# IHS Division of Diabetes Treatment and Prevention

# Annual Diabetes Care and Outcomes Audit 2024

## Electronic Audit Checklist: IHS Resource and Patient Management System (RPMS)

January 2024

| **Step** | **1.0 Preparation** | **Completed?** |
| --- | --- | --- |
|  | **Let your** [Area Diabetes Consultant](https://www.ihs.gov/diabetes/about-us/area-diabetes-consultants-adc/)[[1]](#footnote-1) **know that you are planning to start conducting the Audit.** |  |
|  | Review the detailed [2024 Audit Instructions](https://www.ihs.gov/sites/diabetes/themes/responsive2017/display_objects/documents/audit/Audit2024Instructions.pdf)[[2]](#footnote-2) with particular attention to the section on conducting an electronic Audit using RPMS. |  |
|  | Install the RPMS patch for Audit 2024: Diabetes Management System (DMS) Version 2.0, **Patch 17.** Your facility’s Clinical Application Coordinator (CAC) or local RPMS support team will need to do this. |  |
|  | Review the [DMS User Manual (January 2024)](https://www.ihs.gov/rpms/packagedocs/BDM/bdm_0200.17u.pdf)[[3]](#footnote-3).  *Pay particular attention to the information for Audit 2024, including the changes listed on pp. 2-3.* |  |
|  | Review and update site-populated taxonomies.   1. Run and review the “List Labs/Medications Used at this Facility” report. ***(DMS menu options: AS -> LMR)*** 2. Run and review the “Check Taxonomies for the 2024 DM Audit” report. ***(DMS menu options: AS -> TC)*** 3. Update taxonomies, as needed. ***(DMS menu options: AS -> TU)***   **Tips**:   * See pp. 4-7 of this document for a list of site-populated taxonomies. * Remove lab panels and place combination medications in all appropriate taxonomies. |  |

| **Step** | **2.0 Identify Patients for Inclusion in Your Audit** | **Completed?** |
| --- | --- | --- |
|  | **Option 1: Use your diabetes registry. Update, as needed, prior to conducting the Audit.**   * Find ineligible patients by running the “List Possible Inactive Pts in the DM Register” report. ***(DMS menu options: AS -> INA)*** * Change register status for ineligible patients. ***(DMS menu options: RM-> PM)*** * Find newly diagnosed diabetes patients by running the “Patients with DM Diagnosis and not on Register” report.***(DMS menu options: AS -> DXNR)*** * Add eligible patients to the Diabetes Register. ***(DMS menu options: RM-> PM)*** |  |
|  | **Option 2: Create a list or template of diabetes patients.**   * Create a Fileman template using QMAN. See pp. 29-34 of the [DMS User Manual (January 2024)](https://www.ihs.gov/rpms/PackageDocs/BDM/bdm_0200.17u.pdf)2 for guidance. * Save the template with a name that you will remember. |  |

| **Step** | **3.0 Review Data Quality** | **Completed?** |
| --- | --- | --- |
|  | Run and review a Data Quality Check report. ***(DMS menu options: AS -> DQC)*** |  |
|  | If errors are found in step 3.1, fix as many as possible in RPMS. |  |
|  | Run and review an Audit Report. ***(DMS menu options: AR -> DM24)***  If the results do not look as expected:   * Print Individual Audits to troubleshoot or verify specific patient information. * Review the Diabetes Audit logic. ***(DMS menu options: AS -> DAL)*** * Review and update taxonomies. ***(DMS menu options: AS -> TU)*** * Make other corrections, as needed. |  |

| **Step** | **4.0 Create Audit Export (Data) File** | **Completed?** |
| --- | --- | --- |
|  | Create an Audit Export (Data) file. ***(DMS menu options: AR -> DM24)***  Save a copy of this file where you can access it for uploading to the WebAudit.  **Tips**:   * Use 12/31/2023 as the Audit Date. * Be sure to note the name of your file in case you need assistance retrieving it. |  |

| **Step** | **5.0 Submit and Review Data via the WebAudit** | **Completed?** |
| --- | --- | --- |
|  | Request a WebAudit account if you do not already have one. For more information, see the IHS Division of Diabetes [Audit website](https://www.ihs.gov/diabetes/audit/)[[4]](#footnote-4). |  |
|  | Login to the WebAudit: Go to the [Audit website](https://www.ihs.gov/diabetes/audit/)4 and click on the “WebAudit Login” link or menu item. |  |
|  | Enter information about your facility using the *Enter Facility Info* tool (under *Facility Administration*). |  |
|  | Upload your Audit Export (data) file using the *Upload Data* tool. Be sure to read the requirements and instructions on the main screen first. |  |
|  | Check again for data errors using the *Data Quality Check* tool:   * Fix as many errors as possible using the *View/Edit Data* tool or make corrections in RPMS. * If corrections are made in RPMS, create and upload a new Audit data file. Repeat steps 3.1 through 5.5. |  |
|  | Run and review the Audit Report and Trends Graphs for 2024.   * If necessary, make corrections using the *View/Edit Data* tool or in RPMS. * If you make corrections in RPMS, create and upload a new data file. |  |
|  | Lock the data for your facility using the *Lock Facility Data* tool (under *Facility Administration*). |  |
|  | Complete the [Audit 2024 User Evaluation](https://www.surveymonkey.com/r/audit24ue)[[5]](#footnote-5) (optional). |  |

| **Step** | **6.0 Optional Activities Using the WebAudit** | **Completed?** |
| --- | --- | --- |
|  | Download data for all records for your facility into an Excel file using the *View/Edit Data* tool (under *Data Processing*). Use these data for additional analysis or other local purposes. |  |
|  | Run and review the *Means Report* (under *Reports*) to see estimated mean values for selected Audit outcomes. |  |

## **Additional RPMS Diabetes Audit Information**

**RPMS Security Keys**

You must have Security Keys assigned to your user profile in RPMS to access some applications and functionality. Contact your CAC or local RPMS support team if you are having trouble accessing these RPMS applications.

Note: Access to some of these programs may be based on local policy such as Case Management and QMAN.

**Diabetes Management System Keys:**

The following keys are needed to fully utilize the DMS:

* **BDMZMENU** – This key unlocks the main DMS menu. It should be assigned to all users who need to have access to the DMS system to manage patient data, run reports, etc.
* **BDMZEDIT** – This key allows a user to edit data under Patient Management.
* **BDMZ REGISTER MAINTENANCE** – This key unlocks the Register Maintenance menu options. This key should only be given to the individuals who are responsible for register maintenance and register structure.

Note: Additional users must be added as Authorized Users to access a created Diabetes Register.

**Case Management System Keys:**

* **ACMZMENU** – This key allows access to the Case Management System main menu.

**PCC Management Reports Keys:**

* **APLZMENU** – This key allows access to the PCC Management Reports

**QMAN Keys:**

* **AMQQZMENU** – This key allows access to QMAN.
* **AMQQZCLIN** – This key allow access to clinical data in QMAN.

**Register Status Definitions**

* A-Active patients who receive their primary healthcare at a facility and who have had care at that facility within the last year.
* I-Inactive patients who have not been seen within the last two years.
* T-Transient patients seen at the clinic within the past year but who do not receive their primary diabetes care at facility and only visit the clinic periodically for medications or other services.
* U-Unreviewed patients on the Register who have not had a chart audit and medical review.
* D-Deceased patients documented in Patient Registration with a date of death appear in the DMS register as deceased. Patients documented as deceased directly into the DMS register will only appear in the register, not in Patient Registration records.
* N-Non-IHS patients who receive their diabetes care at a facility.
* L-Lost **to Follow-Up** patients seen at your facility within the past two years but who have not had a visit in the last year.

## **Site-Populated Taxonomies: Medications**

**DM AUDIT ACE INHIBITORS**

*Note: This taxonomy includes both ACE inhibitors and angiotensin II receptor blockers (ARBs).*

**ACE INHIBITORS**

Amlodipine and **benazepril** (Lotrel)

Benazepril (Lotensin)

**Benazepril** and hydrochlorothiazide (Lotensin HCT)

Captopril

**Captopril** and hydrochlorothiazide

Enalapril (Vasotec, Epaned)

**Enalapril** and diltiazem (Teczem)

**Enalapril** and felodipine (Lexxel)

**Enalapril** and hydrochlorothiazide (Vaseretic)

Fosinopril

Lisinopril (Prinivil, Zestril, Qbrelis)

**Lisinopril** and hydrochlorothiazide (Prinzide, Zestoretic)

Moexipril

**Moexipril** and hydrochlorothiazide (Uniretic)

Perindopril (Aceon)

Quinapril (Accupril)

**Quinapril** and hydrochlorothiazide (Accuretic)

Ramipril (Altace)

Trandolapril (Mavik)

**Trandolapril** and verapamil (Tarka)

ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs)

Amlodipine and **valsartan** (Exforge)

Amlodipine, **valsartan** and hydrochlorothiazide (Exforge HCT)

Azilsartan (Edarbi)

**Azilsartan** and chlorthalidone (Edarbyclor)

Candesartan (Atacand)

**Candesartan** and hydrochlorothiazide (Atacand HCT)

Eprosartan (Teveten)

**Eprosartan** and hydrochlorothiazide (Teveten HCT)

Irbesartan (Avapro)

**Irbesartan** and hydrochlorothiazide (Avalide)

Losartan (Cozaar)

**Losartan** and hydrochlorothiazide (Hyzaar)

Nebivilol and **valsartan** (Byvalson)

Olmesartan (Benicar)

**Olmesartan** and hydrochlorothiazide (Benicar HCT)

Sacubitril and **valsartan** (Entresto)

Telmisartan (Micardis)

**Telmisartan** and amlodipine (Twynsta)

**Telmisartan** and hydrochlorothiazide (Micardis HCT)

Valsartan (Diovan, Prexxartan)

**Valsartan** and hydrochlorothiazide (Diovan HCT)**DM AUDIT ACARBOSE DRUGS**

Acarbose (Precose)

Miglitol (Glyset)

**DM AUDIT AMYLIN ANALOGUES**

Pramlinitide (Symlin)

**DM AUDIT ANTIPLT/ANTICOAG THERAPY**

**ANTIPLATELET DRUGS**

Any non-aspirin anti-platelet product including

Cilostazol (Pletal)

Clopidogrel (Plavix)

Dipyridamole (Persantine)

Prasugrel (Effient)

Ticagrelor (Brilinta)

Ticlopidine (Ticlid)

Vorapaxar (Zontivity)

**ANTICOAGULANTS**

Apixaban (Eliquis)

Dabigatran etexilate (Pradaxa)

Dalteparin (Fragmin)

Edoxaban (Savaysa)

Enoxaparin (Lovenox)

Fondaparinux (Arixtra)

Rivaroxaban (Xarelto)

Warfain (Coumadin)

**DM AUDIT ASPIRIN DRUGS**

Any Aspirin (ASA) or Aspirin containing product

**Aspirin** and dipyridamole (Aggrenox)

**DM AUDIT BROMOCRIPTINE DRUGS**

Bromocriptine 0.8 mg (Cycloset)

**DM AUDIT COLESEVELAM DRUGS**

Colesevelam (Welchol)

**DM AUDIT DPP-4 INHIBITOR DRUGS**

Alogliptin (Nesina)

**Alogliptin** and metformin (Kazano)

**Alogliptin** and pioglitazone (Oseni)

Linagliptin (Tradjenta)

Empagliflozin and **linagliptin** (Glyxambi)

Empagliflozin, **linagliptin** and metformin (Trijardy XR)

**Linagliptin** and metformin (Jentadueto, Jentadueto XR)

Sitagliptin (Januvia)

Ertugliflozin and **sitagliptin** (Steglujan)

**Sitagliptin** and metformin (Janumet, Janumet XR)

**Sitagliptin** and simvastatin (Juvisync)

Saxagliptin (Onglyza)

Dapagliflozin and **saxagliptin** (Qtern)

Dapagliflozin, **saxagliptin** and metformin (Qternmet XR)

**Saxagliptin** and metformin (Kombiglyze XR)

**DM AUDIT GLITAZONE DRUGS**

Alogliptin and **pioglitazone** (Oseni)

Pioglitazone (Actos)

**Pioglitazone** and metformin (ActoPlus Met, ActoPlus Met XR)

**Pioglitazone** and glimepiride (Duetact)

Rosiglitazone (Avandia)

**Rosiglitazone** and metformin (Avandamet)

**DM AUDIT GLP-1 RECEPTOR ANGONISTS**

Dulaglutide (Trulicity)

Exenatide (Byetta, Bydureon, Bydureon BCise)

Insulin degludec and **liraglutide** (Xultrophy)

Insulin glargine and **lixisenatide** (Soliqua)

Liraglutide (Victoza, Saxenda)

Lixisenatide (Adlyxin)

Semaglutide (Ozempic, Rybelsus, Wegovy)

**DM AUDIT INSULIN DRUGS**

*Any Insulin product in Drug File:*

Insulin, REG, NPH, Insulin lispro (Humalog, Admelog, Lyumjev),

Insulin glargine (Lantus, Basaglar, Toujeo, Rezvoglar, Semglee),

Insulin detemir (Levemir), Insulin degludec (Tresiba),

Insulin aspart (Novolog, Fiasp), Insulin glulisine (Apidra)

**Inhalable Insulin:** (Affreza)

**Pre-Mixed Insulins:**

70/30-REG/NPH, ASPART/NPA, ASPART/DEGLUDEC;

75/25, LISPRO/NPL; 50/50 LISPRO/NPL

**Insulin Combinations:**

Insulin degludec and liraglutide (Xultrophy),

Insulin glargine and lixisenatide (Soliqua)

**DM AUDIT METFORMIN DRUGS**

Alogliptin and **metformin** (Kazano)

Canagliflozin and **metformin** (Invokamet, Invokamet XR)

Dapagliflozin and **metformin** (Xigduo XR)

Dapagliflozin, saxagliptin and **metformin** (Qternmet XR)

Empagliflozin. linagliptin and **metformin** (Trijardy XR)

Empagliflozin and **metformin** (Synjardy, Synjardy XR)

Ertugliflozin and **metformin** (Segluromet)

Glipizide and **metformin** (Metaglip)

Glyburide and **metformin** (Glucovance)

Linagliptin and **metformin** (Jentadueto, Jentadueto XR)

Metformin (Glucophage, Fortamet, Glumetza, Riomet)

Metformin extended release (Glucophage XR, Glumetza)

Pioglitazone and **metformin** (ActoPlus Met, ActoPlus Met XR)

Repaglinide and **metformin** (PrandiMet)

Rosiglitazone and **metformin** (Avandamet)

Saxagliptin and **metformin** (Kombiglyze XR)

Sitagliptin and **metformin** (Janumet, Janumet XR)

**DM AUDIT SGLT-2 INHIBITOR DRUGS**

Bexagliflozin (Brenzavvy)

Canagliflozin (Invokana)

**Canagliflozin** and metformin (Invokamet, Invokamet XR)

Dapagliflozin (Farxiga)

**Dapagliflozin** and metformin (Xigduo XR)

**Dapagliflozin** and saxagliptin (Qtern)

**Dapagliflozin**, saxagliptin and metformin (Qternmet XR)

Empagliflozin (Jardiance)

**Empagliflozin** and metformin (Synjardy, Synjardy XR)

**Empagliflozin** and linagliptin (Glyxambi)

**Empagliflozin**, linagliptin and metformin (Trijardy XR)

Ertugliflozin (Steglatro)

**Ertugliflozin** and metformin (Segluromet)

**Ertugliflozin** and sitagliptin (Steglujan)

Sotagliflozin (Inpefa)

**DM AUDIT STATIN DRUGS**

Amlodipine and **atorvastatin** (Caduet)

Atorvastatin (Lipitor)

Ezetimibe and **atorvastatin** (Liptruzet)

Ezetimibe and **simvastatin** (Vytorin)

Fluvastatin (Lescol, Lescol XL)

Lovastatin (Mevacor, Altocor, Altoprev)

Niacin XR and **lovastatin** (Advicor)

Niacin XR and **simvastatin** (Simcor)

Pravastatin (Pravachol)

Pitavastatin (Livalo, Zypitamag)

Rosuvastatin (Crestor, Ezallor)

Simvastatin (Zocor)

Sitagliptin and **simvastatin** (Juvisync)

**DM AUDIT SULFONYLUREA DRUGS**

Acetohexamide (Dymelor)

Chlorpropamide (Diabinese)

Glimepiride (Amaryl)

Glipizide (Glucotrol)

**Glipizide** and metformin (Metaglip)

Glyburide (Diabeta, Micronase,Glynase, Glynase PresTab

Glycron)

**Glyburide** and metformin (GlucoVance)

Pioglitazone and **glimepiride** (Duetact)

Tolazamide (Tolinase)

Tolbutamide (Orinase)

**DM AUDIT SULFONYLUREA-LIKE DRUGS**

Nateglinide (Starlix)

Repaglinide (Prandin)

**Repaglinide** and Metformin (PrandiMet)

**DM AUDIT TIRZEPATIDE**

Tirzepatide (Mounjaro)

**DM AUDIT TB MEDS**

Ethambutol (Myambutol)

Isoniazid (INH)

Pyrazinamide

Rifabutin (Myobutin)

Rifampin (Rifadin)

Rifamipin and isoniazid (Rifamate)

Rifampin, isoniazid and pyrazinamide (Rifater)

Rifapentine (Priftin)

## **Site-Populated Taxonomies: Lab**

**Do not include lab panels in your lab taxonomies.**

**BGP GPRA ESTIMATED GFR TAX**

Estimated GFR, Calculated GFR, \_GFR, Estimated, \_GFR Non-African American, EST GFR, eGFR

**BGP CREATINE KINASE TAXa**

CK, CPK, Creatine Kinase, Total CK

**BGP HEP C TESTS TAX**

Hepatitis C tests

**DM AUDIT ALT TAXa**

ALT, SGPT

**DM AUDIT AST TAXa**

AST, SGOT

**DM AUDIT CHOLESTEROL TAX**

Cholesterol, Total Cholesterol, \_Cholesterol, POC Cholesterol

**DM AUDIT CREATININE TAX (Do not include tests for Urine Creatinine.)**

Creatinine, POC Creatinine, Serum Creatinine, \_Creatinine

**DM AUDIT HDL TAX**

HDL, HDL Cholesterol, POC HDL Cholesterol, \_HDL Cholesterol

**DM AUDIT HBG A1C TAX**

Hemoglobin A1C, A1C, HGB A1C, HBA1C, HA1C, POC HEMOGLOBIN A1C, \_A1C

**DM AUDIT LDL CHOLESTEROL TAX**

LDL, Direct LDL, LDL Cholesterol, LDL Cholesterol (calc), POC LDL Cholesterol, \_LDL Cholesterol

**DM AUDIT QUANT UACR TAXb**

Microalbumin/Creatinine Ratio measured in actual numeric values (mg/g Creatinine). Look for tests A/C, A:C, Albumin/Creatinine, \_A/C, -A/C, asterisk (\*)A/C, Microalbumin/Creatinine, M-Alb/Creatinine.

**DM AUDIT TB LAB TESTS**

QFT-G, T SPOT-TB, Quantiferon GOLD

**DM AUDIT TRIGLYCERIDE TAX**

Triglyceride, POC Triglyceride, \_Triglyceride

aThe DM AUDIT ALT, DM AUDIT AST, and DM AUDIT CREATINE KINASE taxonomies are used to check for test values that would be indicative of an adverse reaction to statin therapy.

bNote: Check with your laboratory supervisor to confirm that the tests added to this taxonomy reflect true quantitative test values.

1. <https://www.ihs.gov/diabetes/about-us/area-diabetes-consultants-adc/> [↑](#footnote-ref-1)
2. <https://www.ihs.gov/sites/diabetes/themes/responsive2017/display_objects/documents/audit/Audit2024Instructions.pdf> [↑](#footnote-ref-2)
3. <https://www.ihs.gov/rpms/packagedocs/BDM/bdm_0200.17u.pdf> [↑](#footnote-ref-3)
4. <https://www.ihs.gov/diabetes/audit/> [↑](#footnote-ref-4)
5. <https://www.surveymonkey.com/r/audit24ue> [↑](#footnote-ref-5)