

# Indian Health Service Diabetes Care and Outcomes Audit

## Audit 2024 Instructions

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Indian Health Service  
Division of Diabetes Treatment and Prevention  
<https://www.ihs.gov/diabetes/>

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## Preface

### Welcome to Audit 2024!

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If you have not previously participated in an Indian Health Service (IHS) Diabetes Care and Outcomes Audit (“Diabetes Audit” or “Audit”), **please read these instructions carefully before beginning** your Audit activities.

Even if you are already familiar with the Annual Diabetes Audit process, there are changes for 2024. The sections below provide a brief summary of the changes along with Quick Start Directions.

Additional resources are available on the [IHS Audit website](#).<sup>1</sup>

### What is New for Audit 2024?

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Below is an overview of the changes for Audit 2024. Additional details and documentation are available from the IHS Audit team ([diabetesaudit@ihs.gov](mailto:diabetesaudit@ihs.gov)).

#### Tobacco/Nicotine Use

1. Input:
  - a. If screening during the Audit period is not documented, items for use and cessation counseling are now skipped.
  - b. Use is now for Audit period only and not prior. Response options are now Yes and No.
2. Reports: All items updated to reflect changes to input. Tobacco use removed from Diabetes-Related Conditions section.

#### Blood Pressure

1. Input: No changes.
2. Reports: Categories changed and/or added in multiple sections.

#### DM Therapy

1. Input: Added new SGLT-2 medications: bexagliflozin (*Brenzavvy*) and sotagliflozin (*Inpefa*).
2. Reports: New medications are included in the relevant sections.

#### Other

1. **Sex:** Label changed to Birth Sex on form and in reports. Item for Unknown added to report.
2. **Special Diabetes Program for Indians (SDPI) Required Key Measures (RKM):** Report items added so that all RKM are on the main Audit Report.
3. Minor changes to labels and formatting on the form and reports.

**IHS Resource and Patient Management (RPMS) Diabetes Management System (DMS):** See DMS User Manual for Version 2.0 Patch 17 for details about additional DMS specific changes. This manual is accessible via the [Audit resources webpage](#).<sup>1</sup>

### Due Date for Audit 2024

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Data must be submitted via the WebAudit and locked **no later than March 15, 2024**.

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<sup>1</sup> <https://www.ihs.gov/diabetes/audit/audit-resources/>

## Quick Start Directions

### Electronic Audits

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#### *Using the IHS Resource and Patient Management System (RPMS):*

1. Select *Diabetes Management System* (menu item **DMS**).
2. Select *Audit Setup* (menu item **AS**).
  - a. Select *Patients with DM Diagnosis and not on Register* (menu item **DXNR**) to find patients seen at your facility but are not currently on your diabetes register.
  - b. Select *List Possible Inactive Pts* (menu item **INA**) to identify patients who are no longer being seen at your facility but are still marked as active in the diabetes register.
  - c. Select *Check Taxonomies for the 2024 DM Audit* (menu item **TC**) and review the output.
  - d. If updates are needed, use *Update/Review Taxonomies for 2024 DM Audit* (menu item **TU**).
  - e. Select *2024 Data Quality Check Report* (menu item **DQC**) and review the output. Make corrections or edits to data and taxonomies, as necessary.
3. Return to the DMS Main Menu, and select *Audit Reporting* (menu item **AR**).
4. Select *2024 Diabetes Audit* (menu item **DM24**).
5. Enter the Audit Date (this is the ending date of the one-year Audit period, also known as the Audit period end date). The date for the 2024 Annual Audit submitted to IHS Division of Diabetes is **12/31/2023**.
6. Select the template or register that includes all of the eligible patients for your Annual Audit.
7. Select patients with a particular status, if necessary.
8. Decide which of the eligible patients to include in your Audit, using the following options:
  - a. You can limit the Audit to a particular provider or a particular community (select “No” for the 2024 Annual Audit).
  - b. You can include only Indian/Alaska Native patients, only Non-Indian/Alaska Native patients, or all patients (select “1” to include only Indian/Alaska Native patients for the 2024 Annual Audit).
  - c. You can include or exclude pregnant patients in the Audit (select “E” to exclude pregnant patients for the 2024 Annual Audit).
  - d. You can include all or a random sample of the patients selected so far (select “A” to include all patients for the 2024 Annual Audit).
9. Select *option 2* to create an Audit Export (data) File to upload into the WebAudit. This file is in delimited text format. Note the total number of eligible patients to be included in the file, which will be entered into the WebAudit.
  - a. Enter a name for the Audit Export (data) File to be created. Write this name down.
  - b. Select “E” to exclude DEMO patients from the 2024 Annual Audit.
10. Access the WebAudit and enter the Facility Information. See Section 4, p. 10.
11. Obtain the Audit Export (data) File and upload it to the WebAudit. See Section 4, p.10.

12. Review and edit the data, as necessary. See Section 6, p.14.
13. Review the *Audit Report* and, if desired, other reports. See Section 7, p.15.
14. Once all review and editing are complete, “lock” the data for the facility. See Section 8, p.16.

***Using electronic medical record (EMR) software other than RPMS:***

1. Contact the IHS Audit team ([diabetesaudit@ihs.gov](mailto:diabetesaudit@ihs.gov)) and your [Area Diabetes Consultant](#)<sup>2</sup> to let them know that you are planning to conduct an electronic Audit and request resources.
2. Work with IT and other personnel at your facility to identify eligible patients with diabetes and create an electronic Audit data file in the format specified for Audit 2024 (see Appendix A, p.17).
3. Follow steps 10-14 above.

**Manual Audits**

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1. From a registry or other listing of diabetes patients at your facility that meet the Audit inclusion and exclusion criteria, randomly select the appropriate number of charts to review. See Section 5, p.11.
2. Review the 2024 Audit form and these instructions, including Appendix B on p.26, with all chart reviewers.
3. Complete an Audit 2024 paper form for each chart selected using information from paper and/or electronic medical records. Be sure to provide data for all relevant items.
4. Access the WebAudit and enter the facility information. See Section 5, p.13.
5. Enter the data from each paper Audit form into the WebAudit. See Section 5, p.13.
6. Review and edit the data, as necessary. See Section 6, p.14.
7. Review the Audit Report and, if desired, other reports. See Section 7, p.15.
8. After all data has been entered, and review and editing are complete, “lock” the data for your facility. See Section 8, p.16.

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<sup>2</sup><https://www.ihs.gov/diabetes/about-us/area-diabetes-consultants-adc/>

## Section 1. Introduction

The Indian Health Service (IHS) Diabetes Care and Outcomes Audit is a process for assessing diabetes care and health outcomes for American Indian and Alaska Native (AI/AN) people with diagnosed diabetes. The [\*Diabetes Standards of Care and Resources for Clinicians and Educators\*](#)<sup>3</sup> provide the basis for the Audit. Together, these resources can help IHS, tribal, and urban (I/T/U) facilities work towards providing the highest quality of care for all diabetes patients.

To conduct an Audit, facility staff gather data for patients with diabetes by one of two methods:

1. **Electronic Audit:** Extraction of data from an electronic medical record (EMR) system into a data file formatted according to the specifications for the current year (see Appendix A, p.17). The data file is submitted into the central database via the WebAudit “Upload Data” tool.
  - a. The IHS Resource and Patient Management System (RPMS) Diabetes Management System (DMS) includes tools for creating this data file.
  - b. Other EMR systems may also be programmed to create Audit data files. These include, but are not limited to Allscripts, Athena, Cerner, eClinicalWorks, Epic, Greenway, i2i, and NextGen.
2. **Manual Audit:** Manual chart review, where staff physically examine the paper and/or electronic medical record for each patient and complete a paper Audit form. Data from the paper forms are entered manually into the central database via the WebAudit “Data Entry” tool.

Generally, active diabetes patients receiving most of their primary care at the facility are eligible for inclusion in the Audit. For electronic Audits, all eligible patients should be included. For manual Audits, guidance for determining the number of charts and selecting patients and charts is provided in this document, along with standard definitions for each data item.

Facilities are encouraged to review their Audit results in a team setting and use them to identify strengths and areas needing improvement. Staff can then establish priorities and develop an action plan with a timetable for reevaluation.

The Division of Diabetes recommends conducting an Audit annually or even more frequently, to monitor care patterns and changes over time. Once each year, facilities submit Audit data to the IHS Division of Diabetes for centralized processing and analysis, referred to as the Annual Diabetes Audit or Annual Audit. The data are aggregated and used to generate reports with nationwide information for IHS leadership, Congress, and other stakeholders. Using a uniform process and standardized definitions provides consistency and allows valid comparison of each facility's results with the results for their Area and all Areas combined.

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<sup>3</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/>

## Section 2. Identifying Patients to Audit: Inclusions and Exclusions

A critical task in performing the Audit is determining which diabetes patients to include. General guidance for identifying these patients is provided below.

First, identify patients who meet **all** of the following criteria:

1. Have a diagnosis of diabetes mellitus.
2. Are American Indian or Alaska Native.
3. Have **at least one visit** (in person or telehealth) to any of the following clinics during the one-year Audit period (numbers in parentheses are IHS specific clinic codes):
  - a. General (01)
  - b. Diabetic (06)
  - c. Internal Medicine (13)
  - d. Pediatric (20)
  - e. Well Child (24)
  - f. Family Practice (28)
  - g. Chronic Disease (50)
  - h. Endocrinology (69)

Then, **exclude** patients who:

1. Received most of their primary care during the Audit period outside of your facility.
2. Are currently on dialysis AND received most of their primary care during the Audit period at the dialysis unit.
3. Died before the end of the Audit period.
4. Were pregnant during any part of the Audit period.
5. Have prediabetes (as determined by documented diagnosis of prediabetes, impaired fasting glucose [IFG], impaired glucose tolerance [IGT], or elevated A1C level).
6. Moved permanently or temporarily before the end of the Audit period.

## Section 3. Electronic Auditing vs. Manual Chart Review

Information on diabetes care elements and outcome measures may be collected in one of two ways:

1. Extracting data from an electronic medical record system into a data file formatted according to the specifications for the current year (an electronic Audit).
2. Manually reviewing medical charts (paper and/or electronic) and completing paper forms (a manual Audit). Although RPMS is most commonly used for electronic Audits, other systems may also be able to extract data for an electronic Audit.

Table 1 provides a comparison of electronic vs. manual Audits.

Table 1. Key Characteristics of Electronic vs. Manual Audits

Task or Characteristic	Electronic	Manual
Diabetes registry review and update	Yes	Yes
Chart review	No	Yes
Form completion	No	Yes
Data entry	No	Yes
Taxonomy review and update	Yes	No
Human judgment dependent	No	Yes
Computer system dependent	Yes	No
Instructions	Section 4, p.8	Section 5, p.11

There are pros and cons for both methods. In particular,

Electronic:

1. Accuracy is subject to proper documentation, coding, and data entry.
2. Requires time and attention for initial set up, including understanding and updating code lists, known as taxonomies in RPMS.
3. Requires programming and testing for facilities using EMRs other than RPMS.
4. Usually requires less time once initial set up is complete.
5. May require troubleshooting, including manual review of selected charts, if results are very different from what is observed or expected or if potential errors are found.

Manual:

1. Accuracy is subject to proper documentation in the paper or electronic chart.
2. Usually requires more time.
3. Not subject to limitations of electronic medical record systems.

The IHS Division of Diabetes encourages the use of electronic Audits whenever feasible.

When transitioning from a manual to an electronic Audit or from one EMR to another, facilities should initially run simultaneous manual and electronic Audits to compare the results. These results should be very similar, if not identical. If the results for any of the Audit elements are different, the reason needs to be found and addressed. Once these differences are resolved, electronic auditing can then be used as the primary source of Audit data.

Once your facility decides what type of Audit to conduct, see the appropriate section of these instructions: Section 4 on p.8 for electronic Audits or Section 5 on p.11 for manual Audits.

## Section 4. Performing an Electronic Audit

RPMS and some other electronic medical record systems are capable of extracting Audit data from their databases into a data file formatted for uploading into the WebAudit.

This section provides a brief, step-by-step synopsis of the Audit process using the RPMS Diabetes Management System (DMS). More detailed information is available in the DMS User Manual (accessible via the [Audit resources webpage](#)).<sup>1</sup>



To use the DMS application you need to have the proper access keys, otherwise the necessary menu items will not be available to you. Contact your local RPMS site manager if you need assistance.

#### ***a. Creating an Audit Export Data File Using RPMS***

Preparation:

1. In the DMS menu, select **AS** for *Audit Setup* to review and update taxonomies for medications, lab tests, and education topics to ensure they are present, accurate, and complete.
2. Prepare a list of all patients that meet the Audit inclusion/exclusion criteria (Section 2, p.7). This can be done in a number of ways, including:
  - a. Review and update the diabetes register, as needed, so that it includes only eligible patients or some way to identify eligible patients (e.g., by status).
  - b. Create a template of the diabetes patients at your facility that meet the Audit criteria.
3. Run and review the DMS Data Quality Check Report (menu item DQC) and fix as many errors as possible. This report lists potential errors in the data extracted for your Audit - the same errors checked for by the WebAudit Data Quality Check. In addition, the DMS version of the report includes patient identifiers, which the WebAudit version does not.

Create Audit data file:

1. In the DMS menu, select **AR** for *Audit Reporting*.
2. Select **DM24** for the 2024 Diabetes Audit. Note: If **DM24** is not on your menu, then the DMS patch for Audit 2024 has not yet been installed. Ask your RPMS site manager to install BDM Version 2.0 Patch 17.
3. Enter Audit Date, which is the ENDING date of the one-year Audit period. For the 2024 Annual Audit submitted to the IHS Division of Diabetes, enter **12/31/2023** to use the prior calendar year as the Audit period (January 1 – December 31, 2023).
4. Select the template or register that includes all of the eligible patients for your Annual Audit.
5. Select patients with a particular status, if necessary.
6. Determine which patients to include in your Audit, using the following options:
  - a. Limiting to a particular provider or a particular community (select “No” for the 2024 Annual Audit data submitted to the IHS Division of Diabetes).
  - b. Including only Indian/Alaska Native patients, only Non-Indian/Alaska Native patients, or all patients (select “1” to do so for the 2024 Annual Audit).
  - c. Including or excluding pregnant patients in the Audit (select “E” to exclude for the 2024 Annual Audit).
  - d. Including all or a random sample of the patients selected so far (select “A” to include all patients for the 2024 Annual Audit).
7. Select option “2” to create an Audit Export (data) File that can be uploaded into the WebAudit. This file is in delimited text format. Note the total number of eligible patients to be included in the file as it will be entered into the WebAudit.

8. Provide a name (3-20 characters) for the Audit Export File. It is recommended that the name not include any spaces; underscores can be used instead. Including your initials in the name will help to locate your file. For example, you might use DKR\_FacilityName\_Audit2024.
9. The program will ask if everything is OK to continue; enter “Y//Yes”.
10. Select “E” to Exclude DEMO Patients from the 2024 Annual Audit.
11. You will be asked if you want to queue this request. It is recommended that you enter “Y//Yes”.
12. A data file with the name provided in step 8 above will be created.

The data file will be saved in the directory noted on the screen. You will probably need the RPMS site manager or other IT professional to retrieve the file and place it in a location you can access. Keep track of the file name and where you put it!

**Please remember that electronic files containing patient data are confidential and need to be handled accordingly. Do not send files through email, even if encrypted.**

#### ***b. Creating an Audit Data File Using an Electronic Medical Record System Other Than RPMS DMS***

Because all electronic medical record systems have different structures and functionality, it is critical to review the Audit 2024 data file format and DMS Audit 2024 logic and code lists before proceeding. Detailed specifications for the Audit data file can be found in Appendix A on p.17. DMS Audit logic is available in the DMS User Manual, which is accessible via the [Audit resources webpage](#)<sup>1</sup> as are the code lists. Additional resources are available from the IHS Audit team, on request ([diabetesaudit@ihs.gov](mailto:diabetesaudit@ihs.gov)).

#### ***c. Uploading the Audit Data File to the WebAudit***

For information about the WebAudit, visit the IHS Division of Diabetes [Audit website](#).<sup>4</sup>

To upload an Audit data file:

1. Request a WebAudit account if you do not already have one.
2. Log in to the WebAudit.
3. Select “Facility Administration” from the main or left hand menu. Then select “Enter Facility Information”.
4. Select an Audit Type. For the Annual Audit submitted to the Division of Diabetes, you will select “Annual Audit”. For all other Audits, select “Interim Audit”. Click on the “Go” button.
5. Enter the number of patients that meet the inclusion and exclusion criteria in Section 2, p.7.
6. Click on the “Submit” button.
7. Select “Upload file for this facility” from the onscreen menu or click on “Data Processing” in the left hand menu, then select “Upload Data”.
8. Individuals with access to multiple facilities will need to select a Facility.

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<sup>4</sup> <https://www.ihs.gov/diabetes/audit/>

9. Select the electronic medical record system used to create your data file.
10. Click on the “Choose File” button and navigate to your data file, then click on the “Open” button.
11. Click on the “Upload File” button.
12. If the data file upload is successful, you will receive a message on the screen to that effect.
13. If the upload is unsuccessful, you will receive an error message and details about the problems found.
14. Once the file has been successfully uploaded, proceed with checking the data quality, if you have not already done so in DMS (see Section 6, p.14).
15. Generate and review the Audit Report (see Section 7, p.15).
16. When all editing and corrections have been completed, “lock” the data (see Section 8, p.16).

## Section 5. Performing a Manual Chart Audit

### a. Sample Size Determination

For manual auditors, the time requirements of the chart review process generally make it impractical to review all eligible diabetes patients. As such, they may select a random sample to Audit. The number needed for statistically valid results depends on the number of diabetes patients at your facility that meet the eligibility criteria for the Audit (see Section 2, p.7).

Table 2 (Sample Sizes) on the following pages lists the minimum number of charts you need to review to be reasonably sure that a difference from a previous or subsequent Audit is a real change and not just due to chance. For example, if your facility has 1000 eligible patients with diabetes, you will need to audit at least 63 charts.

### b. Sample Size Calculation Details

The Audit sample sizes in Table 2 were calculated using the following method:

Sample size =  $n / (1 + (n / \text{population}))$  where  $n = Z^2 P(1-P) / D^2$

**Sample size** = number to be randomly selected from population of eligible diabetes patients

**Population** = number of diabetes patients that meet the criteria for inclusion in the Audit

**P** = true proportion of Audit element in the population (since this is not known exactly, it is taken as 50% [i.e., 0.5] as the most conservative value)

**D** = (Maximum) difference between sample mean and population mean (Table 2. Sample Sizes lists *within ± 10%* and *within ± 5%*, which corresponds to a D value of 0.1 and 0.05, respectively)

**Z** = area under normal curve corresponding to the desired confidence level:

Confidence	Z
0.90	1.645
0.95	1.960
0.99	2.575

Reference: Kish (1995)

**Table 2. Audit Sample Sizes**

Population (# eligible diabetes patients)	90% Certainty Within 10% (Recommended)	90% Certainty Within 5%	95% Certainty Within 10%	95% Certainty Within 5%
<30	all	all	all	all
30	21	27	23	28
40	25	35	28	36
50	29	42	33	44
60	32	49	37	52
70	34	56	40	59
80	37	62	44	66
90	39	68	46	73
100	40	73	49	79
110	42	78	51	86
120	43	83	53	91
130	44	88	55	97
140	46	92	57	103
150	47	96	59	108
160	48	101	60	113
170	48	104	61	118
180	49	108	63	123
190	50	112	64	127
200	51	115	65	132
220	52	121	67	140
240	53	127	69	148
260	54	133	70	155
280	54	138	72	162
300	55	142	73	168
320	56	147	74	175
340	56	151	75	180
360	57	154	76	186
380	57	158	77	191
400	58	161	77	196
420	58	165	78	201
440	59	168	79	205
460	59	170	79	209
480	59	173	80	213
500	60	176	81	217
525	60	179	81	222
550	60	181	82	226
575	61	184	82	230
600	61	186	83	234
650	61	191	84	241
700	62	195	84	248
800	62	202	86	260
900	62	208	87	269
1000	63	213	88	278
2000	65	238	92	322
3000	66	248	93	341
4000	67	253	94	350
5000	67	257	94	357
6000+	67	259	95	361

### **c. Chart Selection**

Charts should be selected using a systematic random sampling process, as follows:

- i. Prepare a list of the diabetes patients at your facility that meet the eligibility criteria in Section 2, p.7, of these instructions.
- ii. Determine your sample size using Table 2 above.
- iii. Divide the number of patients on your list from step i above by the sample size determined in step ii above to get the sampling interval, called k.
- iv. Randomly select the first chart to audit from the first k records.
- v. Select every kth chart after that one on the list.

*Example:* Suppose you need to select 69 charts from a list of 1000 patients.

1. Divide 1000 by 69, to get  $k=14.4$ , which is rounded down to 14. So you must select one chart out of every 14.
2. Use any method of random chance to determine which one of the first 14 patients on the list should be selected. For example, you could number 14 pieces of paper with 1 through 14 and have someone draw one. If the number is 5, select the fifth patient on the list and then every 14<sup>th</sup> patient after that (19, 33, 47, etc.).

**Note:** It is important to track down charts for all selected patients to minimize bias in your sample.

### **d. Completing the Audit Form**

The 2024 Audit form is available on the [Audit resources webpage](#).<sup>1</sup>

Review the medical chart (paper and/or electronic) for each selected patient to obtain the necessary information, using the information in Appendix B on p.26 as a guide. If you cannot find a result in the chart, then for the purposes of the Audit, apply the old dictum: *"If it is not documented, it did not happen."*

**Finally, please remember that all medical records and completed Audit forms are confidential documents and need to be handled with discretion for personal health information. Do not leave charts and forms unattended. Store completed forms in a secure location.**

### **e. Instructions for WebAudit Data Entry and Processing**

Data entry is done via the internet-based WebAudit. To access the WebAudit you must connect to the internet via a web browser, such as Chrome.

For further information about the WebAudit, visit the IHS Division of Diabetes [Audit website](#).<sup>4</sup>

To complete data entry:

1. Request a WebAudit account, if you do not already have one.
2. Log in to the WebAudit.
3. Select "Facility Administration" from the left hand or onscreen menu, then select "Enter Facility Information".
4. Select an Audit Type. For the Annual Audit submitted to the Division of Diabetes, you will select "Annual Audit". For all other Audits, select "Interim Audit". Click on the "Go" button.

5. Enter the number of patients that meet the inclusion and exclusion criteria in Section 2, p.7.
6. Click the "Submit" button.
7. Select "Enter data for this facility" from the onscreen menu or click on "Data Processing" from the left hand menu, then select "Data Entry".
8. Individuals with access to multiple facilities will need to select a Facility.
9. Enter the data from each paper Audit form one at a time, taking care to complete every item. To expedite data entry, use the keyboard as much as possible, including:
  - a. <Tab> key to move to the next field.
  - b. <Shift><Tab> to move to the previous field.
  - c. Number keys to enter responses from selection lists (e.g., type the number "1" for Birth Sex=1:Male).
10. When all data on a form have been entered, click on the "Save" button at the bottom of the screen. The system will check for obvious errors. If any are found, they will be noted on the screen.
 

**Note:** If your data entry session is interrupted for more than 20 minutes and you do not click on the "Save" button, you will be logged off and will lose the current record's unsaved data.
11. Once all of the Audit forms have been entered, proceed with checking the data quality (see Section 6, p.14).
12. Generate and review the Audit Report (see Section 7, p.15).
13. When all editing and corrections have been completed, the data may be "locked" (see Section 8, p.16).

## Section 6. Data Review and Editing

There may be errors in your Audit data, whether you uploaded a data file or entered data manually. The WebAudit has a tool that check your data for many different errors.

To use the data checking tool, go to the WebAudit, select "Data Processing" from the left hand menu , then select "Data Quality Check." Follow the onscreen directions to generate a report of Potential Data Errors. The errors are listed in a table, with a brief explanation of each one. Keep in mind that some potential errors may not be true errors; they could be extreme but accurate values (such as a person weighing over 500 pounds).

To correct an error, click on the "Edit" icon in the leftmost column of the errors table, which will take you to a screen showing all of the data for the selected record. Make the necessary correction(s) and then click on the "Save" button at the bottom of the screen.

If a potential error turns out to contain an accurate value, add a comment to that effect using the "Add Comment" button in the rightmost column of the errors table.

Note that if you already used the DMS Data Quality Check report to identify potential errors and corrected as many as possible in RPMS, the WebAudit Data Quality Check report should only include those that you were not able to correct in RPMS, if any.

## Section 7. Generating Reports and Graphs

The WebAudit provides several reports for each year, including the Audit Report, Means Report, and SDPI Key Measures Report. Graphs of results over time are also available via the WebAudit, including Trends and Means.

All of the reports and graphs are generated from the data that was either uploaded or manually entered. Current and previous years' reports are available for all years with data submitted.

To generate a report:

1. Select "Reports" from the left hand menu or main menu, then select "Audit Reports".
2. Select an Audit Type. For the Annual Audit, you will select "Annual Audit". For all other Audits, select "Interim Audit". Click on the "Go" button.
3. Select the desired year, and then click on the "Go" button.
4. Select the desired report(s) and click on the "View Report(s)" button.
5. The selected report(s) will appear on the screen. You may need to scroll down the page to view the entire report(s).
6. To print or save the report to your computer, click on the "Download PDF Version" link at the top of the report, on the right side. The report will open as a PDF document. Use your browser's print and save options, as needed.

To generate graphs:

1. Select "Reports" from the left hand menu or main menu, then select "Trends Graphs" or "Means Graphs".
2. Select an Audit Type. For the Annual Audit, you will select "Annual Audit". For all other Audits, select "Interim Audit" then click on the "Go" button.
3. Click on the "Create Report" button.
4. When the report is ready, a button will appear on the screen that says "Open Report in Excel"; click on this button. Depending on what browser you are using, you may need to download the Excel file and then open it or it may automatically open to the "Graphs" tab. Select the "Data" tab to see the results in table format.
5. Copy, print, or edit the graphs using Excel menus and options, as needed.

Carefully reviewing the results in the Audit Report and graphs is another good way to check for potential errors in your Audit data. In particular, very low (close to 0) or very high (close to 100) percentages may indicate problems with the data, as can big changes in results from the previous year. If any such problems are found, review your medical records and taxonomies (if performing an electronic Audit) or your data forms and medical records (if performing a manual Audit). Contact your [Area Diabetes Consultant](#)<sup>2</sup> or the IHS Audit team ([diabetesaudit@ihs.gov](mailto:diabetesaudit@ihs.gov)) if you are unable to resolve any problems.

## Section 8. Finalizing (“Locking”) Data

When the data have been reviewed and corrected and are as complete and accurate as possible, they can be “locked”. Once locked, no further additions or changes can be made, so data should not be locked until you are confident that no further edits are necessary. Locking also submits the data to the IHS Division of Diabetes.

To lock the data:

1. Log in to the WebAudit.
2. Select “Facility Administration” from the left hand or main menu select then “Lock Facility Data”.
3. Follow the instructions on the screen.

## Section 9. Resources/Links

IHS Division of Diabetes Audit Website – Form, Instructions, WebAudit access, and other information  
<https://www.ihs.gov/diabetes/audit/>

*Diabetes Standards of Care and Resources for Clinicians and Educators*  
<https://www.ihs.gov/diabetes/clinician-resources/soc/>

RPMS Diabetes Management System manuals  
Link on this webpage: <https://www.ihs.gov/diabetes/audit/audit-rpms-dms-information/>

Area Diabetes Consultant Contact Information  
<https://www.ihs.gov/diabetes/about-us/area-diabetes-consultants-adc/>

Contact the IHS Division of Diabetes Audit Team  
[diabetesaudit@ihs.gov](mailto:diabetesaudit@ihs.gov)

## Section 10. References

Kish, Leslie. *Survey Sampling*. Wiley-Interscience, 1995. Print.



## Appendix A. IHS Diabetes Care and Outcomes Audit Data File Specifications for 2024

### General Information

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1. **Data File Format:** Delimited text, with the following general requirements.
  - a. Delimiter **must** be the ^ symbol, not a tab, space, or any other character.
  - b. Line 1 contains the Audit field names in the order they appear below.
  - c. Lines 2 and beyond contain the data, with each line representing a single record/patient.
  - d. All records must contain a value or a placeholder for all fields. If there is no value for a field (because data are missing or due to skip pattern), the placeholder is one blank space between the delimiters (i.e., ^ ^).
  - e. *Do not submit anything other than a blank space for missing or unknown data (e.g., not 0).*
2. **Data Fields:**
  - a. A list of Audit 2024 fields and basic details/requirements for each is provided on subsequent pages of this document.
  - b. Extracting accurate data for many fields requires additional information, some of which is available in the Audit documentation.
  - c. Other information is specific to the health record system being used and must be determined locally, including documentation of medications and education.
3. **Additional Information and Resources**
  - a. Audit website: <https://www.ihs.gov/diabetes/audit/>
  - b. Contact the IHS Audit team via email: [diabetesaudit@ihs.gov](mailto:diabetesaudit@ihs.gov)

## List of Audit Data Fields

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
1	AUDITDATE	Ending date of the one-year Audit period: 12/31/2023 for Annual Audit 2024	N/A	mm/dd/yyyy	
2	FACILITYNA	Name or abbreviation for the facility	N/A	Character (max length=20)	For confirmation purposes only, since the WebAudit will automatically supply and display the name.
3	REVIEWER	Reviewer's initials	N/A	Character (max length=3)	
4	STATE	Postal abbreviation for last known state of residence	N/A	Character (max length=2)	Do not populate if patient's address is outside of the US (e.g., in Canada).
5	MOB	Month of birth	N/A	# with value 1-12	
6	YOB	Year of birth	N/A	yyyy	
7	SEX	Birth sex	N/A	# field with: 1=Male 2=Female 3=Unknown	
8	DODX	Date of diabetes diagnosis	N/A	mm/dd/yyyy	If only year is known, use value 07/01/yyyy. If only month and year are known, use 15 for the day. Leave blank if year or entire date is unknown.
9	DMTYPE	Diabetes type	N/A	# field with: 1=Type 1 2=Type 2 (or uncertain)	
10	TOBSCREEN	Screened for tobacco use	Audit period	# field with: 1=Yes 2=No	
11	TOBACCOUSE	Tobacco use	Audit period	# field with: 1=Yes 2=No	<b>Populate only if TOBSCREEN value is 1=Yes.</b>
12	TOBCOUNSEL	Tobacco cessation counseling/education received	Audit period	# field with: 1=Yes 2=No	<b>Populate only if TOBSCREEN value is 1=Yes and TOBACCOUSE value is 1=Yes.</b>
13	ENDSSCREEN	Screened for electronic nicotine delivery system (ENDS) use during Audit period	Audit period	# field with: 1=Yes 2=No	ENDS include: vapes, vaporizers, vape pens, hookah pens, electronic cigarettes (e-cigarettes or e-cigs), and e-pipes.  Limit to nicotine for Audit.

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
14	ENDSUSE	ENDS use	Audit period	# field with: 1=Yes 2=No	<b>Populate only if ENDSSCREEN value is 1=Yes.</b>  ENDS include: vapes, vaporizers, vape pens, hookah pens, electronic cigarettes (e-cigarettes or e-cigs), and e-pipes.  Limit to nicotine for Audit
15	FEET	Last recorded height - feet part	Last ever	# with 0 decimal places	If height is provided as feet and inches, be sure to provide a value for both fields: FEET and INCHES.
16	INCHES	Last recorded height - inches part	Last ever	# with up to 2 decimal places	If height is provided as total in inches only, FEET field should not be populated (i.e., do not submit 0 or any other value).  Round to 2 decimal places, if necessary.
17	WEIGHT	Weight in lbs	Most recent in Audit period	# with 0 decimal places	Truncate to nearest whole pound.
18	HTNDX	Hypertension diagnosed	Ever	# field with: 1=Yes 2=No	
19	SYST1	Most recent systolic blood pressure (mmHg)	Audit period	# with 0 decimal places	
20	DIAST1	Most recent diastolic blood pressure (mmHg)	Audit period	# with 0 decimal places	
21	SYST2	Next most recent systolic blood pressure BP (mmHg)	Audit period	# with 0 decimal places	
22	DIAST2	Next most recent diastolic blood pressure (mmHg)	Audit period	# with 0 decimal places	
23	SYST3	Third most recent systolic blood pressure (mmHg)	Audit period	# with 0 decimal places	
24	DIAST3	Third most recent diastolic blood pressure (mmHg)	Audit period	# with 0 decimal places	
25	FOOTEXAM	Complete diabetic foot exam including evaluation of sensation and vascular status	Audit period	# field with: 1=Yes 2=No	
26	EYEEXAM	Dilated retinal exam or retinal imaging exam	Audit period	# field with: 1=Yes 2=No	

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
27	DENTALEXAM	Dental exam conducted by a dental professional including examination of teeth and gingiva	Audit period	# field with: 1=Yes 2=No	
28	DEPSCREEN2	Screened for depression	Audit period	# field with: 1=Yes 2=No	
29	DEPDX2	Active diagnosis of depression	Audit period	# field with: 1=Yes 2=No	
30	DIETINSTR	Nutrition education	Audit period	# field with: 1=Yes by RD 2=Yes by non-RD 3=Yes by both RD & non-RD 4=None	
31	EXERCISE	Physical activity education	Audit period	# field with: 1=Yes 2=No	
32	DMEDUC	Diabetes education other than nutrition and physical activity	Audit period	# field with: 1=Yes 2=No	
33	TXNONE	None of the listed diabetes medications prescribed	As of the end of the Audit period	# field with: 1=Yes 2=No	If value for this field=1:Yes, then all other TX fields should=2:No.  If all other TX fields=2:No, then value for this field should=1:Yes.
34	TXINSUL	Prescribed any insulin	As of the end of the Audit period	# field with: 1=Yes 2=No	
35	TXMETFORM	Prescribed metformin	As of the end of the Audit period	# field with: 1=Yes 2=No	Includes Glucophage, others
36	TXSUREA	Prescribed a sulfonylurea	As of the end of the Audit period	# field with: 1=Yes 2=No	Includes glipizide, glyburide, glimepiride
37	TXDPP4	Prescribed a DPP-4 inhibitor	As of the end of the Audit period	# field with: 1=Yes 2=No	Includes alogliptin ( <i>Nesina</i> ), linagliptin ( <i>Tradjenta</i> ), saxagliptin ( <i>Onglyza</i> ), sitagliptin ( <i>Januvia</i> )

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
38	TXGLP1MED	Prescribed a GLP-1 receptor agonist	As of the end of the Audit period	# field with: 1=Yes 2=No	Includes dulaglutide ( <i>Trulicity</i> ), exenatide ( <i>Byetta</i> , <i>Bydureon</i> ), liraglutide ( <i>Victoza</i> , <i>Saxenda</i> ), lixisenatide ( <i>Adlyxin</i> ), semaglutide ( <i>Ozempic</i> , <i>Rybelsus</i> , <i>Wegovy</i> )
39	TXSGLT2	Prescribed an SGLT-2 inhibitor	As of the end of the Audit period	# field with: 1=Yes 2=No	Includes bexagliflozin ( <i>Brenzavvy</i> ), canagliflozin ( <i>Invokana</i> ), dapagliflozin ( <i>Farxiga</i> ), empagliflozin ( <i>Jardiance</i> ), ertugliflozin ( <i>Steglatro</i> ), sotagliflozin ( <i>Inpefa</i> )
40	TXGLIT	Prescribed pioglitazone [ <i>Actos</i> ] or rosiglitazone [ <i>Avandia</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
41	TXTIRZEP	Prescribed tirzepatide [ <i>Mounjaro</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
42	TXACARB	Prescribed acarbose [ <i>Precose</i> ] or miglitol [ <i>Glyset</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
43	TXSUREALK	Prescribed repaglinide [ <i>Prandin</i> ] or nateglinide [ <i>Starlix</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
44	TXAMYLIN	Prescribed injectable pramlintide [ <i>Symlin</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
45	TXBROMO	Prescribed bromocriptine [ <i>Cycloset</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
46	TXCOLESEV	Prescribed colesvelam [ <i>Welchol</i> ]	As of the end of the Audit period	# field with: 1=Yes 2=No	
47	ACE	Prescribed an ACE inhibitor or ARB	As of the end of the Audit period	# field with: 1=Yes 2=No	Commonly prescribed medications include: <b>ACE Inhibitors:</b> benazepril ( <i>Lotensin</i> ), captopril, enalapril ( <i>Vasotec</i> , <i>Epaned</i> ), fosinopril, lisinopril ( <i>Zestril</i> ), ramipril ( <i>Altace</i> ), <b>ARBs:</b> candesartan ( <i>Atacand</i> ), irbesartan ( <i>Avapro</i> ), losartan ( <i>Cozaar</i> ), telmisartan ( <i>Micardis</i> ), olmesartan ( <i>Benicar</i> ), valsartan ( <i>Diovan</i> , <i>Prexxartan</i> )

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
48	ASPIRIN	Prescribed aspirin or other antiplatelet/ anticoagulant therapy	As of the end of the Audit period	# field with: 1=Yes 2=No	Commonly prescribed medications include: <b>Antiplatelets:</b> aspirin, aspirin/dipyridamole ( <i>Aggrenox</i> ), cilostazol ( <i>Pletal</i> ), clopidogrel ( <i>Plavix</i> ), prasugrel ( <i>Effient</i> ), ticagrelor ( <i>Brilinta</i> ) <b>Anticoagulants:</b> apixaban ( <i>Eliquis</i> ), dabigatran ( <i>Pradaxa</i> ), edoxaban ( <i>Savaysa</i> ), enoxaparin ( <i>Lovenox</i> ), rivaroxaban ( <i>Xarelto</i> ), warfarin ( <i>Coumadin</i> )
49	LLSTATIN2	Prescribed a statin therapy	As of the end of the Audit period	# field with: 1=Yes 2=No 3= Allergy/intolerance/ contraindication	Look for yes, then allergy or intolerance or contraindication, then no.  Commonly prescribed medications include: atorvastatin, fluvastatin, lovastatin, pitavastatin, pravastatin, rosuvastatin, simvastatin
50	CVDDX	Diagnosed cardiovascular disease (CVD)	Ever	# field with: 1=Yes 2=No	Includes coronary artery disease (CAD), hypertensive heart disease, heart failure, cardiomyopathy, heart dysrhythmias, valvular heart disease, stroke, and/or peripheral vascular disease.
51	TBDX	Tuberculosis (TB) diagnosis (latent or active) documented (ever)	Ever	# field with: 1=Yes 2=No	
52	TBTESTDONE3	Most recent skin (PPD) or blood test for tuberculosis (TB) with valid result	Most recent ever	# field with: 1=Skin test (PPD) 2=Blood test (QFT-GIT, T-SPOT) 3= No test documented	<b>Populate only if TBDX value is 2=No.</b>  If more than one test is documented, use the most recent.
53	TBTESTRSLT2	TB test result	Most recent	# field with: 1=Positive 2=Negative 3=No result documented	<b>Populate only if TBDX value is 2=No and TBTESTDONE3 value is 1=Skin test or 2=Blood test.</b>
54	TBINHTX2	TB treatment initiated (isoniazid, rifampin, rifapentine, others)	Ever	# field with: 1=Yes 2=No 3=Unknown	<b>Populate only if TBDX value is 1=Yes or (TBDX value is 2=No and TBTESTDONE3 value is 1=Skin test or 2=Blood test and TBTESTRSLT2 value is 1=Positive).</b>

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
55	TBTESTDATE	Date of last TB test	Ever	mm/dd/yyyy	<p><b>Populate only if TBDX value is 2=No and TBTESTDONE3 value is 1=Skin test or 2=Blood test and TBTESTRSLT2 is 2=Negative.</b></p> <p>If only year is known, use value 07/01/yyyy. If only month and year are known, use 15 for the day. Leave blank if year or entire date is unknown.</p>
56	HCVDX	Diagnosed hepatitis C (HCV)	Ever	# field with: 1=Yes 2=No	
57	HCVSCREEN2	If not diagnosed with HCV, screened for HCV at least once	Ever	# field with: 1=Yes 2=No	<p><b>Populate only if HCVDX value is 2=no.</b></p> <p>Screening is performed using the Hepatitis C antibody (anti-HCV) test.</p>
58	RETINOPDX	Diagnosed retinopathy	Ever	# field with: 1=Yes 2=No	
59	LEA	Lower extremity amputation, any type (e.g., toe, partial foot, above or below knee)	Ever	# field with: 1=Yes 2=No	
60	FLUVAX2	Influenza vaccine	Audit period	# field with: 1=Yes 2=No	
61	PNEUMO	Pneumococcal vaccine (PCV15, PCV20, or PPSV23)	Ever	# field with: 1=Yes 2=No	
62	TD2	Tetanus (Td, Tdap, DTaP, or DT) vaccine	Past 10 years	# field with: 1=Yes 2=No	
63	TDAP2	Tdap vaccine	Ever	# field with: 1=Yes 2=No	

Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
64	HEPBVAX2	Hepatitis B complete series	Ever	# field with: 1=Yes 2=No 3=Immune	Either complete 3-dose series or complete 2-dose series counts.  3-dose series includes: Engerix-B®, PreHevbrio®, Recombivax HB®, and Twinrix® vaccines.  2-dose series includes: Heplisav-B® vaccine.
65	SHINGLESVAX	Shingrix/recombinant zoster vaccine (RZV) complete series	Ever	# field with: 1=Yes 2=No	Complete series for Shingrix is 2 doses.  Note: Zostavax vaccine does not count for this item.
66	HBA1C	HbA1c test result (%)	Most recent in Audit period	# with 1 decimal place	
67	HBA1CDATE	Date of most recent HbA1c	Most recent in Audit period	mm/dd/yyyy	If only year is known, use value 07/01/yyyy.  If only month and year are known, use 15 for the day.  Leave blank if year or entire date is unknown.
68	CHOLVALUE	Total cholesterol value (mg/dL)	Most recent in Audit period	# with 0 decimal places	Round to 0 decimal places, if necessary.
69	HDLVALUE	HDL cholesterol value (mg/dL)	Most recent in Audit period	# with 0 decimal places	Round to 0 decimal places, if necessary.
70	LDLVALUE	LDL cholesterol value (mg/dL)	Most recent in Audit period	# with 0 decimal places	Round to 0 decimal places, if necessary.
71	TRIGVALUE	Triglyceride value (mg/dL)	Most recent in Audit period	# with 0 decimal places	Round to 0 decimal places, if necessary.
72	CREATVALUE	Serum creatinine value (mg/ dL)	Most recent in Audit period	# with up to 2 decimal places	Round to 2 decimal places, if necessary.
73	EGFRVALUE	Estimated GFR (eGFR) value	Most recent in Audit period	# with 1 decimal place	Use documented value, if available.  Round to 1 decimal place, if necessary.
74	UPACRVAL	Quantitative urine albumin/creatinine ratio (UACR) value (mg/g)	Most recent in Audit period	# with up to 2 decimal places	Round to 2 decimal places, if necessary.
75	LOCAL	Local question	N/A	#, single digit, 1-9	This field may be left blank for all patients if the facility does not choose to populate it.



Order	Field Name	Description	Timeframe	Format/Values/Units	Comments
76	LOCALEXT	Extended local question	N/A	Character (max length=50)	This field may be left blank for all patients if the facility does not choose to populate it.
77	AGE	Patient age in years at time of AUDITDATE	N/A	# with maximum of 3 digits and no decimal places	Calculate as: integer part of difference in days between AUDITDATE and date of birth, divided by 365.25

## Appendix B. 2024 Diabetes Audit Data Element Descriptions

**1) Audit Period Ending Date:** Ending date of the one-year (365-day) Audit period as mm/dd/yyyy. **Use 12/31/2023 for the Annual Audit submitted to the IHS Division of Diabetes in 2024.**

**2) Facility Name:** Facility's name or abbreviation. This is for confirmation purposes only, since the WebAudit will automatically supply and display the name.

**3) Reviewer Initials:** Initials of person who did the medical chart review (maximum of three letters).

**4) State of Residence:** The two-character postal abbreviation for the State in which the patient resides. If the patient lives outside of the United States (e.g., in Canada), leave blank.

**5 & 6) Month and Year of Birth (Required):** Patient's month (2 digits) and year (4 digits) of birth.

**7) Birth sex (Required):** Patient's biological sex at birth.

- (1) Male
- (2) Female
- (3) Unknown

**8) Date of Diabetes Diagnosis:** Date the patient was first diagnosed with diabetes. If only the year is known, enter the middle of that year (i.e., "07/01/<year>"). If only the month and year are known, enter the middle day of that month (i.e., 15). Leave blank if year or entire date is unknown.

**9) DM Type:** Patient's diabetes type. If uncertain, mark as (2) Type 2.

- (1) Type 1
- (2) Type 2

### Tobacco/Nicotine Use (during Audit period)

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**10) Screened for tobacco use:** Was patient screened for tobacco use?

- (1) Yes
- (2) No

**11) Tobacco use:** Does patient use tobacco (cigarettes, chewing tobacco, snuff, etc.)? Answer only if screened for tobacco use is "(1) Yes."

- (1) Yes
- (2) No

**12) Tobacco cessation counseling/education received:** Did patient receive tobacco cessation counseling and/or education or referral for counseling? Answer only if screened for tobacco use and tobacco use are both "(1) Yes."

- (1) Yes
- (2) No

### **Electronic Nicotine Delivery Systems (ENDS)**

ENDS include: vapes, vaporizers, vape pens, dab pens, dab rings, mods, pod-mods, hookah pens, electronic cigarettes (e-cigarettes or e-cigs), and e-pipes which contain nicotine.

**13) Screened for ENDS use:** Was patient screened for ENDS use?

- (1) Yes
- (2) No

**14) ENDS use:** Does patient use ENDS? Answer only if screened for ENDS use is “(1) Yes.”

- (1) Yes
- (2) No

For additional information about tobacco and ENDS, see the [IHS Diabetes Standards of Care](#).<sup>5</sup>

### **Vital Statistics**

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**15 & 16) Height (last ever):** Patient’s last ever documented height in inches or in feet and inches. Feet should be a whole number with no decimal places. Fractional parts of an inch may be entered in decimal form with up to two decimal places (for example, 63 and ½ inches = 63.5, 71 and ¾ inches = 71.75).

**17) Weight (last in Audit Period):** Patient’s weight in pounds as a whole number with no decimal places.

**18) Hypertension (documented diagnosis ever):** Does patient have diagnosed hypertension, as documented by problem list diagnosis or three visits with a diagnosis of hypertension ever?

- (1) Yes
- (2) No

**19-24) Blood pressure (last 3 during Audit period):** Patient’s last blood pressures **obtained in a non-ER setting during the Audit period**, up to a maximum of three obtained on different days. If there are multiple blood pressure readings recorded on the same day, choose the last reading recorded. For reporting purposes, mean blood pressure will be calculated using the last two or three readings. If only one reading is available, it is used in place of mean blood pressure. For additional information about blood pressure, see the [IHS Diabetes Standards of Care](#).<sup>6</sup>

### **Examinations (during Audit period)**

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**25) Foot (comprehensive or “complete” including evaluation of sensation and vascular status):** Did patient have a comprehensive (“complete”) foot exam that included evaluation of sensation and vascular status?

- (1) Yes
- (2) No

For additional information about foot exams, see the [IHS Diabetes Standards of Care](#).<sup>7</sup>

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<sup>5</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/tobacco-use1/>

<sup>6</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/blood-pressure1/>

<sup>7</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/foot-care1/>

**26) Eye (dilated exam or retinal imaging):** Did patient have an eye exam that included a dilated eye exam or retinal imaging?

- (1) Yes
- (2) No

For additional information about eye exams, see the [IHS Diabetes Standards of Care](#).<sup>8</sup>

**27) Dental:** Did patient have a dental exam conducted by a dental professional that included examination of the gingiva and mucosal surfaces? Dental records may be kept separate from the medical records at your facility and will need to be located for review.

- (1) Yes
- (2) No

For additional information about dental exams, see the [IHS Diabetes Standards of Care](#).<sup>9</sup>

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## Depression

**28) Screened for depression (during Audit period):** Was patient screened for depression during the Audit period using the Patient Health Questionnaire (PHQ), Zung, Beck, or similar depression screening scale, or was it otherwise documented that patient was assessed for possible depression?

- (1) Yes
- (2) No

**29) Active diagnosis of depression (during Audit period):** Does patient have depression documented as an active diagnosis during the Audit period?

- (1) Yes
- (2) No

For additional information about depression, see the [IHS Diabetes Standards of Care](#).<sup>10</sup>

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## Education (during Audit period)

**30) Nutrition:** Nutrition or diet education provided to patient, according to provider type.

- (1) RD=Registered dietitian only
- (2) Other=Non-RD provider only
- (3) Both RD and Other
- (4) None=No nutrition or diet instruction documented

**31) Physical Activity:** Did patient receive physical activity or exercise education?

- (1) Yes
- (2) No

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<sup>8</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/eye-care1/>

<sup>9</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/oral-care1/>

<sup>10</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/depression1/>

**32) Other diabetes:** Other than diet or exercise, did patient receive education on any topic(s) related to diabetes?

- (1) Yes
- (2) No

For additional information about documenting education using RPMS, visit the [IHS Patient Education webpage](#).<sup>11</sup>

## Diabetes Therapy

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**Document *all* prescribed from the list below (as of the end of the Audit period).**

- If you are unsure about any medications used at your facility, check with your pharmacist.
  - For combination medications such as *Janumet* (sitagliptin + metformin) and others, be sure to mark 1:Yes for all components.
  - Electronic Audit notes (for RPMS only):
    - Diabetes medications that are active (have been filled or refilled) in the six months prior to the Audit period end date are included.
    - If none of the listed diabetes medications are found, then the first item "None of the following" is marked as 1:Yes by default.
1. **(33)** None of the following [Note that if this item is selected during WebAudit data entry, all other Diabetes Therapy choices will be automatically marked as 2:No.]
  2. **(34)** Insulin [all forms, including insulin aspart (*NovoLog*), degludec (*Tresiba*), detemir (*Levemir*), glargine (*Lantus*), lispro (*Humalog*), others]
  3. **(35)** Metformin [Glucophage, others]
  4. **(36)** Sulfonylurea [glipizide, glyburide, glimepiride]
  5. **(37)** DPP-4 inhibitor [alogliptin (*Nesina*), linagliptin (*Tradjenta*), saxagliptin (*Onglyza*), sitagliptin (*Januvia*)]
  6. **(38)** GLP-1 receptor agonist [dulaglutide (*Trulicity*), exenatide (*Byetta*, *Bydureon*), liraglutide (*Victoza*, *Saxenda*), lixisenatide (*Adlyxin*), semaglutide (*Ozempic*, *Rybelsus*, *Wegovy*)]
  7. **(39)** SGLT-2 inhibitor [bexagliflozin (*Brenzavvy*), canagliflozin (*Invokana*), dapagliflozin (*Farxiga*), empagliflozin (*Jardiance*), ertugliflozin (*Steglatro*), sotagliflozin (*Inpefa*)]
  8. **(40)** Pioglitazone [*Actos*] or rosiglitazone [*Avandia*]
  9. **(41)** Tirzepatide [*Mounjaro*]
  10. **(42)** Acarbose [*Precose*] or miglitol [*Glyset*]
  11. **(43)** Repaglinide [*Prandin*] or nateglinide [*Starlix*]
  12. **(44)** Pramlintide [*Symlin*]
  13. **(45)** Bromocriptine [*Cycloset*]
  14. **(46)** Colesevelam [*Welchol*]

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<sup>11</sup> <https://www.ihs.gov/forproviders/patiented/>

## ACE Inhibitor or ARB

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**47) Prescribed (as of the end of the Audit period):** Was patient prescribed ACE inhibitor or angiotensin II receptor blocker (ARB) medication as of the end of the Audit period?

- (1) Yes
- (2) No

- Commonly prescribed medications include:
  - **ACE Inhibitors:** benazepril (*Lotensin*), captopril, enalapril (*Vasotec*, *Epaned*), fosinopril, lisinopril (*Zestril*), ramipril (*Altace*)
  - **ARBs:** candesartan (*Atacand*), irbesartan (*Avapro*), losartan (*Cozaar*), olmesartan (*Benicar*), telmisartan (*Micardis*), valsartan (*Diovan*, *Prexxartan*)
  - **Note:** For combination medications such as *Zestoretic* (lisinopril + HCTZ), *Hyzaar* (losartan + HCTZ), *Lotrel* (amlodipine + benazepril), and others, be sure to mark 1:Yes for ACE Inhibitor or ARB.
- Electronic Audit note (for RPMS only): Medications that are active (have been filled or refilled) in the six months prior to the Audit period end date are included.

## Aspirin or Other Antiplatelet/Anticoagulant Therapy

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**48) Prescribed (as of the end of the Audit period):**

- (1) Yes
- (2) No

- Commonly prescribed medications include:
  - **Anticoagulants:** apixaban (*Eliquis*), dabigatran etexilate (*Pradaxa*), edoxaban (*Savaysa*), enoxaparin (*Lovenox*), rivaroxaban (*Xarelto*), warfarin (*Coumadin*)
  - **Antiplatelets:** cilostazol (*Pletal*), clopidogrel (*Plavix*), prasugrel (*Effient*), ticagrelor (*Brilinta*)
  - **Aspirin:** aspirin, aspirin and dipyridamole (*Aggrenox*)
- Electronic Audit note (for RPMS only): Only medications that are active (have been filled or refilled) in the six months prior to the Audit period end date are included.

## Statin Therapy

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**49) Prescribed (as of the end of the Audit period):**

- (1) Yes
- (2) No
- (3) Allergy/intolerance/contraindication

- Commonly prescribed medications include: atorvastatin (*Lipitor*), fluvastatin (*Lescol*, *Lescol XL*), lovastatin (*Altacor*, *Altoprev*), pitavastatin (*Livalo*), pravastatin, rosuvastatin (*Crestor*), and simvastatin (*Zocor*).
- For combination medication such as *Vytorin* (ezetimibe + simvastatin) be sure to mark 1:Yes for statin therapy.

- Electronic Audit note (for RPMS only): Only medications that are active (have been filled or refilled) in the six months prior to the Audit period end date are included.

### Cardiovascular Disease (CVD)

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**50) Diagnosed (ever):** Does patient have a known diagnosis consistent with CVD? This includes coronary artery disease (CAD), hypertensive heart disease, heart failure, cardiomyopathy, heart dysrhythmias, valvular heart disease, stroke, and/or peripheral vascular disease. See the RPMS/DMS code list file on the [Audit resources webpage](#)<sup>1</sup> for additional details.

- (1) Yes
- (2) No

### Tuberculosis (TB)

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**51) TB diagnosis (latent or active) documented (ever):** Does patient have a documented TB diagnosis?

- (1) Yes
- (2) No

**52) TB test done (most recent):** Patient's most recent TB test that has a valid result. Answer only if TB diagnosed (ever) is "(2) No".

- (1) Skin test (PPD)
- (2) Blood test (QFT-GIT, T-SPOT)
- (3) No test documented

**53) TB test result:** Result of most recent TB test. Answer only if TB test done is "(1) Skin test (PPD)" or "(2) Blood test (QFT-GIT, T-SPOT)".

- (1) Positive
- (2) Negative
- (3) No result documented

**54) If TB diagnosed and/or test result positive, treatment initiated (e.g., isoniazid, rifampin, rifapentine, others):** Does patient have documentation of treatment being initiated for latent (inactive) or active TB? (Look for documentation of TB treatments in health factors or prescriptions for isoniazid, rifampin, rifapentine, ethambutol, pyrazinamide, or rifabutin.) Answer only if TB diagnosis documented (ever) is "(1) Yes" or TB test result is "(1) Positive".

- (1) Yes
- (2) No
- (3) Unknown

**55) If TB result negative, test date:** Date of most recent negative TB test as mm/dd/yyyy. Answer only if TB test result is "(2) Negative". If only the month and year are known, enter the middle day of that month (i.e., 15). Leave blank if year or entire date is unknown.

For additional information about tuberculosis, see the [IHS Diabetes Standards of Care](#).<sup>12</sup>

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<sup>12</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/hepc-tb-screening>

## Hepatitis C (HCV)

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**56) HCV diagnosed (ever):** Does patient have a known diagnosis consistent with hepatitis C?

- (1) Yes
- (2) No

**57) If not diagnosed with HCV, screened at least once (ever):** Screening is performed using the Hepatitis C antibody (anti-HCV) test. Answer only if HCV diagnosed (ever) is “(2) No”.

- (1) Yes
- (2) No

For additional informational about HCV, see the [IHS Diabetes Standards of Care](#).<sup>12</sup>

## Retinopathy

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**58) Diagnosed (ever):** Does patient have a known diagnosis of retinopathy? See the RPMS/DMS Taxonomy listing on the [Audit resources webpage](#)<sup>1</sup> for additional details.

- (1) Yes
- (2) No

For additional information about retinopathy, see the [IHS Diabetes Standards of Care](#).<sup>8</sup>

## Amputation

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**59) Lower extremity (ever),** any type (e.g., toe, partial foot, above or below knee):

- (1) Yes
- (2) No

## Immunizations

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**60) Influenza vaccine (during Audit period):**

- (1) Yes
- (2) No

**61) Pneumococcal vaccine [PCV15, PCV20, or PPSV23] (ever):**

- (1) Yes
- (2) No

**62) Td, Tdap, DTaP, or DT (in past 10 years):**

- (1) Yes
- (2) No

**63) Tdap (ever):**

- (1) Yes
- (2) No



**64) Hepatitis B complete series (ever):** Has patient ever received a complete 3-dose series or 2-dose series, depending on vaccine type? Note: 3-dose series includes: Engerix-B®, PreHevbrio®, Recombivax HB®, and Twinrix® vaccines and 2-dose series includes: Heplisav-B® vaccine.

- (1) Yes
- (2) No
- (3) Immune

**65) Shingrix/recombinant zoster (RZV) complete series (ever):** Has patient ever received a complete 2-dose series of Shingrix® vaccine (recombinant zoster vaccine, RZV)?

**Notes:** Zostavax vaccine does not count for this item. This vaccine is recommended for patients age 50 years and older.

- (1) Yes
- (2) No

For additional information about immunizations, see the [IHS Diabetes Standards of Care](#).<sup>13</sup>

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**Laboratory Data (most recent result during Audit period)**

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**66) A1C (%):** Numeric value with up to one decimal place. When entering the result, omit any ">" or "<" signs (for example, enter >14 as 14). Leave blank if test not done during the Audit period.

**67) A1C Date obtained:** Date most recent A1C was drawn as mm/dd/yyyy. If only the month and year are known, enter the middle day of that month (i.e., 15). Leave blank if year or entire date is unknown.

**68-71) Total Cholesterol, HDL Cholesterol, LDL Cholesterol, Triglycerides (mg/dL):** Numeric value with no decimals. Leave blank if test not done during the Audit period.

**72) Serum Creatinine (mg/dL):** Numeric value with up to two decimal places. Leave blank if test not done during the Audit period.

**73) eGFR (mL/min/1.73 m<sup>2</sup>):** Numeric value with up to one decimal place. Leave blank if result not documented during Audit period.

**74) Quantitative Urine Albumin-to-Creatinine ratio (UACR) value (mg/g):** Numeric value with up to one decimal place. If the result came back as too low to detect (may have a < sign in front), enter the value 5.

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<sup>13</sup> <https://www.ihs.gov/diabetes/clinician-resources/soc/immunizations1/>

## Local Questions (Optional)

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Facilities can formulate their own supplemental Audit question(s), if desired. These may be used to assess an additional aspect of diabetes care of special interest.

**75-76)** There are two local option questions: a numbered item with responses 1-9 and a text field.

For electronic Audits in RPMS, responses for these questions can be entered via the DMS Patient Management option. See the DMS User Manual available via the [Audit resources webpage](#)<sup>1</sup> for more information.

For manual Audits, these questions may be written on the second page of the Audit form. For entry into the WebAudit, “Local Option” fields appear near the bottom of the data entry screen.