreds of guidelines applied between birth and age 21?

The Well Child Module (WCM) aims to use information technology to standardize well-child care throughout Indian Country. This application facilitates compliance with national guidelines and standards to the greatest extent possible. Current guidelines are provided by a group of senior pediatricians who serve Indian communities. The guidelines are generally taken from nationally-recognized sources of child-care standards, including Bright Futures, the American Academy of Pediatrics, the Ages and Stages Child Monitoring Program, and the Indian Health Service (IHS) Patient Education Advisory Group.

The WCM leverages the power of information technology and automated decision support in two specific ways:

1. Capture and encapsulate a complex data set that is collected piecemeal over an extended period.
2. Customize the data collection instrument precisely for each specific well-child visit.

The WCM is part of a long continuum of RPMS innovations related to the informatics of well-child care. This includes the first automated immunization reminders (IHS, 1970), the first comprehensive immunization forecasting system (RPMS, 1995), and the first “intelligent,” computer-generated well-child care forms (PCC+, 2000).

## 1.2 New Features

This patch contains several minor enhancements:

- Display online help files
- Display the patient's preferred name
- Display BMI for patients 24 months and older and OFC for those under 24 months
- Correct errors some sites found when launching the standalone WCM client
- Update Knowledgebase instructions

## 2.0 Setup Checklist

Please refer to the patch notes for the installation of the patch. This is Version 2.6 Patch 7 (VEN). The patch updates the features of the Well Child Module (WCM).

To use the ASQ feature of the WCM, each site must purchase an ASQ CD for each location (building) where the ASQ is to be used. You cannot install the ASQ component without this CD ROM due to copyright and licensing restrictions. The CD must be purchased separately and is not included in the distribution. Each license includes one CD ROM that contains all ASQ materials and the right to make unlimited printed copies of those materials within that building. To enable this feature, a copy of the CD ROM must be inserted on your local RPMS server during WCM installation.

Order the CD ROM online: <https://brookespublishing.com>.

Once at the website, navigate to the store, childhood development, and ASQ 3. Ensure the package you order includes a CD ROM with PDF files containing all the ASQ data collection forms.

**Note:** The WCM can be installed without the ASQ component. Tell your site manager to uncheck the ASQ box when the WCM is installed on your RPMS server. Later, if you decide to purchase the ASQ CD, the WCM can be re installed – this time with the ASQ feature checked.

ASQ NOTE: <https://brookespublishing.com>

**DUE TO COPYRIGHT AND LICENSING RESTRICTIONS**, the ASQ component cannot be installed without this CD ROM. These files must be purchased separately and are not included in the distribution. To meet licensing requirements, you must purchase one copy of the CD for each facility (separate clinic site/hospital complex) where well-child care is provided. Copy the CD contents to the same workstations as the ASQ Manager component [PWF3].

### **3.0 Adding Well Child Components to EHR**

There are no new components in this release. Refer to the prior EHR Component Guide for detailed instructions for adding.

## 4.0 Knowledgebase Editor

From the moment a child is born until their 21st birthday, thousands of age-specific guidelines and reminders apply to well-child care. Pediatric advisory groups and other domain experts constantly update the recommended guidelines. Since only some of us can hold all this information in our heads, the WCM does it for us. All current guidelines and reminders are stored in a master list called the WCM Knowledgebase.

The knowledge base is the heart, soul, and brain of the WCM. The WCM also includes a powerful tool called the Knowledgebase Editor. This GUI tool resembles an Excel spreadsheet. It enables pediatric experts at each site to edit the knowledge base and determines which age-specific guidelines from the master list will be presented on each visit.

The Knowledgebase Editor (KB Editor) is a powerful standalone component released with the WCM. It allows users with appropriate keys to modify the display of several components in the WCM based on local requirements. The keys are normally given to the senior pediatric consultants at a site. Still, modifications may be best made by a group of providers to enable the most useful information. Selecting the topics in each category to display is a long process, but it should require minimal changes once done. These topics have mostly been extracted from national advisory groups, especially the American Academy of Pediatrics Bright Futures guidelines.



Figure 4-1: KB Editor desktop icon

The KB Editor is launched from the desktop using the user RPMS access and verify codes, pointing to the local server:

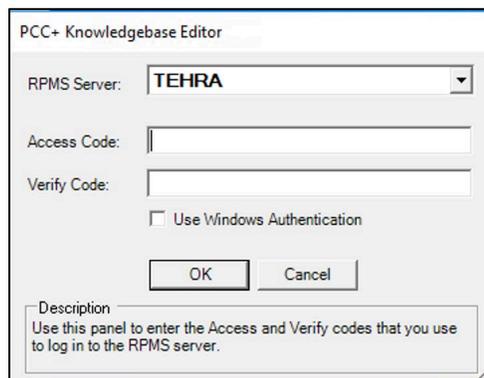
A screenshot of the 'PCC+ Knowledgebase Editor' login dialog box. It has a title bar with the text 'PCC+ Knowledgebase Editor'. Inside, there is a dropdown menu for 'RPMS Server' with 'TEHRA' selected. Below that are two text input fields for 'Access Code' and 'Verify Code'. A checkbox labeled 'Use Windows Authentication' is unchecked. At the bottom are 'OK' and 'Cancel' buttons. A 'Description' box at the very bottom contains the text: 'Use this panel to enter the Access and Verify codes that you use to log in to the RPMS server.'

Figure 4-2: Login screen

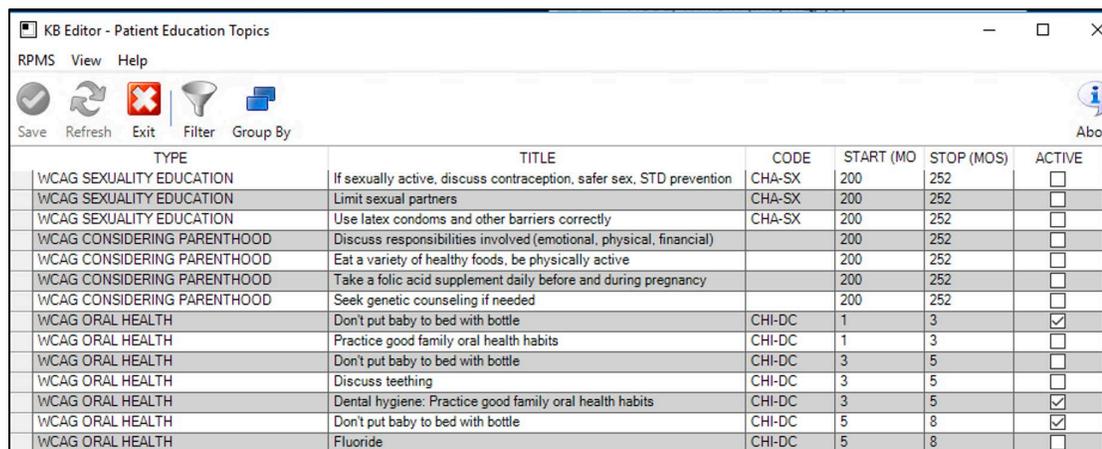
From the first screen, select the following items to be modified:

### Knowledgebase Editors

Since there are thousands of possible entries, limiting the number of choices to a reasonable number is necessary. Different sites may choose different items depending on local preferences and requirements. Some states or agencies, such as Medicaid, may also mandate certain items which others do not. The KB Editor allows sites to configure their EHR questions to meet these requirements.

### Patient Education Topics

Many educational topics can be discussed at every well-child visit. Some topics are appropriate for several different ages, and others are not. The KB editor allows a user to check as Active those topics that will display in the WCM at different ages. Items must be checked to display. As the figure below shows, each topic includes the start and stop age along with a description (title) for each topic. Only items checked “Active” will display in the WCM.

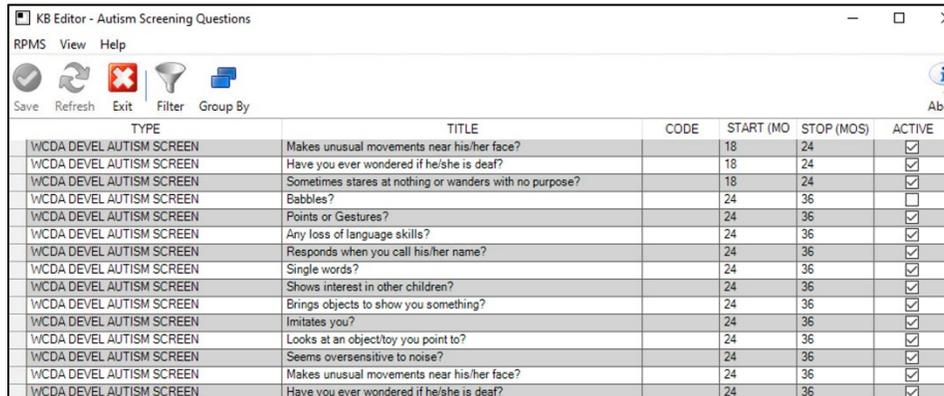


TYPE	TITLE	CODE	START (MO)	STOP (MOS)	ACTIVE
WCAG SEXUALITY EDUCATION	If sexually active, discuss contraception, safer sex, STD prevention	CHA-SX	200	252	<input type="checkbox"/>
WCAG SEXUALITY EDUCATION	Limit sexual partners	CHA-SX	200	252	<input type="checkbox"/>
WCAG SEXUALITY EDUCATION	Use latex condoms and other barriers correctly	CHA-SX	200	252	<input type="checkbox"/>
WCAG CONSIDERING PARENTHOOD	Discuss responsibilities involved (emotional, physical, financial)		200	252	<input type="checkbox"/>
WCAG CONSIDERING PARENTHOOD	Eat a variety of healthy foods, be physically active		200	252	<input type="checkbox"/>
WCAG CONSIDERING PARENTHOOD	Take a folic acid supplement daily before and during pregnancy		200	252	<input type="checkbox"/>
WCAG CONSIDERING PARENTHOOD	Seek genetic counseling if needed		200	252	<input type="checkbox"/>
WCAG ORAL HEALTH	Don't put baby to bed with bottle	CHI-DC	1	3	<input checked="" type="checkbox"/>
WCAG ORAL HEALTH	Practice good family oral health habits	CHI-DC	1	3	<input type="checkbox"/>
WCAG ORAL HEALTH	Don't put baby to bed with bottle	CHI-DC	3	5	<input type="checkbox"/>
WCAG ORAL HEALTH	Discuss teething	CHI-DC	3	5	<input type="checkbox"/>
WCAG ORAL HEALTH	Dental hygiene: Practice good family oral health habits	CHI-DC	3	5	<input checked="" type="checkbox"/>
WCAG ORAL HEALTH	Don't put baby to bed with bottle	CHI-DC	5	8	<input checked="" type="checkbox"/>
WCAG ORAL HEALTH	Fluoride	CHI-DC	5	8	<input type="checkbox"/>

Figure 4-3: Patient education topics

## Autism Screening Topics

Various questions about the autism screening display and are selected similarly:

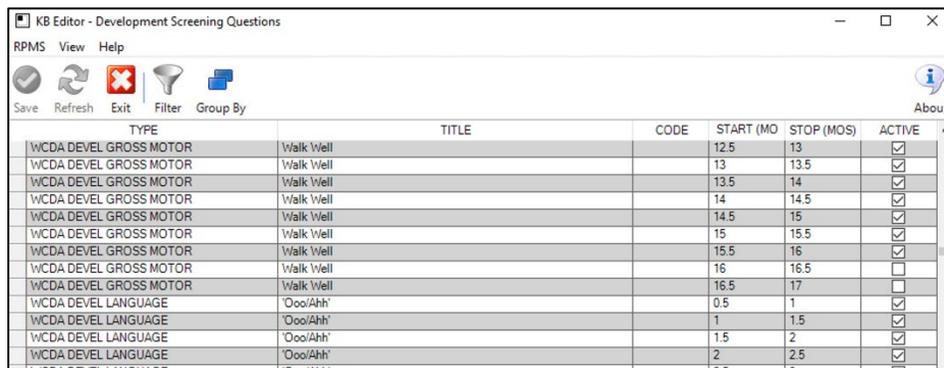


TYPE	TITLE	CODE	START (MO)	STOP (MOS)	ACTIVE
WCDA DEVEL AUTISM SCREEN	Makes unusual movements near his/her face?		18	24	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Have you ever wondered if he/she is deaf?		18	24	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Sometimes stares at nothing or wanders with no purpose?		18	24	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Babbles?		24	36	<input type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Points or Gestures?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Any loss of language skills?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Responds when you call his/her name?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Single words?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Shows interest in other children?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Brings objects to show you something?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Imitates you?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Looks at an object/toy you point to?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Seems oversensitive to noise?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Makes unusual movements near his/her face?		24	36	<input checked="" type="checkbox"/>
WCDA DEVEL AUTISM SCREEN	Have you ever wondered if he/she is deaf?		24	36	<input checked="" type="checkbox"/>

Figure 4-4: Autism screening questions

## Development Screening Questions

These questions are similar to the other topics and have been selected from the Denver Developmental Screening Test (DDST). The DDST is not considered a formal development screen (as the ASQ is), but a site may use these questions at visits when formal ASQ testing is not performed.



TYPE	TITLE	CODE	START (MO)	STOP (MOS)	ACTIVE
WCDA DEVEL GROSS MOTOR	Walk Well		12.5	13	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		13	13.5	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		13.5	14	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		14	14.5	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		14.5	15	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		15	15.5	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		15.5	16	<input checked="" type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		16	16.5	<input type="checkbox"/>
WCDA DEVEL GROSS MOTOR	Walk Well		16.5	17	<input type="checkbox"/>
WCDA DEVEL LANGUAGE	'Ooo/Ahh'		0.5	1	<input checked="" type="checkbox"/>
WCDA DEVEL LANGUAGE	'Ooo/Ahh'		1	1.5	<input checked="" type="checkbox"/>
WCDA DEVEL LANGUAGE	'Ooo/Ahh'		1.5	2	<input checked="" type="checkbox"/>
WCDA DEVEL LANGUAGE	'Ooo/Ahh'		2	2.5	<input checked="" type="checkbox"/>

Figure 4-5: Development screening questions

## Periodic Exams

Selected as for other topics.

TYPE	TITLE	CODE	START (MO)	STOP (MOS)	ACTIVE
WCEX SPECIAL RISK SCREEN	At risk for TB, PPD	66	90	90	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Family hx of lipid disorder, diabetes, acanthosis: Lipid screen	66	90	90	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Anemia screen	66	90	90	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Lead	66	90	90	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	At risk for TB, PPD	90	114	114	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Family hx of lipid disorder, diabetes, acanthosis: Lipid screen	90	114	114	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Anemia screen	90	114	114	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Lead	90	114	114	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	At risk for TB, PPD	114	126	126	<input checked="" type="checkbox"/>
WCEX SPECIAL RISK SCREEN	Family hx of lipid disorder, diabetes, acanthosis: Lipid screen	114	126	126	<input checked="" type="checkbox"/>

Figure 4-6: Periodic exams

Once selected, your choices will display in the EHR Well Child Module as seen below:

The screenshot displays the Well Child module interface. On the left, there is a 'Public Health Growth Charts' section with a graph for 'Girls Height and Weight' and 'Body Mass Index (BMI)'. Below the graph is the 'Ages & Stages Questionnaire (ASQ)' section, which includes a table for recording scores:

Date	ASQ (months)	Communication	Gross Motor	Fine Motor	Problem Solving	Personal Social			
09/29/2023	30	6	101.9	44	119.00	33	127.06	22	101.970

On the right side, there is a 'Well Child Patient Education' window with 'Well Child Patient Education Updates' and 'Well Child Reminders' sections. The updates section includes checkboxes for 'PT ED - FAMILY RELATIONSHIPS' (e.g., Read books together, Do not expect child to share all toys) and 'PT ED - HEALTHY HABITS' (e.g., Avoid or limit TV viewing, Watch programs together, Reinforce bedtime routine, Physical activity). The reminders section includes an 'AUTISM SCREEN' with 12 questions and a 'GENERAL HEALTH SCREEN' with 3 items.

Figure 4-7: Well Child module

The items displayed in the education and reminders boxes are chosen in the KB Editor. Data can be entered into the ASQ section (lower left) and the Education section (upper right) if a visit is selected. The growth curves and well-child reminders are only for display.

## 5.0 Pediatric Growth Charts

The Pediatric Growth Charts object shows growth information about the current patient. You can display the charts, the table data for the charts, and print the charts where the charts display in a PDF document.

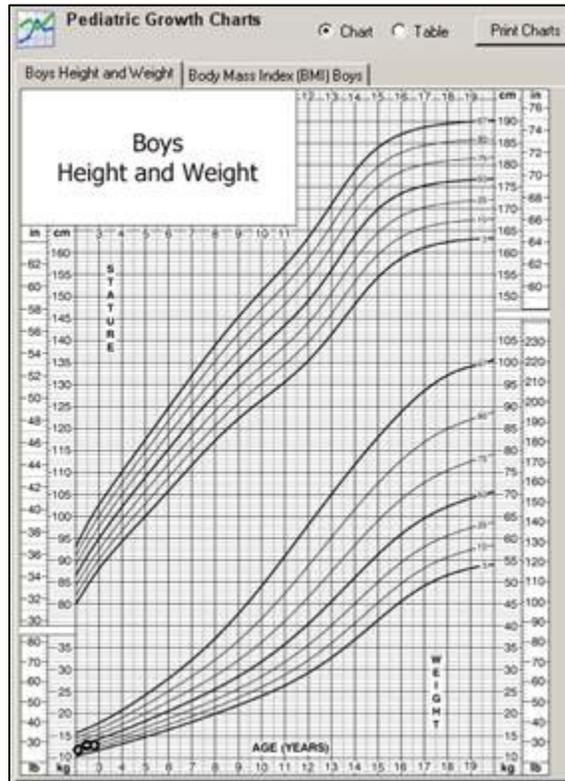


Figure 5-1: Sample pediatric growth charts

The WCM plots growth measurements directly on the CDC growth charts, including the CDCBMI chart:

- If the child is over 24 months, view the BMI chart in the component.
- Younger babies display the head circumference chart instead of the BMI.
- The BMI is computed using the standard RPMS algorithm.

### 5.1 Height and Weight Chart

The default chart view is the height and weight chart.

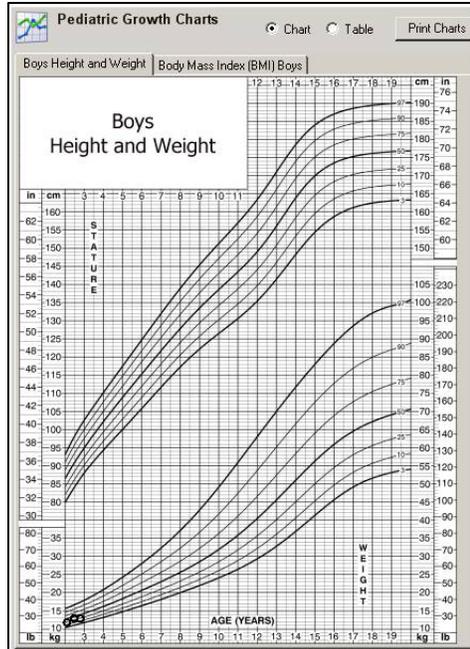


Figure 5-2: Sample Child Growth Chart

## 5.2 Body Mass Index Chart Form

Use the Body Mass Index button to display the body mass chart form.

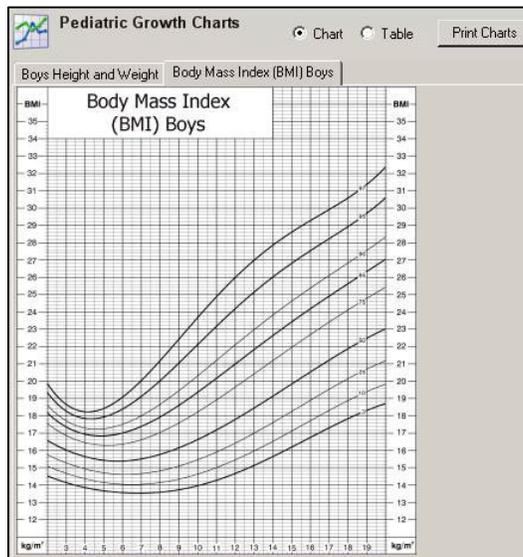


Figure 5-3: Sample Body Mass Index Chart

## 5.3 Head Circumference

Use the Head Circumference button to display the head circumference chart form.

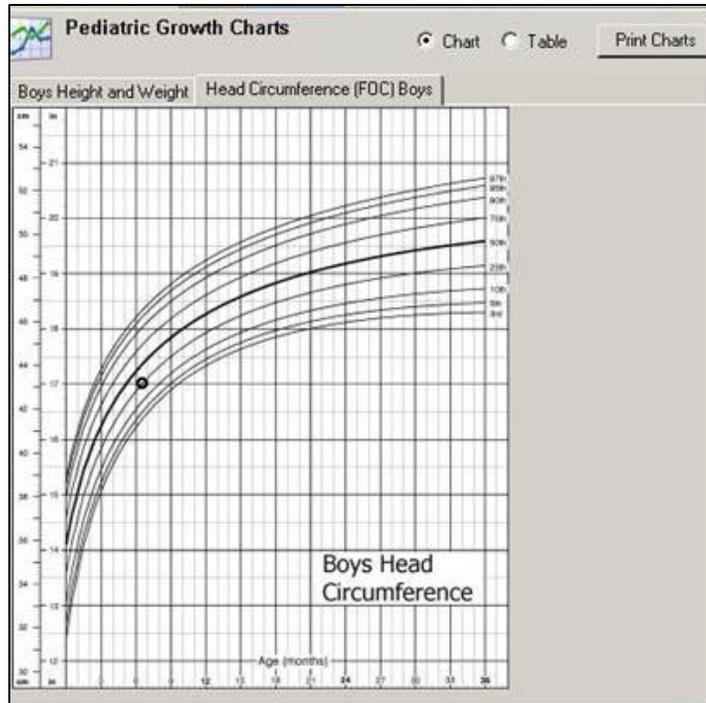


Figure 5-4: Sample Head Circumference Chart

## 5.4 Table Data

The table data displays for any of the chart forms.

### 5.4.1 Table Data for Height and Weight

The table data for height and weight shows the age and weight data used.

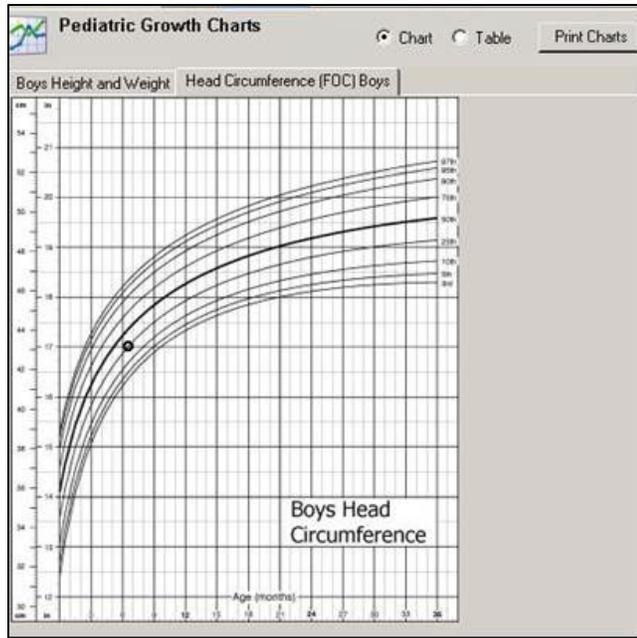


Figure 5-5: Height and weight table data

### 5.4.2 Table Data for Body Mass

The table data for body mass shows the Age and BMI for the body mass index.

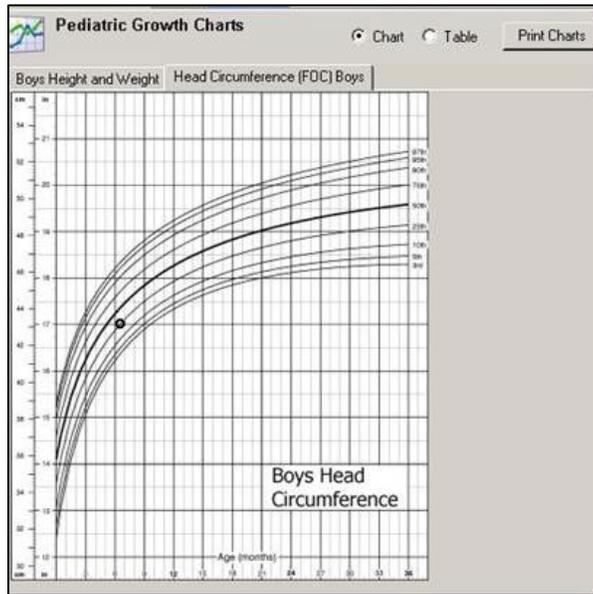
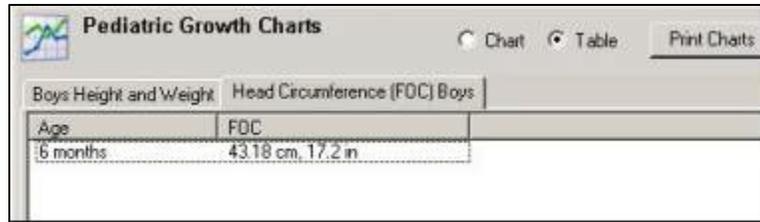


Figure 5-6: Sample Table data for Body Mass Index

### 5.4.3 Table Data for Head Circumference

The table data for head circumference shows Age and FOC data used.



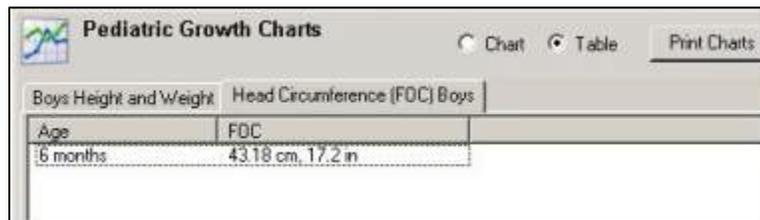
Boys Height and Weight		Head Circumference (FOC) Boys	
Age	FOC		
6 months	43.18 cm, 17.2 in		

Figure 5-7: Sample Table Data for Head Circumference

## 5.5 Print Charts

The Print Charts function requires installing PDF Reader software on your local workstation. This function displays the growth chart data in Adobe Acrobat PDF documents. The Adobe application must be loaded to use this feature. To display the HRN number on the PDF:

1. From Design Mode (in the RPMS-EHR application), select the Pediatric Growth Charts component.
2. Right-click on the component to display a contextual menu and select the properties option. The application displays the Properties for Well Child Pediatric Growth Charts dialog.



Boys Height and Weight		Head Circumference (FOC) Boys	
Age	FOC		
6 months	43.18 cm, 17.2 in		

Figure 5-8: Properties for Well Child Growth Charts dialog

The PrintHRN Value must be set to TRUE. Exit Design Mode before using the Print Charts button. Below is an example of the HRN shown in the PDF document:

<b>Patient:</b>	Demo,Baby (999995)
<b>DOB:</b>	8/11/2007
<b>Sex:</b>	Female

Figure 5-9: Sample HRN number on a document

3. Press Print Charts to display the PDF document. Page one of the PDF document shows the height and weight growth charts.

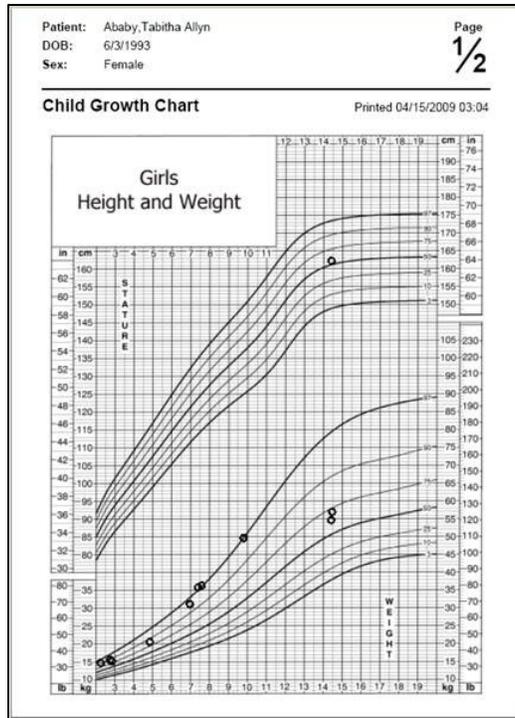


Figure 5-10: Sample Page 1 of the print chart function

Page two of the PDF document can show the growth chart of the body mass:

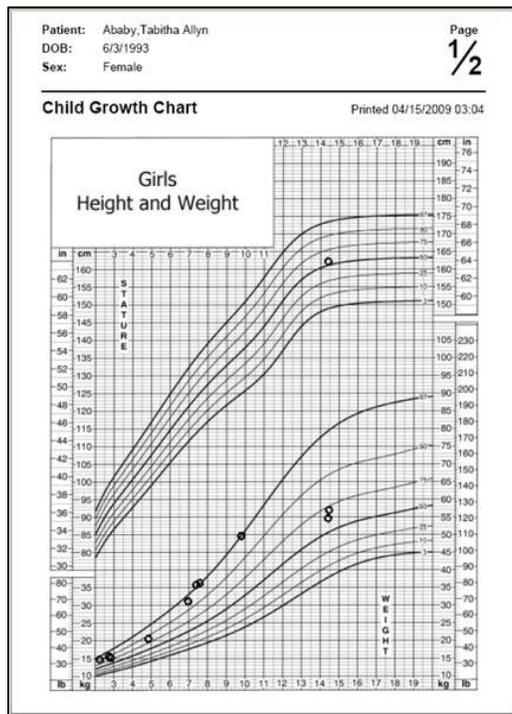


Figure 5-11: Sample Page 2 of the print chart function

## 6.0 Well Child Reminders

The Well Child Reminders object displays the reminders for a well-child for the sex and age of the child displayed in the top part of the object. For example, the reminders for a male, age six years one month, are shown below:

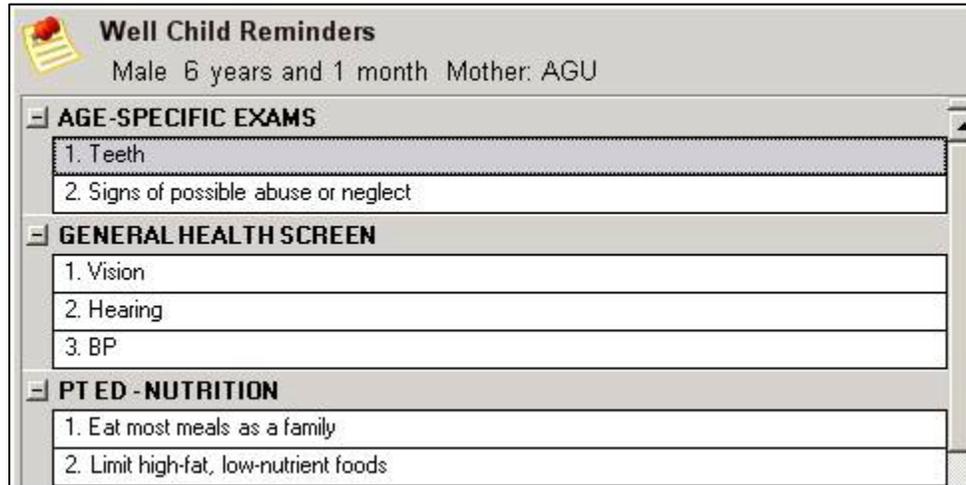


Figure 6-1: Sample Well Child Reminders

Use the view-only object to review the reminders under various categories for the child. Reminders vary according to the sex and age of the child. Each category can expand/collapse as needed by clicking the button (-) to the left of the category name. To move up or down on the page, use the scroll bars.

The Well-Child reminders are stored in a master list called the WCM (Well Child module) knowledgebase. Below are some examples of Well Child reminders.

### 6.1 Age-Specific Exams

Below is a sample of age-specific exam reminders [PWF4].

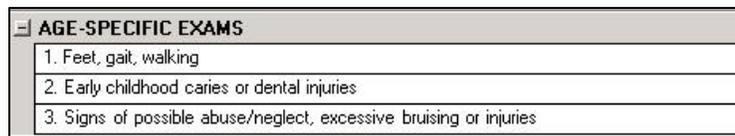


Figure 6-2: Sample Age-Specific Exams Reminders

### 6.2 General Health Screen

Below is a sample of General Health Screen reminders.

GENERAL HEALTH SCREEN	
1.	Anemia (if not done)
2.	Lead (if not done)
3.	Autism

Figure 6-3: Sample General Health Screen Reminders

### 6.3 PT ED Nutrition

Below is a sample of PT ED Nutrition reminders.

GENERAL HEALTH SCREEN	
1.	Anemia (if not done)
2.	Lead (if not done)
3.	Autism

Figure 6-4: Sample TP ED Nutrition Reminders

### 6.4 Special Risk Screen

Below are the Special Risk Screen reminders.

SPECIAL RISK SCREEN	
1.	At risk for TB: PPD
2.	Family hx of lipid disorder, diabetes, acanthosis: Lipid screen
3.	Anemia screen
4.	Lead

Figure 6-5: Sample Special Risk Screen reminders

### 6.5 Behavioral Health Screen

Below are the Behavioral Health Screen reminders.

BEHAVIORAL HEALTH SCREEN	
1.	Stressors
2.	Substance use (including tobacco)
3.	Sexual behavior
4.	Cruelty, history of abuse
5.	Depression, suicide risk
6.	School/learning problems

Figure 6-6: Sample Behavioral Health Screen reminders

### 6.6 PT ED Social Competence

Below are the PT ED Social Competence reminders.

<b>PT ED - SOCIAL COMPETENCE</b>
1. Praise child, encourage talking about activities and feelings
2. Read interactively with child; listen as he reads aloud
3. Set appropriate limits, establish consequences

Figure 6-7: Sample PT ED Social Competence reminders

## 6.7 PT ED Parent Infant Interact

Below are the PT ED Parent Infant Interact reminders.

<b>PT ED - PARENT-INFANT INTERACT</b>
1. Show affection and praise good behavior
2. Model respect, family values, safe driving practices,
3. Respect teen's need for privacy
4. Establish realistic expectations, clear limits, consequ
5. Normal development
6. Help teens avoid harmful behaviors (drugs, alcohol,
7. Spend time with adolescent

Figure 6-8: Sample PT ED Parent Infant Interact reminders

## 6.8 PT ED for the Parents

Below are the PT ED for the parent's reminders.

<b>PT ED - FOR THE PARENTS</b>
1. Show affection and praise good behavior
2. Model respect, family values, safe driving practices, healthy behaviors
3. Respect teen's need for privacy
4. Establish realistic expectations, clear limits, consequences.
5. Normal development
6. Help teens avoid harmful behaviors (drugs, alcohol, tobacco or sex)
7. Spend time with adolescent

Figure 6-9: Sample PT ED for parent reminders

## 6.9 PT ED Responsibility

Below are the PT ED responsibility reminders.

<b>PT ED - RESPONSIBILITY</b>
1. Menstruating girls: anemia screen
2. Girls with amenorrhea or menstrual complaints: pelvi
3. Boys: assess risk of testicular cancer (hx of cryptorc
4. Family history acanthosis, obesity: Lipid screen
5. At risk for TB: PPD
6. Sexually-active: needs annual STD screening (urine
7. Athletes: significant injuries

Figure 6-10: Sample PT ED Responsibility reminders

## 7.0 Well Child Patient Information

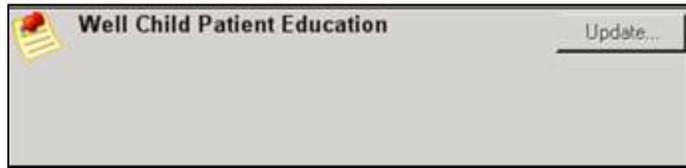


Figure 7-1: Well Child Patient Education object

### 7.1 Well Child Patient Education Update

Click Update (on the Well Child Patient Education object) to access the Well Child Patient [PWF5] Education Update dialog (a visit must be created first).

Figure 7-2: Sample Well Child Patient Education Update dialog

Check a patient education subject used in the encounter, then complete the **Patient Education Time and Level of Understanding** field.

#### Patient Education Time

This indicates the number of minutes spent on patient education. If the patient is a young child, then the patient's education applies to the parents.

## Level of Understanding

Use an option from the drop-down list to indicate the level of understanding of the patient education topic. If more than one subject is checked, the time will be divided equally among the subjects.

Click **OK** to save the information. The application confirms that the data was saved. (Otherwise, click Cancel to not save). The user is returned to the RPMS-EHR application. If OK is clicked, the application updates the Patient Education component with the well-child patient education.

## 7.2 Patient Education Already Documented

Another well-child patient education record can be added by clicking **Update** (again). This time the application displays the date behind the documented patient education topic. For example, the figure below shows that item 13 was documented on 4/21/09:

The screenshot shows a dialog box titled "Well Child Patient Education Update". It contains a list of 13 items, each with a checkbox and a description. The items are grouped into three categories: "PT ED - NUTRITION", "PT ED - ORAL HEALTH", and "PT ED - SOCIAL COMPETENCE". Item 13, "Talk, sing and read together (4/21/09)", is selected. Below the list are two input fields: "Patient Education Time (minutes)" and "Level of Understanding". The "Ok" and "Cancel" buttons are at the bottom right.

Item	Description
1.	Provide 3 nutritious meals, 2-3 healthy snacks daily
2.	Variety of foods
3.	Normal decreased appetite and weight gain
4.	Whole milk
5.	Limit juice to 8 oz/day
6.	Eat meals as a family
7.	Encourage child to feed self, drink from cup
8.	Let child decide what/how much to eat; do not force [likes/dislikes]
9.	Limit sugar
10.	Avoid food struggles
<b>PT ED - ORAL HEALTH</b>	
11.	Brush child's teeth with soft toothbrush, water only
<b>PT ED - SOCIAL COMPETENCE</b>	
12.	Praise good behavior and accomplishments
13.	Talk, sing and read together (4/21/09)

Figure 7-3: Sample Well Child Patient Education Update dialog with data

## 8.0 Ages and Stages Questionnaire (ASQ)

The Ages and Stages Questionnaire provides a validated, standardized method for monitoring early childhood development. There are 21 questionnaires covering ages 2 to 60 months. Each questionnaire covers five aspects of development: fine motor, gross motor, language/communication, personal/social, and problem-solving. The ASQ component enables users to generate age-specific questionnaires and record the results. In addition, users can generate age-specific intervention instructions for the parent or guardian.

The current version of the Well Child Module is synchronized with ASQ, Third Edition. This component can also contain records obtained using previous editions. The ASQ component can only be activated if the site has purchased an ASQ license<sup>®</sup> starter kit<sup>™</sup> from [BrookesPublishing.com](http://BrookesPublishing.com) (~\$275). One license is required for each “location” (hospital/primary clinic building(s), each field clinic, etc.) where the ASQ module is used. Without a valid license, you cannot install the ASQ module.

The ASQ Module supports three clinical three scenarios:

**Scenario 1:** There is at least one historical set of ASQ results but no current visit: The user can view past results and enter historical results collected either on a previous visit or outside the clinic (e.g., the parent was sent home with a questionnaire).

**Scenario 2:** There is a current visit but no previous ASQ results: The user can enter results for today’s visit.

**Scenario 3:** There is a current visit and previous ASQ results: The user can view past results and enter historical results. Also, the user can enter results for today’s visit.

In all scenarios, after a patient is selected, the user can enter gestational age at birth (weeks), print a questionnaire, and print an intervention form.

### 8.1 Getting Started

After bringing up the Well Child Module, click the **Ages and Stages (ASQ)** tab. In this example, we have selected a patient, and we are operating within the context of the current visit. All five buttons are active:

- Gestational age (will only display as active for infants under 24 months of age)
- Print Questionnaire
- Enter Today’s Scores
- Enter Historical Scores
- Print Activities

Previous scores are displayed next to their cutoff values. If the score is below the cutoff value (i.e., the score is abnormal), the background color of the cutoff value cell will be purple.

Date	ASQ (months)	Communication	Gross Motor	Fine Motor	Problem Solving	Personal Social
03/24/2011	42	*	27.06	*	36.27	19.82
03/23/2011	42	28.11 (27.06)	36.11 (36.27)	19.11 (19.82)	27.11 (28.11)	31.11 (31.12)
03/20/2011	42	30.11 (27.06)	30.11 (36.27)	30.11 (19.82)	30.11 (28.11)	30.11 (31.12)
03/13/2011	42	28.11 (27.06)	36.25 (36.27)	20.11 (19.82)	27.95 (28.11)	31.12 (31.12)
03/08/2011	42	30.1 (27.06)	35.99 (36.27)	20.11 (19.82)	25.95 (28.11)	30 (31.12)
03/02/2011	42	27.66 (27.06)	32 (36.27)	20 (19.82)	29 (28.11)	31.11 (31.12)
03/01/2011	42	30 (27.06)	35 (36.27)	20 (19.82)	35 (28.11)	30 (31.12)
02/23/2011	36	35 (30.99)	35 (36.99)	35 (19.07)	35 (30.29)	35 (35.33)
11/18/2010	36	30 (30.99)	35 (36.99)	20 (19.07)	35 (30.29)	40 (35.33)
08/20/2010	36	30 (30.99)	35 (36.99)	40 (19.07)	35 (30.29)	40 (35.33)
06/11/2010	36	35 (30.99)	30 (36.99)	25 (19.07)	30 (30.29)	40 (35.33)
03/21/2009	14	30 (17.4)	30 (25.8)	30 (23.06)	30 (22.56)	30 (23.18)

Figure 8-1: Ages and stages tab

If there were no previous results, the table is empty.

The **Enter Historical Scores** button is greyed out when no previous visits have occurred within the past year.

Because the user is working within the context of the current visit, the top line of the table is ready to accept today's results. If there is no data in a cell, there will be a \* placeholder. If a current visit is not specified, or if the current visit began more than three days ago, the "Enter Today's Scores" button is grayed out (not accessible), and the top line of the table is not displayed.

As soon as new results are entered, all data rows from previous visits are "locked" (no editing allowed). This is true even if a previous visit was within the past 72 hours. In other words, only one row can be edited via the "Enter Today's Scores" button: the row associated with the current visit. All results will be displayed in the table if the user navigates to a previous visit. However, the "Enter Today's Scores" button is grayed out, and no editing is allowed (see example below).

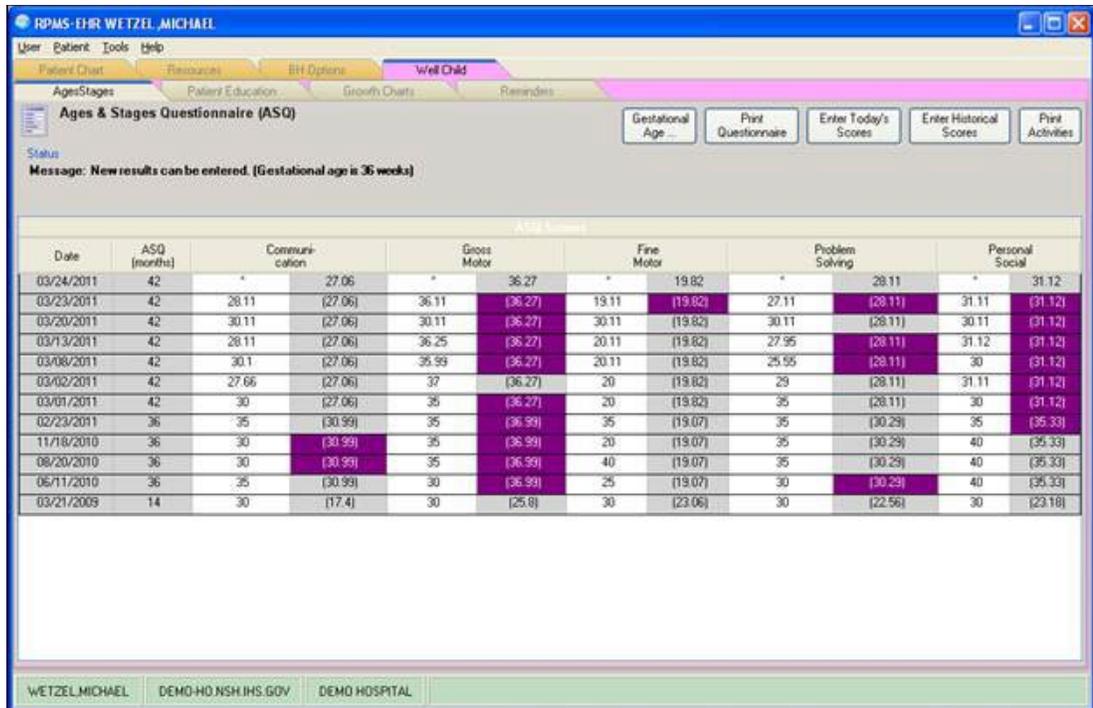


Figure 8-2: Enter today's scores tab with no editing allowed

## 8.2 Gestational Age

The ASQ module automatically selects the correct questionnaire for printing based on the child's current age and gestational age. Therefore, it is important to have the gestational age recorded in the database so that proper adjustments can be made. The Gestational Age button enables the user to enter this critical information. If the child is under 24 months, the questionnaire age may be adjusted if the child was delivered prematurely. This can only be entered for infants under 24 months of age. If no gestational age value is recorded in the database, the ASQ module selects the printed form based on a default gestational age of 40 weeks.



Figure 8-3: Gestational age dialog

## 8.3 Print Questionnaire

If you click the “Print Questionnaire” button, an Adobe Acrobat document (.pdf) window containing the appropriate ASQ questionnaire will pop up. Note that patient identifiers have been automatically included in the document. Use the standard Acrobat controls to view and print the document.

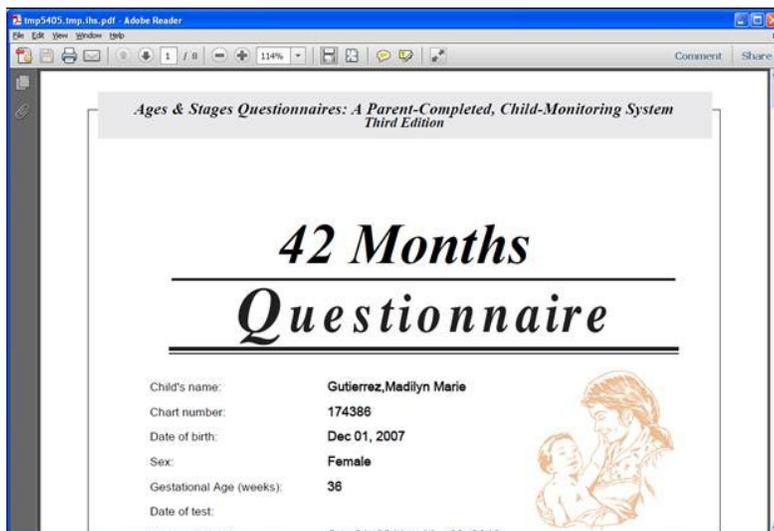


Figure 8-4: 42 months questionnaire

## 8.4 Enter Today's Scores

An ASQ data entry window opens when you click the Enter Today's Scores button. Enter scores for each of the five development parameters by navigating with the mouse, tab, or arrow keys. Typically the score will be an integer that is a multiple of five. It is unnecessary to enter all five scores, but at least one value must be entered to update the database. In ASQ Third Edition, it is possible to record a score based on an incomplete data set (see ASQ Users Guide). Under these circumstances, the score may be a number with up to two decimal digits. In all cases, the score cannot exceed a value of 100.

If an invalid score is entered, it will be rejected immediately, and the data entry box will be blank, waiting for a valid entry. If a valid score is entered below the cutoff value, the background color of the associated cutoff value cell will change to purple.

Date	ASQ (months)	Communication	Gross Motor	Fine Motor	Problem Solving	Personal Social
3/24/2011	42		27.06	36.27	19.82	28.11
						31.12

Figure 8-5: Enter ASQ scores dialog

When you are satisfied that all results are valid, click the OK button. The data entry window will close, and the results table will be refreshed with the new results displayed in the top row.

## 8.5 Enter Historical Scores

The provider may give the child’s parent/caregiver a blank questionnaire for home testing. The ASQ component provides a two-step process to capture historical/home testing results. First, the provider must enter some general information about the test itself. Then scores are entered in the usual way.

Begin by clicking the “Enter Historical Scores” button. This opens the testing validation window. Four pieces of information are required before scores can be entered:

- Visit when the questionnaire was given to the parent (within one year before the current date)
- Date of testing (must be before current visit date)
- Version of ASQ form (1, 2, or 3)
- Questionnaire used for testing (child age in months)

Figure 8-6: Enter historical scores dialog

Use the drop-down list to select the visit when the form was given to the parent. Note that the current visit is not on the list. Only previous visits are displayed.

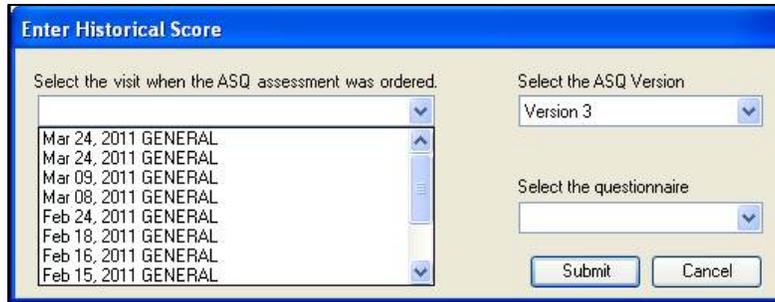


Figure 8-7: Enter historical score dialog drop-down

Use the calendar control to enter the date of the test.

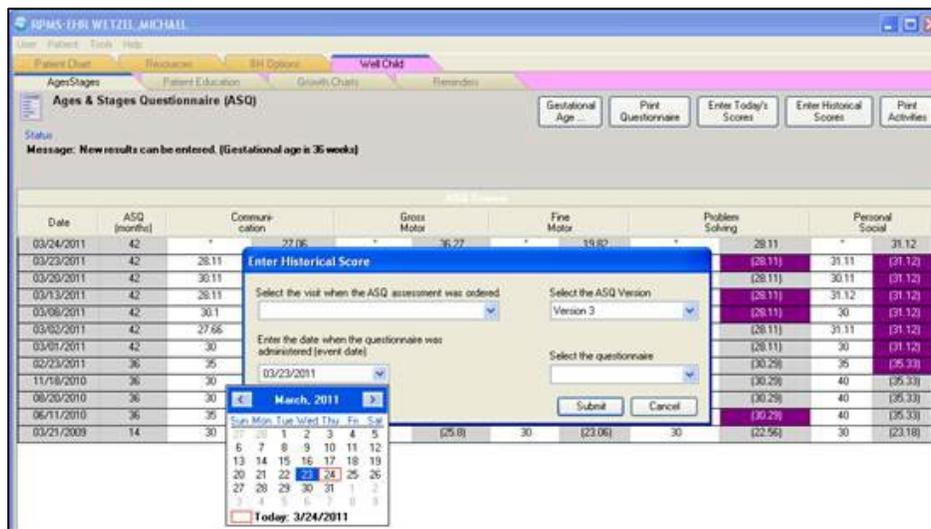


Figure 8-8: Calendar control field

Except in rare instances, the version of the ASQ form will be Third Edition. The control will always default to this version. You can use the drop-down list to select an earlier version.

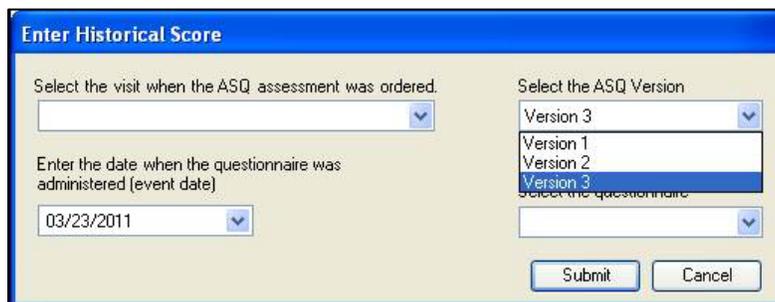


Figure 8-9: ASQ version field

Use the drop-down list to select the questionnaire (months). This information is printed on the first page of the form brought in by the parent.

Figure 8-10: Questionnaire field

After entering all the preliminary information, click the submit button to validate the request. All four fields must contain data. Also, the child's age on the day the ASQ test was administered must correspond to the questionnaire used in the testing. If any data is missing or the child's age on the test date does not match the questionnaire, an error message box appears.



Figure 8-11: Error during submit message

The box explains the error, and the user will be prevented from entering historical results. If the request is valid, an ASQ data entry window will pop up (see Section 8.4). After submitting the historical data, the ASQ results table will be refreshed with a new row in chronological order.

## 8.6 Print Activities

If you click the “Print Activities” button, an Adobe Acrobat document (pdf) window containing the appropriate ASQ intervention activities table opens. Use the standard Acrobat controls to view and print the document. A bug in Adobe Reader prevents the entire document from being viewed in landscape format. However, there is no need for concern. The document normally prints on a single page.

tmp5444.tmp.lhs.pdf - Adobe Reader

File Edit View Window Help

1 / 1 114%

Comment Share

Child: Gutierrez, Madilyn Marie Chart: 174386 Date of test: 3/24/2011

	<p>Play a matching game. Make two sets of 10 or more pictures. You can use pictures from two copies of the same magazine or a deck of playing cards. Lay the pictures face up and ask your child to find two that are the same. Start with two picture sets and gradually add more.</p>	<p>Put out several objects that are familiar to your child (brush, coat, banana, spoon, book). Ask your child to show you which one you can eat or which one you wear outside. Help your child put the objects in groups that go together, such as "things that we eat" and "things that we wear."</p>	<p>Make an adventure path outside. Use a garden hose, rope, or piece of chalk and make a "path" that goes under the bench, around the tree, and along the wall. Walk your child through the path first, using these words. After she can do it, make a new path or have your child make a path.</p>	<p>Make long scarves out of fabric scraps, old dresses, or old shirts by tearing or cutting long pieces. Use material that is lightweight. Hold on to the edge of the scarf, twirl around, run, and jump.</p>
<p>Before bedtime, look at a magazine or children's book together. Ask your child to point to pictures as you name them, such as "Where is the truck?" Be silly and ask him to point with an elbow or foot. Ask him to show you something that is round or something that goes fast.</p>	<p>Talk about the number 3. Read stories that have 3 in them (The Three Billy Goats Gruff, Three Little Pigs, The Three Bears). Encourage your child to count to 3 using similar objects (locks, cards, blocks). Talk about being 3 years old. After your child gets the idea, move up to the numbers 4, 5, and so forth as long as your child is interested.</p>	<p>Listen for sounds. Find a cozy spot, and sit with your child. Listen and identify all of the sounds that you hear. Ask your child if it is a loud or soft sound. Try this activity inside and outside your home.</p>	<p>Listen and dance to music with your child. You can stop the music for a moment and play the "freeze" game, where everyone "freezes," or stands perfectly still, until you start the music again. Try to "freeze" in unusual positions for fun.</p>	<p>you can eat Fruit or Froot of yarn or art piece of end of the firm tip for</p>
<p>seeds, that e or peas), and child place the to filling almost Place the seeds oil. Put the cup ill and encour- eer and watch</p>	<p>ay Simon Says ames of body be "Simon" and the part of his ys." Let your be "Simon," e each body part ive your child a self.</p>	<p>"sharing skills" ve in your home, ren to start (a ed) and have a of toys available on't have to Puppets or blocks y encourage eeked, use an h a belt to allow e with the toys.</p>	<p>you can eat Fruit or Froot of yarn or art piece of end of the firm tip for</p>	<p>you can eat Fruit or Froot of yarn or art piece of end of the firm tip for</p>

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Figure 8-12: Print activities

## 9.0 PPN Parameters

This application uses the AUPN DISPLAY PPN parameter functionality and is defaulted to OFF until Patient Preferred Name (PPN) is available across the enterprise.

While this parameter is turned off, the PPN will NOT display in any application. This allows the PPN display to be turned on immediately without requiring a coordinated release of all applications.

Once all applications support the display of the PPN, instructions will be provided on how to enable this system-wide parameter. Figure 9-1 is an example of a Patient Selection (Search) dialog with the PPN displayed to the right under the HRN number:

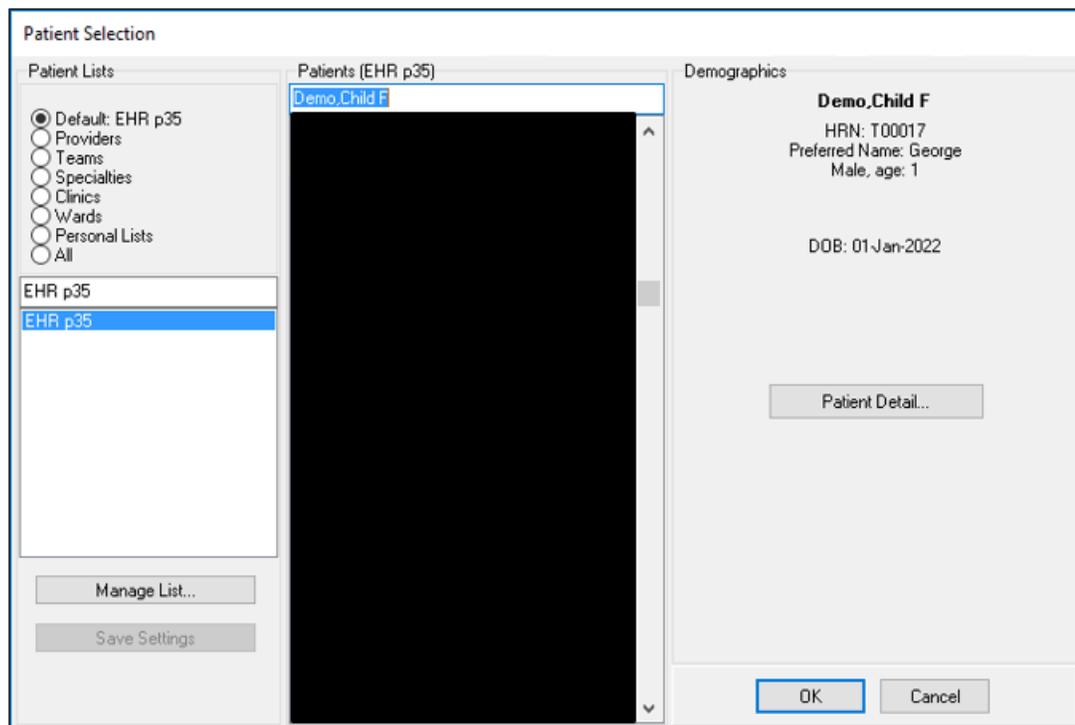


Figure 9-1: Patient Selection (Search) dialog with the PPN displayed

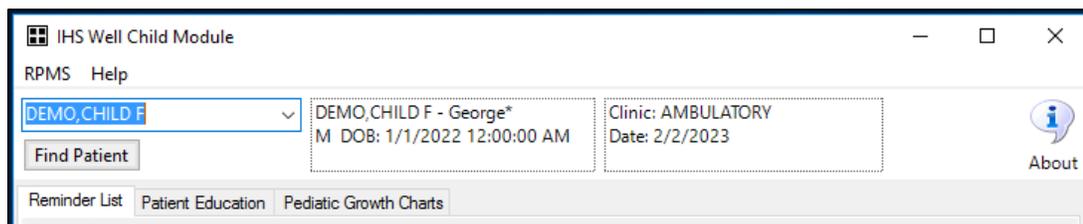


Figure 9-2: PPN in Well Child Module

## 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.

# Glossary

**Archiving**

The storing of historical or little-used data off-line (often on tape).

**ASUFAC number**

Area Service Unit Facility; A unique identifier for each facility within IHS. A six-digit number comprised of 2 digits for Area, 2 digits for Service Unit, and 2 digits for Facility.

**Banner**

A line of text with a user's name and domain.

**Browser**

An interactive application that displays ASCII text on a terminal that supports a scroll region. The text can be in the form of a word-processing field or sequential local or global array. The user is allowed to navigate freely within the document.

**Callable Entry Points**

Places in a routine that can be called from an application program.

**Cross-reference**

An indexing method whereby files can include pre-sorted lists of entries as part of the stored database. Cross-references (x-refs) facilitate look-up and reporting.

**Default Facility**

A user selects a facility identification to work with patients registered to that facility.

**Entry Point**

Entry point within a routine that is referenced by a "DO" or "GOTO" command from a routine internal to a package.

**File**

A set of related records or entries treated as a single unit.

**FileMan**

The database management system for RPMS.

**Global**

In MUMPS, global refers to a variable stored on disk (global variable) or the array to which the global variable may belong (global array).

**Health Record Number (HRN)**

Each facility assigns a unique number within that facility to each patient. Each HRN with its facility identification “ASUFAC” make a unique identifier within all of IHS.

**INDEX (%INDEX)**

A Kernel utility used to verify routines and other MUMPS code associated with a package. Checking is done according to current ANSI MUMPS standards and RPMS programming standards. This tool can be invoked through an option or from direct mode (>D ^%INDEX).

**Init**

Initialization of an application package. The initialization step in the installation process builds files from a set of routines (the init routines). Init is a shortened form of initialization.

**Internal Entry Number (IEN)**

The number used to identify an entry within a file. Every record has a unique internal entry number.

**IRM**

Information Resource Management. The IHS personnel responsible for information systems management and security.

**Kernel**

The set of MUMPS software utilities that function as an intermediary between the host operating system and application packages, such as Laboratory and Pharmacy. The Kernel provides a standard and consistent user and programmer interface between application packages and the underlying MUMPS implementation. These utilities provide the foundation for RPMS.

**Menu**

A list of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection. When displayed, menu-type options are preceded by the word “Select” and followed by the word “option” as in Select Menu Management option: (the menu’s select prompt).

**Namespace**

A unique set of 2 to 4 alpha characters that are assigned by the database administrator to a software application.

**Option**

An entry in the Option file. As an item on a menu, an option provides an opportunity for users to select it, thereby invoking the associated computing activity. Options may also be scheduled to run in the background, noninteractively, by TaskMan.

**Patient Care Component (PCC)**

The central repository for data in the Resource and Patient Management System (RPMS).

**PCC+ Clinic\***

A specific defined location within the local health care facility where care is delivered; “Family Medicine West” or “High Risk Prenatal Clinic”. Each PCC+ clinic is associated with a default PCC+ template, default PCC+ document printer location, and default provider. Note that a PCC+ clinic differs from a RPMS “Clinic Stop” and a hospital location used in the scheduling package.

**Print daemon\***

A background RPMS process that manages user requests to print PCC+ templates and passes the requests to the PCC+ print service.

**Print service\***

A live Windows process on each PCC+ print server that fields requests from the PCC+ Print Daemon and generates fully-merged, visit-specific PCC+ templates on the appropriate printer.

**Print Server\***

A dedicated Windows server that hosts the PCC+ print service stores all PCC+ templates and generates PCC+ documents.

**Queuing**

Requesting that a job be processed at a later time rather than within the current session.

**Routine**

A program or sequence of instructions called by a program that may have some general or frequent use. MUMPS routines are groups of program lines that are saved, loaded, and called as a single unit via a specific name.

**Template**

A PCC+ encounter form stored as a Word mail merge document.

**Template\***

A Word document that links the contents of the RPMS database to a PCC+ encounter from via MS Word's mail merge process.

**UCI**

User Class Identification: a computing area.

**Up-Hat (^)**

A circumflex, also known as a "hat" or "caret," that is used as a piece delimiter in a global. The up-hat is denoted as "^" and is typed by pressing Shift+6 on the keyboard.

**Utility**

A callable routine line tag or function. A universal routine usable by anyone.

**Variable**

A character or group of characters that refers to a value. MUMPS recognizes 3 types of variables: local variables, global variables, and special variables. Local variables exist in a partition of the main memory and disappear at signoff. A global variable is stored on disk, potentially available to any user. Global variables usually exist as parts of global arrays.

## Acronym List

Acronym	Term Meaning
ASQ	Ages and Stages Questionnaire
BMI	Body Mass Index
CDC	Centers for Disease Control and Prevention
DDST	Denver Developmental Screening Test
EHR	Electronic Health Record
GUI	Graphical User Interface
HRN	Health Record Number
IHS	Indian Health Service
KB Editor	Knowledgebase Editor
OFC	Occipital Frontal Circumference
PDF	Portable Document Format
PPN	Patient Preferred Name
PT ED	Patient Education
RPMS	Resource and Patient Management System
WCM	Well Child Module

## Contact Information

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

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