



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **PCC Management Reports (APCL)**

## **Patch 16 Addendum**

Version 3.0 Patch 16  
May 2005

Office of Information Technology  
Albuquerque, New Mexico

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## 1.0 Introduction

Please review these changes and add a copy of them to any printed documentation your site may be using for PCC Patch Management Reports v3.0. These changes will be integrated into future versions of the software and user manuals and will no longer be considered an addendum at the time of the next release.

Patch 16 of PCC Management Reports version 3.0 contains the following changes:

- The new 2005 Diabetes Audit has been added to APCL version 3.0 (section 2.0)

<p><b>Note:</b> For a complete list of changes made by patch 16, please refer to the patch 16 notes file.</p>
---------------------------------------------------------------------------------------------------------------

## 2.0 The 2005 RPMS Diabetes Audit

The 2005 Diabetes Audit has been distributed in PCC Managements Patch 16 (apcl0300.16k) and should be used by all IHS/Tribal or Urban facilities that wish to use the Resource and Patient Management System (RPMS) totally or in part for performing the 2005 Diabetes Audit.

The new DM05 menu option may be found either in PCC Management Reports under the DM Diabetes QA Audit Menu option or under the DA Diabetes QA Audit Menu option of the Diabetes Management System. Access the 2005 menu options by selecting DM05. Note that there are a number of new menu options that will be described in this document.

- DM Diabetes Management System
  - DA Diabetes QA Audit Menu
    - \* DM05 2005 Diabetes Program Audit

```

*****
**          PCC Management Reports          **
**    2005 Diabetes Audit Report Menu    **
*****
                          Version 3.0

                          CIMARRON HOSPITAL

DM05  Run 2005 Diabetes Program Audit
D5TC  Check Taxonomies for the 2005 DM Audit
D5TU  Update/Review Taxonomies for 2005 DM Audit
EAUD  Run the 2005 Audit w/predefined set of Pts
-----
PR05  Run 2005 PreDiabetes/Metabolic Syndrome Audit
PDTC  Check Taxonomies for the 2005 Pre-Diabetes Audit
PDTU  Update/Review Taxonomies for 2005 PreDiab Audit

Select 2005 Diabetes Program Audit Option:

```

Figure 2-1: New 2005 Diabetes Audit Report menu

### 2.1 Check Taxonomies for the 2005 DM Audit (D5TC)

Begin the 2005 audit process by selecting the Check Taxonomies for the 2005 DM Audit (D5TC) option to review the taxonomies required for the 2005 audit.

**To check taxonomies for the 2005 DM audit, follow these steps:**

1. Type D5TC at the “Select 2005 Diabetes Program Audit Option:” prompt.

2. Type the name of an output device at the “Device:” prompt. Press the Enter key to accept the default response.

```
Select 2005 Diabetes Program Audit Option: D5TC Check Taxonomies for the 2005
Diabetes Audit

Checking for Taxonomies to support the 2005 Audit.
Please enter the device for printing.

DEVICE: HOME// <enter>

Checking for Taxonomies to support the 2005 Audit...

In order for the 2005 Diabetes Audit to find all necessary data, several
taxonomies must be established. The following taxonomies are missing or have
no entries:
A/C RATIO Lab Taxonomy [DM AUDIT A/C RATIO TAX] has no entries
SDM providers Taxonomy [DM AUDIT SDM PROVIDERS] has no entries
End of taxonomy check. HIT RETURN:
```

Figure 2-2: Using the D5TC option

**Important note:**

Even though only two taxonomies have been displayed as having no entries, **ALL LAB, MEDICATION, EDUCATION and HEALTH FACTOR taxonomies should be reviewed and updated before attempting to run the 2005 audit.** Please consult Pharmacy and Laboratory staff to ensure that the correct tests and medications are added to the taxonomies.

**DM AUDIT SDM PROVIDERS**

This taxonomy is not used for the 2005 audit so do not be concerned if there are no entries.

**DM AUDIT A/C RATIO TAX**

This taxonomy is a new taxonomy for 2005. It was added to differentiate between laboratory tests that measure urine microalbumin when results are reported in mg/L and tests for Microalbumin/Creatinine Ratio where results are measured in mg/g Creatinine. Assistance of your laboratory staff may be required to be sure that both the original DM AUDIT MICROALBUMINURIA TAX and the new DM AUDIT A/C RATIO TAX are correctly populated.

## 2.2 Update/Review Taxonomies for 2005 DM Audit (D5TU)

This is a new menu option that has been designed to assist the user in updating the taxonomies required for the audit. The option to Review or Edit the taxonomies has been removed. When the D5TU option is chosen, all taxonomies required for the 2005 audit are displayed with only two choices – Display the current contents of that taxonomy or Select that taxonomy for editing (Figure 2-3).

Note that there are actually 39 taxonomies that are available for reviewing or editing. The additional taxonomies that do not appear on the first screen may be displayed one at a time by pressing the down arrow key (↓) or pressing the plus key (+) and then the Enter key to display the entire second screen. The category of taxonomy is displayed on the far right side of each taxonomy name. Those taxonomies in the ICD DIAGNOSIS category do not need to be updated.

**To REVIEW taxonomies for the 2005 DM audit, follow these steps:**

1. Type D5TU at the “Select 2005 Diabetes Program Audit Option:” prompt.
2. The Taxonomies To Support 2005 Diabetes Audit Reporting screen will display (Figure 2-3)
3. Type D at the “Select Action:” prompt.
4. Type the number of the taxonomy you want displayed at the “Which Taxonomy:” prompt.

```

2005 DM AUDIT TAXONOMY UPDATE Apr 17, 2005 16:50:15          Page:    1 of    3
TAXONOMIES TO SUPPORT 2005 DIABETES AUDIT REPORTING
* Update Taxonomies

1)  SURVEILLANCE DIABETES           Diabetes Diagnoses Codes       ICD DIAGNOS
2)  SURVEILLANCE HYPERTENSION       Hypertension Diagnoses Codes   ICD DIAGNOS
3)  SURVEILLANCE TUBERCULOSIS      Tuberculosis Diagnoses Codes   ICD DIAGNOS
4)  DM AUDIT DEPRESSIVE DISORDERS   Depressive Disorders Diagnoses ICD DIAGNOS
5)  DM AUDIT DIET EDUC TOPICS       Diabetes Diet Education Topics  EDUCATION T
6)  DM AUDIT EXERCISE EDUC TOPICS   Diabetes Excercise Education T  EDUCATION T
7)  DM AUDIT OTHER EDUC TOPICS      Other Diabetes Education Topic  EDUCATION T
8)  DM AUDIT SMOKING CESS EDUC      Smoking Cess Education Topics   EDUCATION T
9)  DM AUDIT TOBACCO HLTH FACTORS   Tobacco Health Factors          HEALTH FACT
10) DM AUDIT PROBLEM SMOKING DXS    Smoking related diagnoses for   ICD DIAGNOS
11) DM AUDIT PROBLEM HTN DIAGNOSES  Hypertension Diagnoses         ICD DIAGNOS
12) DM AUDIT PROBLEM DIABETES DX    Diabetes Diagnoses              ICD DIAGNOS
13) DM AUDIT SMOKING RELATED DXS    Smoking related diagnoses for   ICD DIAGNOS
14) DM AUDIT CESSATION HLTH FACTOR  Smoking Cessation Health Facto  HEALTH FACT
15) DM AUDIT SELF MONITOR DRUGS     Self Monitoring Drugs Taxonomy  DRUG
16) DM AUDIT TB HEALTH FACTORS      TB Status Health Factors       HEALTH FACT

+      Enter ?? for more actions

S      Select Taxonomy           D      Display a Taxonomy
Select Action:+// Select Action:+// D  Display a Taxonomy

Which Taxonomy:  (1-39):  5
    
```

Figure 2-3: Using the D5TU option

5. The contents of the selected taxonomy will display (Figure 2-4). In this example the contents of the DM AUDIT DIET EDUC TOPICS taxonomy are displayed.

```

DM AUDIT DIET EDUC TOPICS

Items currently defined to this taxonomy:
  DM-DIET
  DM-NUTRITION
  NUTRITION (SESSION 1: INTRODUCTION TO FOOD LABELS)
  NUTRITION (SESSION 2: INTRODUCTION TO CARBOHYDRATE COUNTING)
  NUTRITION (SESSION 3: INTRODUCTION TO EXCHANGE LISTS)
  NUTRITION (SESSION 4: INTRODUCTION TO FOOD SHOPPING)
  NUTRITION (SESSION 5: INTRODUCTION TO HEALTHY COOKING)
  NUTRITION (SESSION 6: GUIDELINES FOR EATING AWAY FROM HOME)
  NUTRITION (SESSION 7: GUIDELINES FOR THE USE OF ALCOHOL)
  NUTRITION (SESSION 8: GUIDELINES FOR CHOOSING A HEALTHY DIET)
  DMC-NUTRITION

Press enter to continue:
    
```

Figure 2-4: Taxonomy contents display

**To UPDATE taxonomies for the 2005 DM audit, follow these steps:**

**Note:** All of the Education taxonomies will require updating to include the new Diabetes Curriculum codes (DMC). The taxonomy update process is similar to that used for previous audits.

1. Type **D5TU** at the “Select 2005 Diabetes Program Audit Option:” prompt.
2. The Taxonomies To Support 2005 Diabetes Audit Reporting screen will display (Figure 2-3)
3. Type **S** at the “Select Action:” prompt.
4. Type the number of the taxonomy you want to update at the “Which Taxonomy:” prompt.
5. The contents of the selected taxonomy will display (Figure 2-4) and you may add or remove entries from that taxonomy. In this example the contents of the DM AUDIT DIET EDUC TOPICS taxonomy are displayed.

DIABETES TAXONOMY UPDATE      Apr 17, 2005 17:10:59      Page: 1 of 1  
 Updating the DM AUDIT DIET EDUC TOPICS taxonomy

1) DM-DIET  
 2) DM-NUTRITION  
 3) DMC-NUTRITION  
 4) NUTRITION (SESSION 7: GUIDELINES FOR THE USE OF ALCOHOL)  
 5) NUTRITION (SESSION 2: INTRODUCTION TO CARBOHYDRATE COUNTING)  
 6) NUTRITION (SESSION 8: GUIDELINES FOR CHOOSING A HEALTHY DIET)  
 7) NUTRITION (SESSION 3: INTRODUCTION TO EXCHANGE LISTS)  
 8) NUTRITION (SESSION 4: INTRODUCTION TO FOOD SHOPPING)  
 9) NUTRITION (SESSION 5: INTRODUCTION TO HEALTHY COOKING)  
 10) NUTRITION (SESSION 1: INTRODUCTION TO FOOD LABELS)  
 11) NUTRITION (SESSION 6: GUIDELINES FOR EATING AWAY FROM HOME)

---

Enter ?? for more actions

---

A    Add Taxonomy Item      R    Remove an Item  
 Select Action:+// **A** Add Taxonomy Item

*Figure 2-5: Updating taxonomies*

6. To add a taxonomy item, type **A** at the “Select Action:” prompt.
7. Type the name of the new taxonomy item at the “Select TAXONOMY NAME:” prompt. For this example enter either DM or DMC to see a list of all topics in either the old DM education series or the new DMC series. The

topics will display in groups of 5 and the enter key must be pressed in order to see the next group of 5 topics.

8. A topic may be added to the list by typing the number preceding that topic and pressing the Enter key.

```

Select EDUCATION TOPICS NAME: DMC
  1  DMC-ACUTE COMPLICATIONS          DMC-AC
  2  DMC-BEHAVIORAL GOALS (MAKING HEALTHY CHANGES)          DMC-BG
  3  DMC-BLOOD SUGAR MONITORING, HOME          DMC-BGM
  4  DMC-CHRONIC COMPLICATIONS (PREVENTION & TREATMENT)          DMC-CC
  5  DMC-DIABETES MEDICINE - INSULIN          DMC-IN
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: <enter>
  6  DMC-DISEASE PROCESS          DMC-DP
  7  DMC-EXERCISE          DMC-EX
  8  DMC-FOOT CARE          DMC-FTC
  9  DMC-KNOWING YOUR NUMBERS (ABC)          DMC-ABC
 10  DMC-MEDICATIONS          DMC-M
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-10: <enter>
 11  DMC-MIND, SPIRIT AND EMOTION          DMC-MSE
 12  DMC-NUTRITION          DMC-N
 13  DMC-PRE-PREGNANCY COUNSELING          DMC-PPC
 14  DMC-N-AL NUTRITION (SESSION 7: GUIDELINES FOR THE USE OF ALCOHOL)DMC-
N-AL
 15  DMC-N-CC NUTRITION (SESSION 2: INTRODUCTION TO CARBOHYDRATE COUNTING)
DMC-N-CC
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-15: 14 <enter>

```

Figure 2-6: Adding a taxonomy item

9. **This process must be continued number by number until each education topic in that category has been added to the taxonomy list.**
10. When the updating of a single taxonomy has been completed, type Q then press the Enter key at the “Select action:” prompt to exit that taxonomy.
11. The next taxonomy requiring review and updating may then be selected and updated. See the PCC Management Reports Taxonomy Setup Guide from June 2003 for suggested members of each taxonomy.

**Note:** If you have not already done so, be sure that the STATIN drugs have been removed from the LIPID LOWERING DRUGS TAX and added to the DM AUDIT STATIN DRUGS TAX. Also, be sure that the Aspirin drugs are in the DM AUDIT ASPIRIN DRUG TAX and all other anti-platelet drugs are included in the DM AUDIT ANTI-PLATELET DRUG TAX. Drug taxonomies require extra care to ensure that each drug in that category has been added to the taxonomy. There may be two or more drugs with what appear to be the same name and same strength. However, each of these drugs will need to be added to the

taxonomy as they may be from different manufacturers and have different NDC numbers.

Once the taxonomies have been updated, the DM 2005 audit may be run. There are two options for running the 2005 audit:

- Run 2005 Diabetes Program Audit (DM05)
- Run the 2005 Audit w/predefined set of Pts (EAUD)

The DM05 option must be used for the official audit. The EAUD option is a tool to compare the data on the DM Audit to that on the CRS/GPRA Report for Diabetes-Related Indicators.

## 2.3 Run 2005 Diabetes Program Audit (DM05)

This option is the equivalent of previous years' electronic audits. Registers, templates, status, primary care providers, and communities may all be selected by the individual running the audit. ***The official 2005 Diabetes Audit should be run using this option.***

### **To run the 2005 Diabetes Program Audit, follow these steps:**

1. Type DM05 at the "Select 2005 Diabetes Program Audit Option:" prompt.
2. Enter the Official Diabetes Register Name
3. Identify whether your program has received Special Diabetes Program for Indian (SDPI) grant monies.
4. If your program has received grant monies, enter the program grant number.
5. Enter the audit date. All data in the year preceding this date will be reviewed. A date in the future may be used as the audit date to identify patients who may have specific care needs before the official audit date.
6. Determine whether the audit will be run for a specific register, a template of patients, or one or more individual patients.
7. If Register is selected, enter the name of the Register to be audited. If a template is selected, enter the name of the template. If one or more individual patients are to be audited, enter them by last name, first name or chart number.
8. Identify the status of the patient(s) to be included in the audit.
9. Determine whether you want to limit the audit to a particular primary care provider. This can only be done if patients are assigned to a designated or primary care provider at your facility.

10. Determine whether you want to limit the audit to patients who live in a particular community.
11. If you have selected a Register or Template to audit, determine whether you will audit all the patients in the Register or template or a random sample. A suggested number of patients to be included in the random sample can be determined from the chart distributed in the 2005 audit instructions.
12. If a random sample has been selected, identify how many patients will be included in the audit.
13. Determine what format is to be used for the audit output –
  - a. Individual audit sheet for each person.
  - b. A cumulative audit summary report.
  - c. An EPI INFO file.
  - d. Both individual sheets as well as a cumulative audit. This option is most often chosen by facilities where the data in RPMS will need to be supplemented by manual chart reviews.

If the EPI INFO file option is chosen, supply a 5-8 character unique name for the EPI INFO file. Be sure to queue the report as shown below to run after hours or during a time when fewer users are using the RPMS system.

```

Enter Print option: 1// 2 Create EPI INFO file
Enter the name of the FILE to be Created (3-8 characters): DM_AUD05

I am going to create a file called dm_aud05.rec which will reside in
the C:\EXPORT directory on your RPMS server.
It is the same directory that the data export globals are placed.
See your site manager for assistance in finding the file
after it is created. PLEASE jot down and remember the following file name:
***** dm_aud05.rec *****
It may be several hours (or overnight) before your report and flat file are
finished.

The records that are generated and placed in file dm_aud05.rec
are in a format readable by EPI INFO. For a definition of the format
please see your user manual.
Is everything ok? Do you want to continue? Y// <enter>
Won't you queue this ? Y// <enter>
Requested Start Time: NOW//T@2000

```

*Figure 2-7: Creating a file*

Make arrangements to retrieve the file from your RPMS site manager as an email attachment, or on a CD, USB drive, or floppy disk.

**Important changes for the 2005 audit:**

1. PAP Smear has been dropped.
2. The logic for whether a urinalysis was done and whether proteinuria was present has been modified.
3. V04.81 has been added as a diagnosis check for Influenza vaccine given.
4. Chart Reviews have been eliminated from the check for Nutrition Education.
5. Two new audit items – Is Depression on the PCC Problem list and if not, Has depression screening been done, have been added.

A complete explanation for each of the audit data elements can be reviewed by choosing the menu option DAL Display Audit Logic for the 2005 audit year.

Figure 2-8 shows a sample 2005 Individual Audit and Figure 2-9 shows a sample Cumulative Audit.

## 2.4 Run the 2005 Audit w/predefined set of Pts (EAUD)

This option was developed to standardize the method in which patients are selected to be audited and duplicate figures generated for Diabetes-related indicators on the CRS 2005 reports. **Do not use this option for your official 2005 Diabetes Audit.**

The 2005 Electronic Diabetes Audit is run for a set of patients, defined as ‘Active Diabetic Patients,’ by the Clinical Reporting System (CRS). As an option, you may also specify that the patients must be an active member of the Diabetes register.

**The predefined list of patients is selected by the program based on the following criteria:**

1. Must reside in a community specified in the official GPRA community taxonomy.
2. Must be alive on the audit date.
3. Indian/Alaska Natives Only - based on Classification of 01.
4. Must have 2 visits to medical clinics in the 3 years prior to the audit date. At least one visit must be from: 01 General, 06 Diabetic, 10 GYN, 12 Immunization, 13 Internal Med, 20 Pediatrics, 24 Well Child, 28 Family Practice, 57 EPSDT, 70 Women's Health, 80 Urgent, or 89 Evening Clinics.
5. The patient must have been diagnosed with diabetes at least 1 year prior to the audit date.

6. The patient must have had at least 2 visits during the year prior to the Audit date, AND at least 2 DM- related visits ever.

**The steps for running the E Audit are similar to the DM05 Audit:**

1. Type EAUD at the “Select 2005 Diabetes Program Audit Option:” prompt.
2. Enter the Official Diabetes Register Name
3. Identify whether your program has received Special Diabetes Program for Indian (SDPI) grant monies.
4. If your program has received grant monies, enter the program grant number.
5. Enter the audit date. All data in the year preceding this date will be reviewed.
6. A date in the future may be used as the audit date to identify patients who may have specific care needs before the official audit date.
7. Identify the name of the GPRA taxonomy of communities used by your facility.
8. Determine whether only Active patients in the Register will be included in the audit
9. Determine what format is to used for the audit output –
  - a. Individual audit sheet for each person.
  - b. A cumulative audit.
  - c. An EPI INFO file.
  - d. Both individual and cumulative audit.

ASSESSMENT OF DIABETES CARE, 2005		DATE AUDIT RUN: Mar 01, 2005
AUDIT DATE: Mar 01, 2005		FACILITY NAME: CIMARRON HOSPITAL
AREA: 50	SU: 52	FACILITY: 01 # PTS ON DM REGISTER: 1745
Does you community receive SDPI grant funds? Don't know		
TRIBAL AFFIL: 022 CHEROKEE NATION OF O		COMMUNITY: 4049658 SALINA
REVIEWER: CMI	CHART #: 100018	DOB: Feb 12, 1955 SEX: FEMALE
PRIMARY CARE PROVIDER:		
DATE OF DIABETES DIAGNOSIS:	Lipid Lowering Agent: None	
CMS Register:	IMMUNIZATIONS	
Problem List: Mar 2003	Flu vaccine (past yr): No	
1st DX recorded in PCC: Jun 03, 1997	Pneumovax Ever: Yes - Oct 26, 1997	
Diabetes Type: 2 Type 2	Td in past 10 yrs: No	
CMS Register:	PPD Status: NEG	
Problem List: 250.00	If PPD Pos, INH Tx Complete:	
PCC POV's: Type 2		
TOBACCO USE: 1 Current User	If PPD Neg, Last PPD date: Jun 19, 2000	
Referred for (or provided) Cessation	Date of Last EKG:	
Counseling: Yes-4/22/2004		
VITAL STATISTICS	LABORATORY DATA	
Height: 65.00 inches Oct 04, 2004	HbA1c (most recent): 10.0	
Last Weight: 213 lbs Nov 23, 2004	Date Obtained: Nov 23, 2004	
BMI: 35.4	HbA1c (next most recent): 10.1	
HTN (documented DX): Yes	MOST RECENT SERUM VALUE (in the	
Last 3 Blood Pressures (in past yr):	past 12 months):	
120/66 Nov 23, 2004	Creatinine: 0.9 mg/dl 10/4/2004	
146/65 Oct 04, 2004	Total Cholesterol: 235 mg/dl 11/23/2004	
140/69 Aug 09, 2004	HDL Cholesterol: canc mg/dl 11/23/2004	
EXAMINATIONS (in past year)	LDL Cholesterol: 67.8 mg/dl 10/4/2004	
Foot exam-complete:	Triglycerides: 1029 mg/dl 11/23/2004	
No	Urinalysis or A/C Ratio:	
Eye exam (dilated/fundus):	Yes 10/4/2004 Urinalysis	
Yes - Optometrist/Ophthalmologist Visit	Proteinuria:	
Dental exam:	No NEGATIVE 10/4/2004 URINE PROTEIN	
Yes-Dental Clinic visit-Apr 22, 2004	Microalbuminuria:	
EDUCATION (in past year)	Pos POS 4/22/2004 ALBUMIN, MICRO	
Diet Instruction: Yes (RD & Non RD - Other)		
Exercise Instruction: Yes	Self monitoring of blood glucose	
DM Education (Other): Yes	documented in chart: No	
DM THERAPY	Supplemental Section	
Select all that currently apply	Does pt have depression as an active	
1 Diet & Exercise Alone	problem? No	
X 2 Insulin	If 'No', has pt been screened for	
X 3 Sulfonylurea	depression in the past year?	
X 4 Metformin	No	
5 Acarbose	Local Option question:	
X 6 Glitazones		
9 Unknown/Refused		
ACE Inhibitor/ARB Use: Yes		

Figure 2-8: Sample 2005 Individual Audit

CMI		Apr 17, 2005		Page 1	
*** HEALTH STATUS OF DIABETIC PATIENTS *** CIMARRON HOSPITAL Reporting Period: Mar 01, 2004 to Mar 01, 2005					
-----					
300 patients were reviewed		n	Percent		
Gender					
	Female	182	61%		
	Male	118	39%		
Age					
	<15 yrs	2	1%		
	15-44 yrs	53	18%		
	45-64 yrs	151	50%		
	65 yrs and older	94	31%		
Diabetes Type					
	Type 1	10	3%		
	Type 2	287	96%		
	Unknown	3	1%		
Duration of Diabetes					
	Less than 10 years	76	25%		
	10 years or more	45	15%		
	Diagnosis date not recorded	179	60%		
Weight Control (BMI) - does not add up to 100%					
	Overweight or Obese (BMI>85%ile)	211	70%		
	Obese (BMI>95%ile)	165	55%		
	BMI could not be calculated	40	13%		
Blood Sugar Control - uses last HGB A1C value					
	HbA1c <7.0	99	33%		
	HbA1c 7.0-7.9	42	14%		
	HbA1c 8.0-8.9	39	13%		
	HbA1c 9.0-9.9	16	5%		
	HbA1c 10.0-10.9	12	4%		
	HbA1c 11.0 or higher	10	3%		
	Undocumented	82	27%		
Blood Pressure Control - based on mean of last 3 bp's					
	<120/<70	14	5%		
	120/70 - 130/80	41	14%		
-----					
	131/81 - <140/<90	75	25%		
	140/90 - <160/<95	83	28%		
	160/95 or higher	16	5%		
	BP category Undetermined	71	24%		
Tobacco use					
	Current Tobacco User	61	20%		
	Counseled - Yes	30	49%		

Counseled - No	31	51%
Not a current tobacco user	230	77%
Tobacco use not documented	9	3%
DIABETES TREATMENT		
Diet and Exercise Alone	112	37%
Insulin	18	6%
Oral Med (monotherapy)		
Sulfonylurea	40	13%
Metformin	31	10%
Acarbose	0	0%
Troglitazone	2	1%
Combination of Oral Meds	61	20%
Combination of Oral Meds+Insulin	36	12%
Unknown/Refused	0	0%
ANTI-PLATELET THERAPY		
Aspirin	156	52%
Other Anti-platelet Rx	5	2%
Both ASA & Other Rx	2	1%
None	137	46%
Refused	0	0%
ACE INHIBITOR (OR ARB) USE		
Use in pts with overt proteinuria	21	66%
Use in pts with known hypertension	176	75%
LIPID LOWERING AGENT USE		
Use in pts with total chol >=240	7	58%
Use in pts with LDL chol > 130	12	43%
Of the 87 pts taking a lipid agent:		
Statin drug prescribed:	69	79%
Non-statin drug prescribed:	10	11%
Statin AND non-statin prescribed:	8	9%
EXAMS - Yearly		
Foot Exam - Neuro & Vasc	174	58% ( 0% )
Eye Exam - Dilated	173	58% ( 0% )
Dental Exam	157	52% ( 0% )
Pap Smear (Females Only)	0	0% ( 0% )
DIABETES-RELATED EDUCATION - Yearly		
Diet Instruction	209	70% ( 0% )
Exercise Instruction	263	88% ( 0% )
Other Diabetes Education	218	73% ( 0% )
Any of the above topics	263	88%
IMMUNIZATIONS		
Flu Vaccine - yearly	179	60% ( 0% )
Pneumovax - once	145	48% ( 0% )
Tetanus/Diphtheria (q 10 yrs)	124	41% ( 0% )
LABORATORY EXAMS		
Urinalysis in the past 12 months	211	70%
Proteinuria present	32	11%
Proteinuria absent	177	59%
Proteinuria result unknown	2	1%

Proteinuria test not done	89	30%
Of the 177 without proteinuria:		
Microalbuminuria present	78	44%
Microalbuminuria absent	61	34%
Microalbuminuria not tested	38	21%
Creatinine obtained in the past 12 months	233	78%
Creatinine >= 2.0 mg/dl	10	3%
Creatinine < 2.0 mg/dl	223	74%
Unable to determine result	0	0%
Creatinine not tested/unknown	67	22%
Total Cholesterol obtained in the past 12 months	143	48%
Desirable (<200 mg/dl)	90	30%
Borderline (200-239 mg/dl)	41	14%
High (240 mg/dl or more)	12	4%
Unable to determine result	0	0%
Not tested	157	52%
LDL Cholesterol obtained in the past 12 months	143	48%
LDL <100 mg/dl	58	19%
LDL 100-129 mg/dl	46	15%
LDL 130-160 mg/dl	24	8%
LDL >160	7	2%
Unable to determine result	8	3%
Not tested	160	53%
HDL Cholesterol obtained in the past 12 months	140	47%
HDL <35 mg/dl	32	11%
HDL 35-45 mg/dl	58	19%
HDL 46-55 mg/dl	31	10%
HDL >55	19	6%
Unable to determine result	0	0%
Not tested	160	53%
Triglycerides obtained in the past 12 months	144	48%
TG <150 mg/dl	63	21%
TG 150-199 mg/dl	29	10%
TG 200-400 mg/dl	44	15%
TG >400 mg/dl	8	3%
Unable to determine result	0	0%
Not tested	156	52%
EKG		
Performed in past 3 years	59	20%
Performed in past 5 years	117	39%
Ever performed	132	44%
Tuberculosis Status		
PPD +, INH treatment complete	3	1%
PPD +, untreated/incomplete or tx unknown	16	5%
PPD -, placed since DM dx	29	10%
PPD -, placed before DM dx or date unknown	56	19%
PPD status unknown	196	65%
Self monitoring of blood glucose documented		

Yes	125	42%
No	175	58%
Refused	0	0%
Depression on Problem List or as POVs		
Yes	20	7%
No	280	93%
Depression Screening?		
Yes	0	0%
No	280	100%

Figure 2-9: Sample Cumulative Audit

## 2.5 Check Taxonomies for the 2005 Pre-Diabetes Audit (PDTC)

Three new options have been added to the DM05 menu for 2005 to assist with management of patients with “Pre-Diabetes”. It is anticipated that a new Register for patients with Pre-Diabetes will be distributed during 2005 and some facilities have already developed separate Registers for patients with symptoms or diagnoses that indicate risk for development of diabetes. **This is an optional audit and is not required by the national programs during 2005.**

There is no diagnosis or ICD-9 code for pre-diabetes. It is a general term accepted for patients who have a diagnosis of impaired fasting glucose (ICD-9 code 790.21), impaired glucose tolerance (ICD-9 code 790.22), or Dysmetabolic Syndrome (277.7) all of whom are at greater risk for developing diabetes.

The tools already in the Diabetes Management System may be used for managing these patients if the word, DIABETES, is included in the name of the Register holding these patients. The additional taxonomies and an audit developed specifically for monitoring the care of these patients may be used regardless of whether the patients are included on a Register.

### To check taxonomies for the 2005 pre-diabetes audit, follow these steps:

1. Type PDTC at the “Select 2005 Diabetes Program Audit Option:” prompt.
2. Type the name of an output device at the “Device:” prompt. Press the Enter key to select the default response.

```

DM05  Run 2005 Diabetes Program Audit
D5TC  Check Taxonomies for the 2005 DM Audit
D5TU  Update/Review Taxonomies for 2005 DM Audit
EAUD  Run the 2005 Audit w/predefined set of Pts
-----
PR05  Run 2005 PreDiabetes/Metabolic Syndrome Audit
PDTC  Check Taxonomies for the 2005 Pre-Diabetes Audit
PDTU  Update/Review Taxonomies for 2005 PreDiab Audit

Select 2005 Diabetes Program Audit Option: PDTC Check Taxonomies for the 2005
P

Checking for Taxonomies to support the 2005 Pre-Diabetes Audit.
Please enter the device for printing.

DEVICE: HOME//  Virtual

Checking for Taxonomies to support the 2005 Pre-Diabetes Audit...

In order for the 2005 Pre-Diabetes Audit to find all necessary data, several
taxonomies must be established.  The following taxonomies are missing or have
no entries:

DM AUDIT FASTING GLUCOSE TESTS
DM AUDIT 75GM 2HR GLUCOSE

End of taxonomy check.  HIT RETURN:

```

*Figure 2-10: Checking Taxonomies for the 2005 Pre-Diabetes Audit*

## 2.6 Update/Review Taxonomies for 2005 PreDiab Audit (PDTU)

Your laboratory may not currently have tests that are identified as a Fasting Glucose or a Glucose drawn 2 hours after a 75 Gram glucose load. So the initial step in setting up these taxonomies may require a discussion with your laboratory staff to be sure that there is a standard protocol for ordering and naming these tests. Once the tests are in place, PDTU Update/Review Taxonomies for 2005 PreDiab Audit may be selected to view and update the taxonomy contents. You will notice that all the other taxonomies that identify data for the 2005 Diabetes Audit are displayed as well as the two new taxonomies. To display all of the taxonomies in the list, you may need to scroll down by pressing the down arrow (↓) or plus key (+) and then the Enter key.

### To UPDATE taxonomies for the 2005 DM audit, follow these steps:

**Note:** All of the Education taxonomies will require updating to include the new Diabetes Curriculum codes (DMC). The taxonomy update process is similar to that used for previous audits.

1. Type PDTU at the “Select 2005 Diabetes Program Audit Option:” prompt.

2. The Taxonomies To Support Pre-Diabetes/Metabolic Syndrome Reporting screen will display (Figure 2-11)
3. Type **S** at the “Select Action:” prompt.
4. Type the number of the taxonomy you want to update at the “Which Taxonomy:” prompt.

```

PRE-DIABETES TAXONOMY UPDATE Apr 18, 2005 11:42:04 Page: 1 of 2
TAXONOMIES TO SUPPORT PRE-DIABETES/METABOLIC SYNDROME REPORTING
* Update Taxonomies
+
12) DM AUDIT SULFONYLUREA DRUGS Sulfonylurea Drug Taxonomy DRUG
13) DM AUDIT METFORMIN DRUGS Metformin Drug Taxonomy DRUG
14) DM AUDIT ACARBOSE DRUGS Acarbose Drug Taxonomy DRUG
15) DM AUDIT LIPID LOWERING DRUGS Lipid Lowering Drug Taxonomy DRUG
16) DM AUDIT STATIN DRUGS Statin Drug Taxonomy DRUG
17) DM AUDIT TROGLITAZONE DRUGS Troglitzaone Drug Taxonomy DRUG
18) DM AUDIT ACE INHIBITORS ACE Inhibitor Drug Taxonomy DRUG
19) DM AUDIT ASPIRIN DRUGS Aspirin Drug Taxonomy DRUG
20) DM AUDIT ANTI-PLATELET DRUGS Anti-Platelet Drug Taxonomy DRUG
21) DM AUDIT FASTING GLUCOSE TESTS Fasting Glucose Tests Taxonomy LAB TEST
22) DM AUDIT CHOLESTEROL TAX Cholesterol Lab Taxonomy LAB TEST
23) DM AUDIT LDL CHOLESTEROL TAX LDL Cholesterol Lab Taxonomy LAB TEST
24) DM AUDIT HDL TAX HDL Lab Taxonomy LAB TEST
25) DM AUDIT TRIGLYCERIDE TAX Triglyceride Lab Taxonomy LAB TEST
26) DM AUDIT 75GM 2HR GLUCOSE 75 gm 2hr glucose test Taxonom LAB TEST

Enter ?? for more actions

S Select Taxonomy D Display a Taxonomy Q Quit
Select Action:+// S Select Taxonomy

Which Taxonomy: (1-26): 21
    
```

Figure 2-11: Using the PDTU option

5. The contents of the selected taxonomy will display (Figure 2-12) and you may add or remove entries from that taxonomy.
6. Use the Add a member option to identify the lab test(s) to be included in this taxonomy. Type **A** at the “Select Action:” prompt.
7. Add each test identified by your laboratory staff as being an appropriate member of the taxonomy. When all tests have been added, type **Q** then press the Enter key at the “Select action:” prompt to exit that taxonomy. Repeat the process for the DM AUDIT 75GM 2HR GLUCOSE taxonomy.

<pre> PRE-DIAB TAXONOMY UPDATE      Apr 18, 2005 11:48:09      Page:    1 of    1 Updating the DM AUDIT FASTING GLUCOSE TESTS taxonomy  1)  FASTING GLUCOSE 2)  GTT, FASTING  Enter ?? for more actions  Select Action:+//  A Add taxonomy item </pre>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Figure 2-12: Adding an item

8. Once all the taxonomies have been reviewed and updated, the Pre-Diabetes Audit may be run.

## 2.7 Run 2005 PreDiabetes/Metabolic Syndrome Audit (PR05)

### Follow these steps to run the PreDiabetes Audit:

1. Select PR05.
2. Enter the Official Pre-Diabetes Register Name
3. Enter the audit date. All data in the year preceding this date will be reviewed.
4. A date in the future may be used as the audit date to identify patients who may have specific care needs before the official audit date.
5. Determine whether the audit will be run for a specific register, a template of patients, or one or more individual patients.
6. If Register is selected, enter the name of the Register to be audited. If a template is selected, enter the name of the template. If one or more individual patients are to be audited, enter them by last name, first name or chart number.
7. Identify the status of the patient(s) to be included in the audit.
8. Determine whether you want to run the audit by a particular primary care provider. This can only be done if patients are assigned to a designated or primary care provider at your facility.
9. Determine whether you want to limit the audit to patients who live in a particular community.

10. If you have selected a Register or Template to audit, determine whether you will audit all the patients in the Register or template or a random sample.
11. If a random sample has been selected, identify how many patients will be included in the audit.
12. Determine what format is to be used for the audit output –
  - a. Individual audit sheet for each person.
  - b. A cumulative audit.
  - c. Both individual sheets as well as a cumulative audit. This option allows identification of the individual patients included in the audit if a random sample has been chosen.

Figure 2-13 shows an example of an individual Pre-Diabetes Audit. Notice that Waist Circumference will be displayed if it has been recorded and coded by Data Entry staff using the WC mnemonic.

**Note:** You do not need to have a Pre-Diabetes Register in order to run the Pre-Diabetes Audit. You may enter the official IHS Diabetes Register when prompted for a Register name.

Don't be too disappointed in initial results of this audit. Because of lack of standardization of laboratory tests and diagnostic codes and narratives for pre-diabetes conditions, it may be some time before this audit can be used reliably for tracking patients at risk for development of diabetes.

ASSESSMENT PREDIABETES/METABOLIC SYNDROME CARE, FY 2005	
AUDIT DATE: Mar 1, 2005	REVIEWER: CMI
FACILITY NAME: CIMARRON HOSPITAL	AREA: 50 SU: 52 FACILITY: 01
# PTS ON PRE-DIABETES REGISTER: 1745	
TRIBAL AFFIL: 022 CHEROKEE NATION OF O	COMMUNITY: 4073955 WAGONER
CHART #: 168923 DOB: Sep 23, 1943	SEX: FEMALE
PRIMARY CARE PROVIDER:	
CLASSIFICATION (all that apply):	
1 IFG - No	
2 IGT - No	
3 METABOLIC SYNDROME - Yes	
Last POV in PCC: 277.7 Date: Jan 11, 2005	
First POV in PCC: 277.7 Date: Sep 09, 2004	
OTHER ABNORMAL GLUCOSE (790.29) - No	
CMS Register DX:	
Height: 66.0 inches May 07, 2004	
Last 3 Weights:	
Waist Circumference:	ACE Inhibitor Use: No
Last 3 Blood Pressures:	Aspirin/Anti-Platelet Therapy: None
140/65 Sep 06, 2004	
146/81 May 07, 2004	Lipid Lowering Agent: None
131/65 May 07, 2004	
HTN (documented DX): Yes	Date of Last EKG: May 30, 2003
EDUCATION (in past year)	
Diet Instruction: Yes (RD)	
Exercise Instruction: No	LABORATORY DATA
TOBACCO USE: 2 Not a Current User	Fasting Glucose (most recent):
Referred for (or provided)	176 mg/dl 9/6/2004
Cessation Counseling: No	75 gm 2 hour glucose (most recent):
DM THERAPY	
Select all that currently apply	MOST RECENT SERUM VALUE IN THE PAST
X 1 Unknown/Refused/None	12 MONTHS
2 Metformin	Total Cholesterol: 228 mg/dl 9/6/2004
3 Acarbose	HDL Cholesterol: 62 mg/dl 9/6/2004
4 Glitazones	LDL Cholesterol: 130.8 mg/dl 9/6/2004
5 Other: Sulfonylurea,	Triglycerides: 176 mg/dl 9/6/2004
Glyburide, glipizide, etc)	

Figure 2-13: Sample pre-diabetes audit

### 3.0 Contact Information

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