Independent Hospital Pricing Authority

IHPA

Activity Based Funding

Emergency Department Diagnosis
Edit Checker Program User Guide

V1.0

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Activity Based Funding – ED Edit Checker Program User Guide

The Edit Checker program has been developed in accordance with edits agreed to by the Emergency Care Advisory Working Group and the Independent Hospital Pricing Authority. The program has been tested with sample data prior to release. However, if any issues are identified, please notify the Independent Hospital Pricing Authority as soon as possible so these may be addressed and resolved.

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Acronyms and Abbreviations

The following abbreviations are used throughout this document.

AM	Australian Modification
AR-DRG	Australian Refined Diagnosis Related Group
CM	Clinical Modification
ED	Emergency Department
ICD	International Classification of Diseases and Related Health Problems
IHPA	Independent Hospital Pricing Authority
MDB	Major Diagnostic Block
MDC	Major Diagnostic Category
URG	Urgency Related Groups
UDG	Urgency Disposition Groups
DSS	Data Set Specification
DRS	Data Request Specification

Introduction

The Emergency Department (ED) Edit Checker program has been developed by the Independent Hospital Pricing Authority (IHPA) to assist state and territory health departments and hospitals to improve the data quality reported for the hospital emergency department; particularly the validation of diagnosis code fields in emergency department patient level data.

This program provides the following facilities:

1. The ability to check diagnosis code against ICD-10-AM edit, principal diagnosis code edit and sex diagnosis code edit (sex edit is composed of both male diagnosis code edit and female diagnosis code edit).

2. The ability to check principal diagnosis code field, additional diagnosis code 1 field and additional diagnosis code 2 field in the ED records.

3. The ability to check Microsoft Access data file interactively and view individual results and a summary result.

4. The ability to check text file interactively and view individual results and a summary result.

5. The ability to pause/resume the validation during running Edit Checker, or to cancel current validation job at any time.

Please note this program requires Java to be installed.

The Edit Checker program will not alter or amend the original input data but will assist in the detection of any errors in the diagnosis code fields.

Emergency Department Edit Checker User Guide

Input Fields

The input for Edit Checker consists of four factors: PrinDiag (principal diagnosis code), adddiag1 (additional diagnosis code 1), addidag2 (additional diagnosis code 2) and sex. Additional data items can be included in the input file, however are not used to produce the output. They are simply brought across to the output.

The valid values for the Sex field are:

1   Male

2   Female

3   Intersex or indeterminate

9   Not stated/inadequately described

The valid values for all diagnosis code fields are ICD-10-AM codes, with a length of seven, according to IHPA's ED patient level Data Request Specification 2014-15.

Text File

The following table shows the default start positions for the text line inputs.

Column Name	Description	Format	Default Start Position(left justify)
PrinDiag	Principal diagnosis code	Text, Length=7	1
adddiag1	Additional diagnosis code1	Text, Length=7	8
adddiag2	Additional diagnosis code 2	Text, Length=7	15
sex	Sex	Text, Length=1	22

Access File

The following table shows the field structure required in the Access data table. Note that your data table must follow this structure in order to run this program.

Column Name	Description	Format
PrinDiag	Principal diagnosis code	Text, Length=7
adddiag1	Additional diagnosis code1	Text, Length=7
adddiag2	Additional diagnosis code 2	Text, Length=7
sex	Sex	Text, Length=1

The default table name for Access table is "Table1".

Output Fields

The output for Edit Checker consists of three fields: warning flags for PrinDiag (principal diagnosis code), adddiag1 (additional diagnosis code 1), addidag2 (additional diagnosis code 2), respectively.

The value generated for the warning field is:

Value	Description	Format
W1	Invalid ICD-10-AM code	Text, Length=2
W2	Invalid Principal Diagnosis code	Text, Length=2
W3	Invalid diagnosis code for sex	Text, Length=2
(blank)	No invalid code found	Text, Length=2

All three warning fields are appended to the right of the original input fields in the order of W1 to W3, eg if W1 is flagged for principal diagnosis and W3 is flagged for additional diagnosis 2, the output will be the original input fields plus "W1 W3" (note two spaces in the middle).

Please note there is a hierarchy for assigning warning edits for a particular record. The program will check in order of W1, W2, W3. If a record results in a W1 warning edit being applied, the program will not proceed to check W2 and W3 for that record. Similarly, if a record results in a W2 warning, the program will not proceed to check W3 warning for that record. The logic map of flagging warnings is depicted as below.
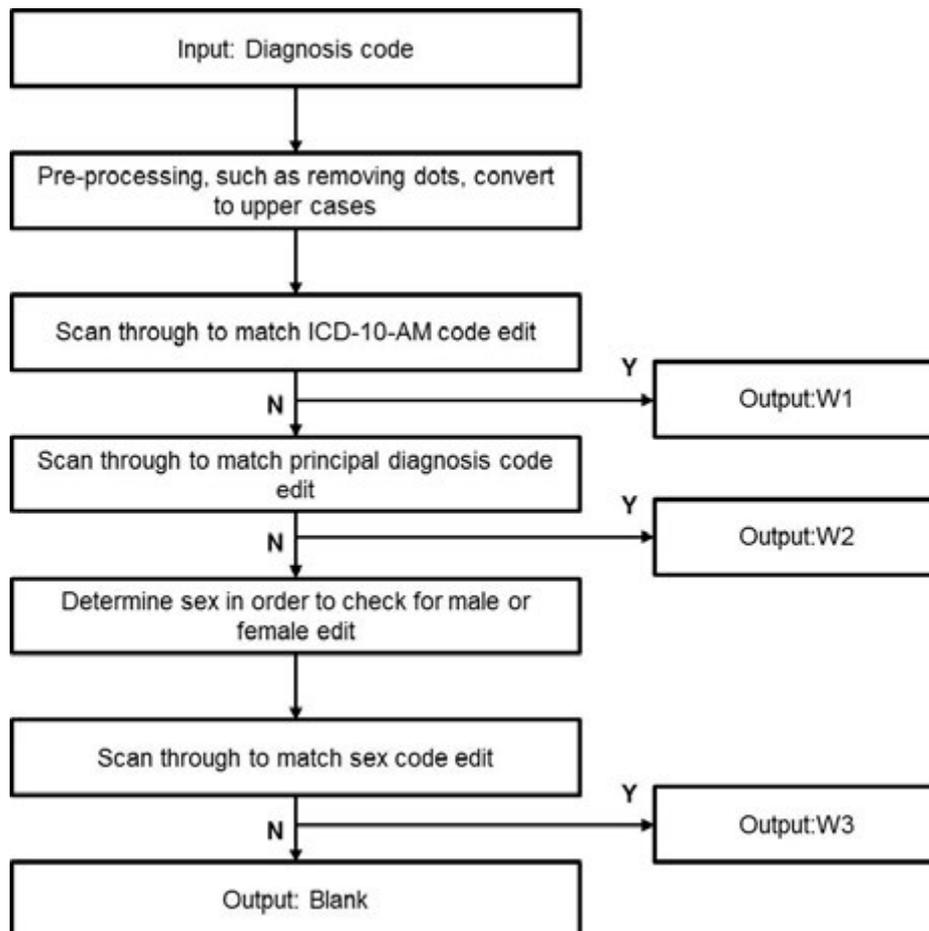
Opening the program

1. Open EditChecker.exe and it automatically detects whether the Windows operating system has installed the Java Runtime (JRE) 7.0 or above. If Java is not installed, the program will direct users to the Java download page.
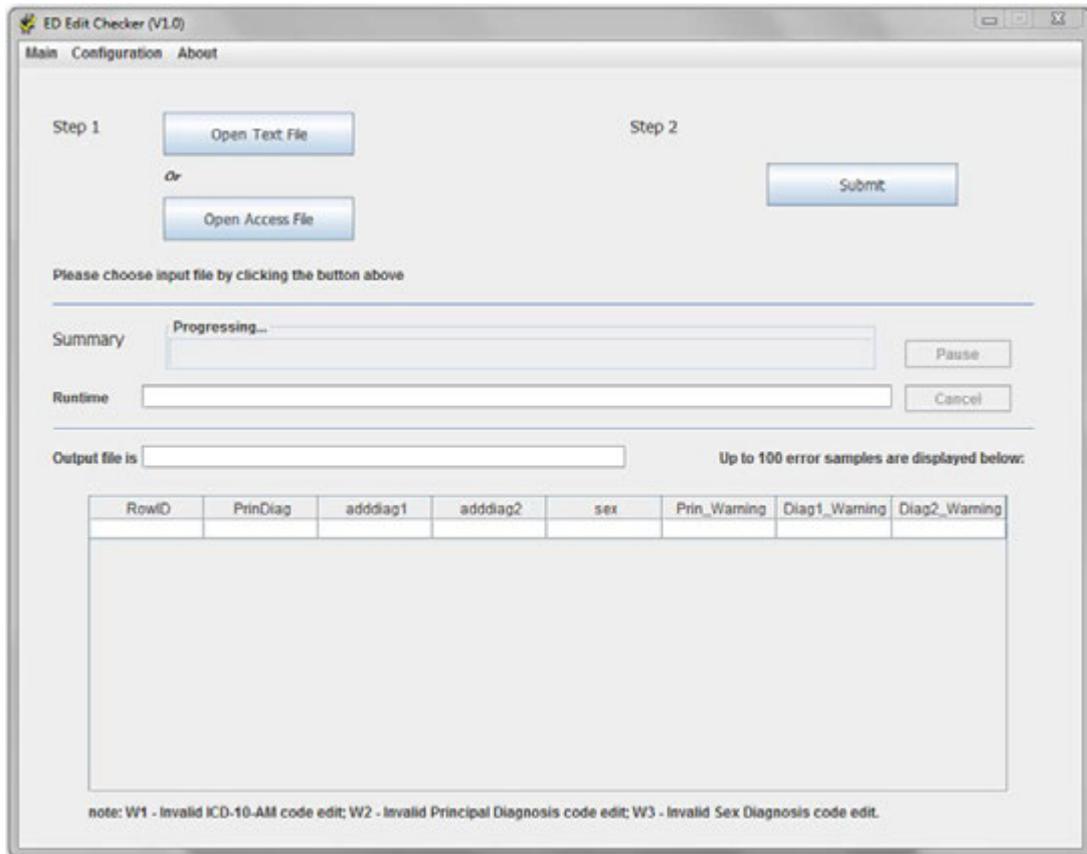

2. Once JRE is installed, click on "EditChecker.exe" in the hard drive disk or removable storage where the user stores the program.
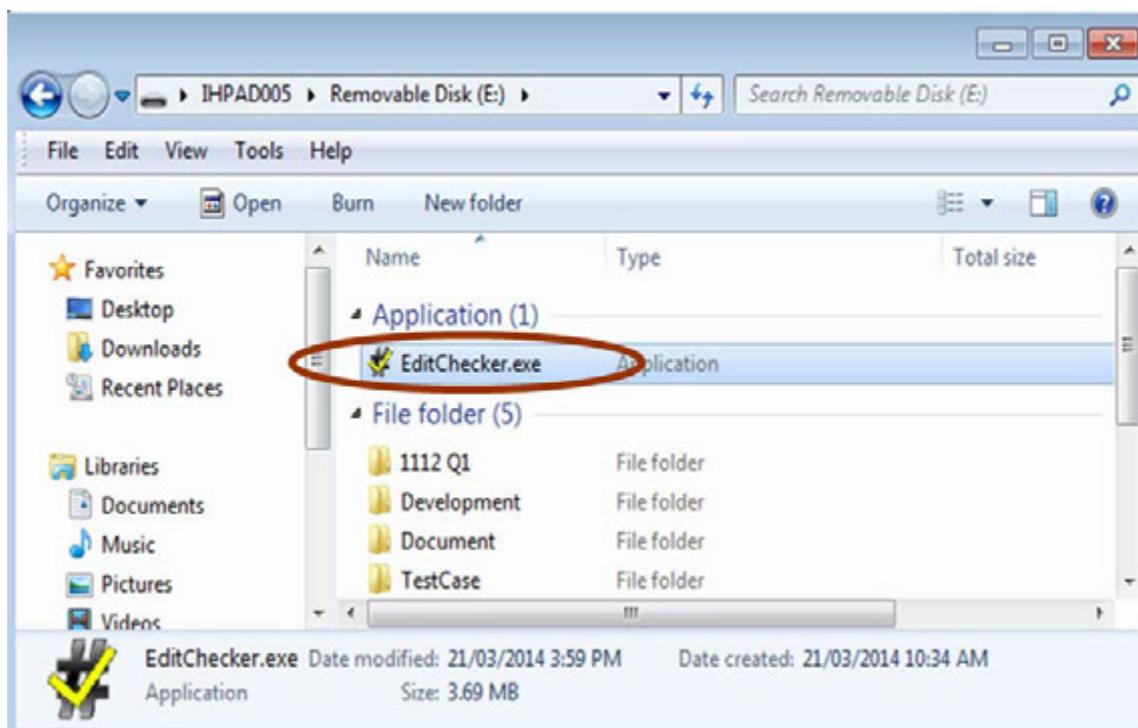
3. This will direct the user to enter into the main user interface.

Selecting an input file and configuration

4. Specify the type of source file which you would like to validate. This program can support both text file and Microsoft Access file.

Text File

5. To open a text file, click on the "Open Text File" button, and choose your input file. Once you have selected the input file, click the "Open" button in the pop up window.
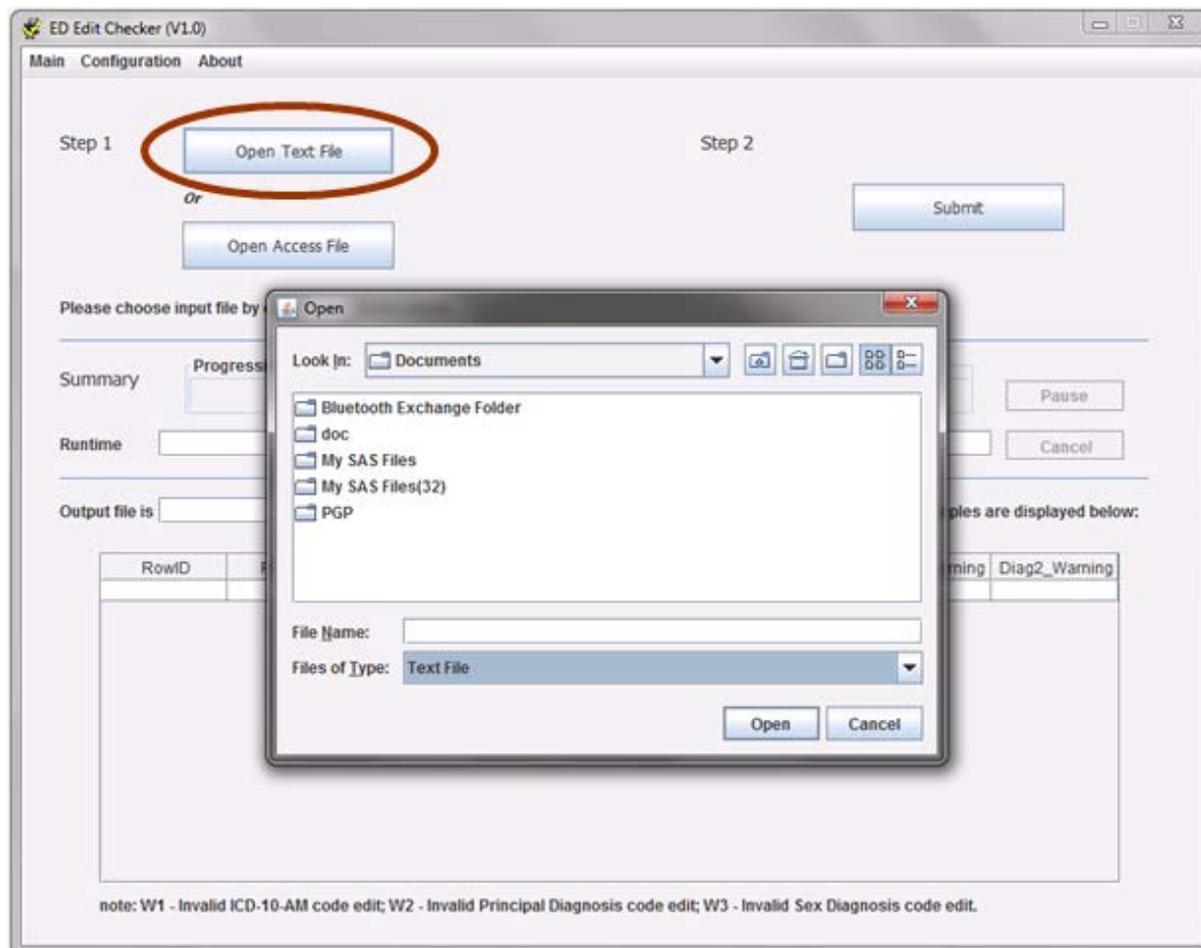
6. Please note, the file path (including folder name and filename) of the chosen input file is displayed in the user interface window, under "Open Access File" button, for your reference.

7. The default setting works when the start positions of the input file are lined up with the parameters specified in the table in the previous "Input Field" section. If the input start positions are not aligned with the default parameters, you will need to manually configure the start position of the four input fields.
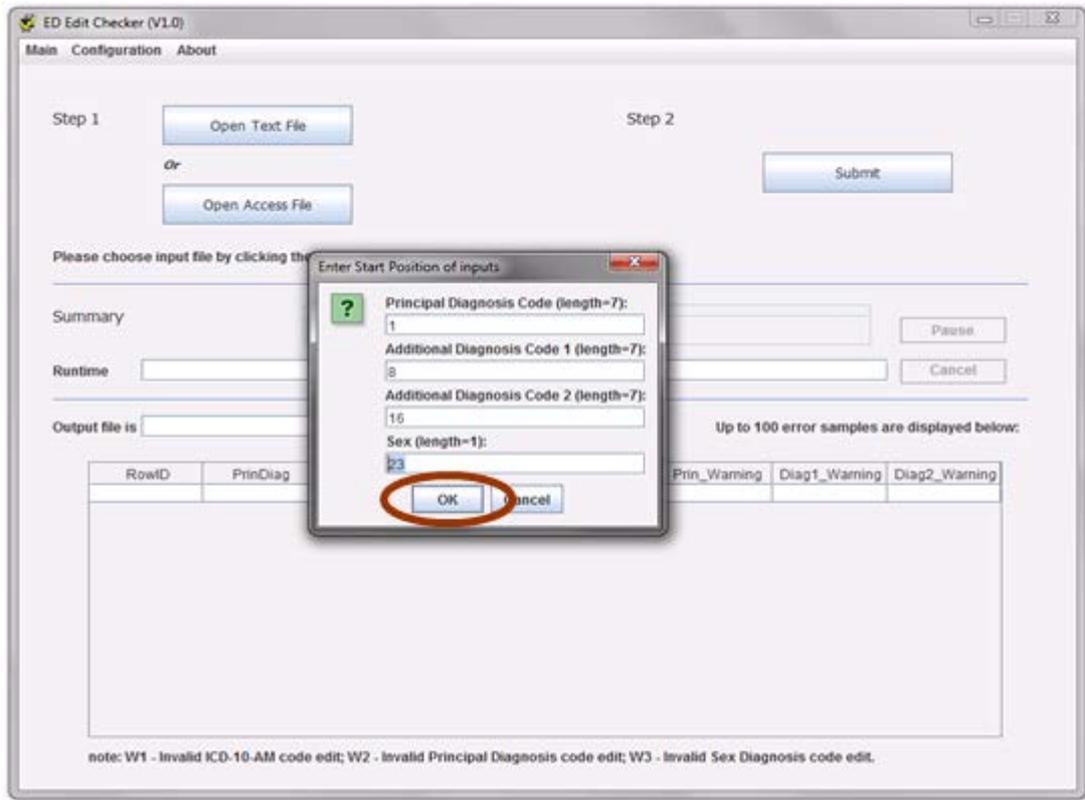
8. To configure the start position of the four input fields manually, select "Configuration" menu and then "create new text file format".
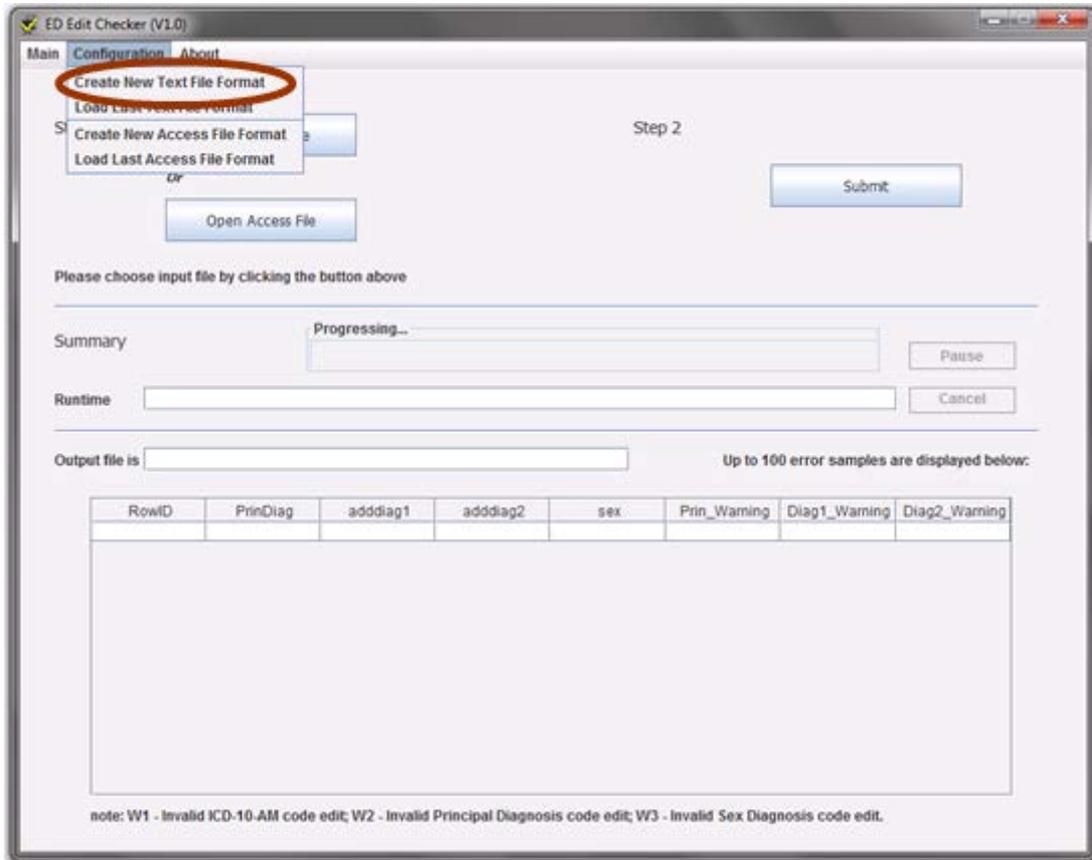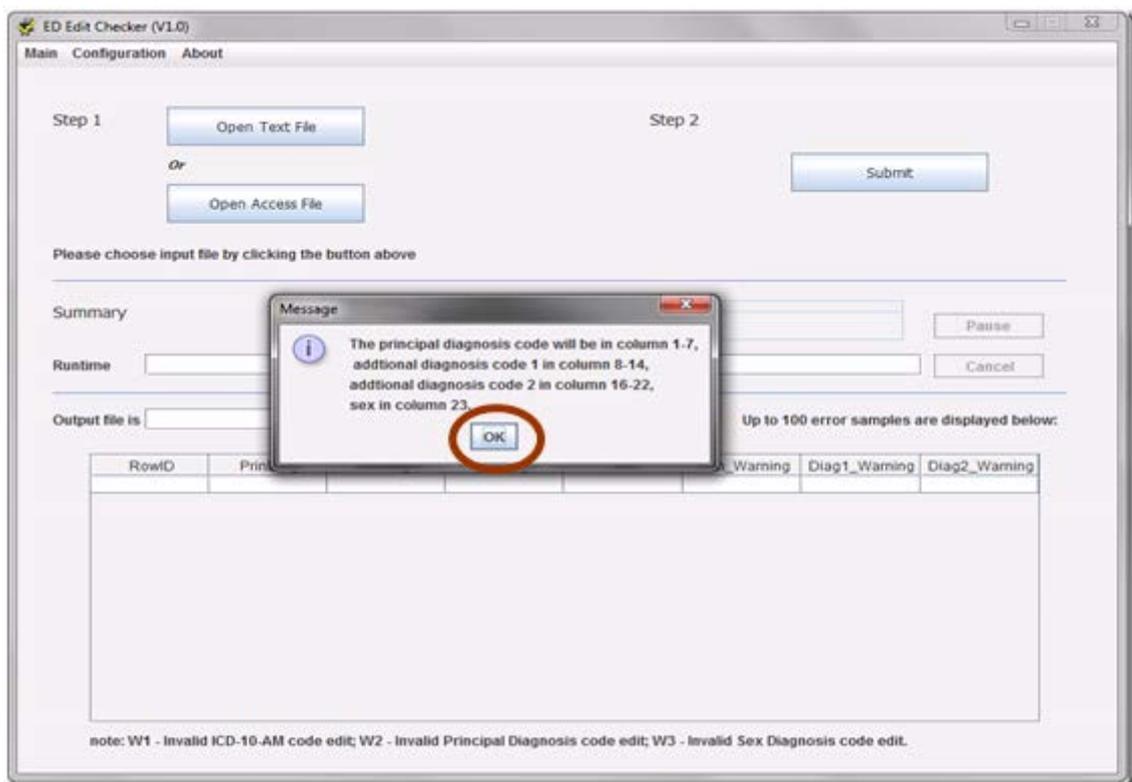
9. A pop up window will appear to enter the start position of inputs. Enter the start positions of the input fields and click "OK" to save your current configuration.
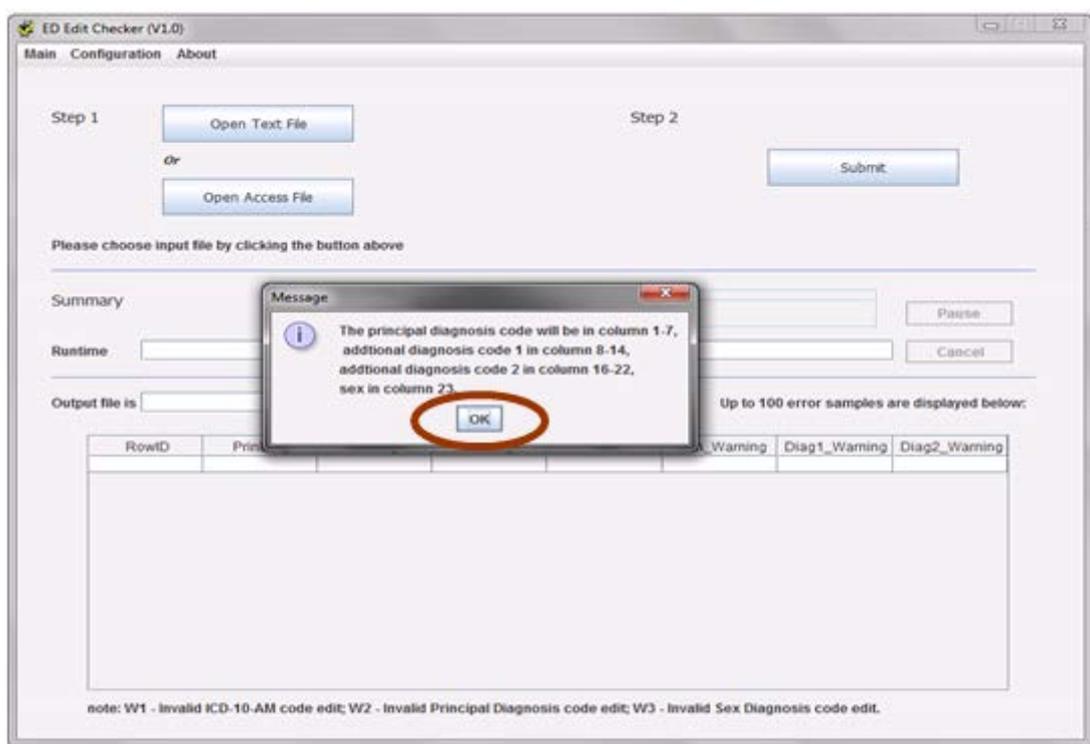

10. A confirmation message will then be displayed; click "OK" to continue.

11. Once a configuration has been created and saved, a user can apply this configuration by using "Load Last Text File Format" function under "Configuration" menu.
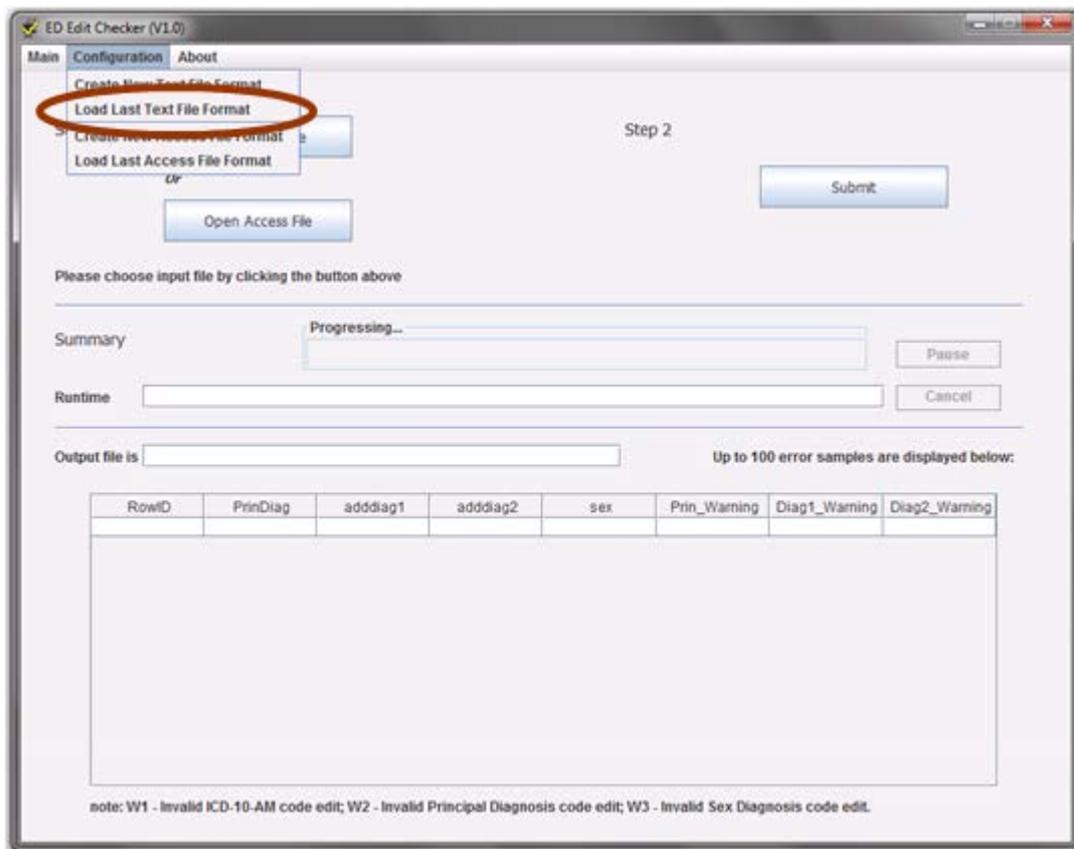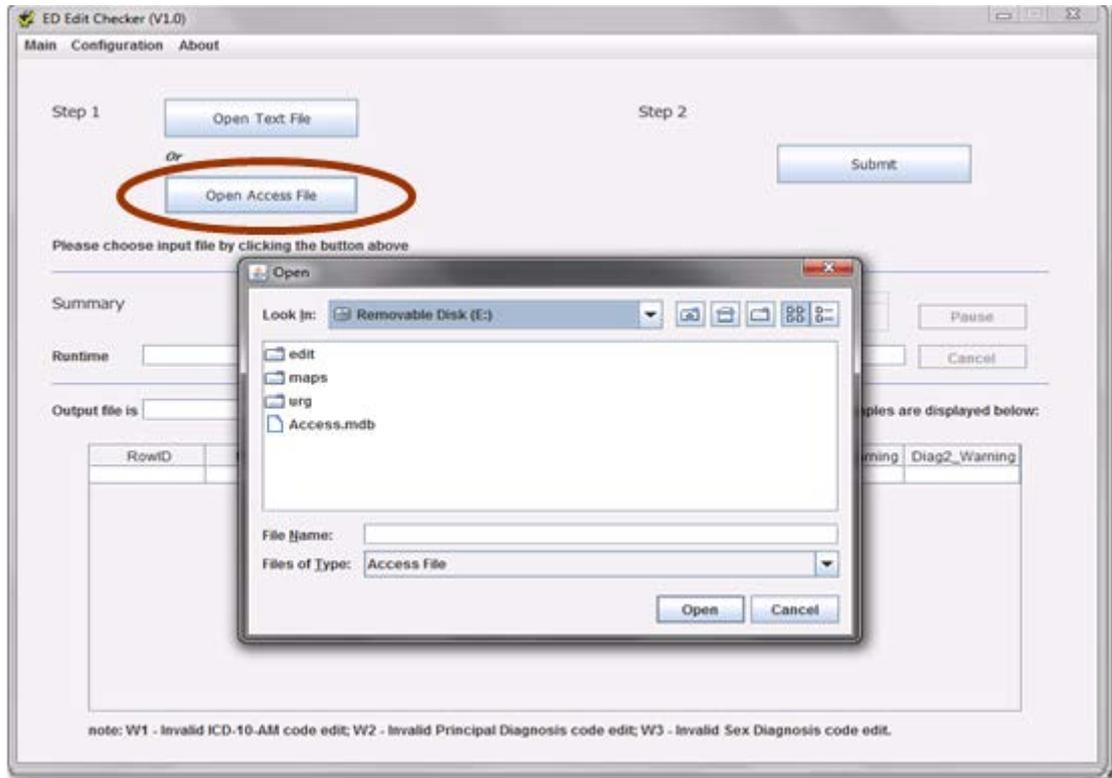

12. Once the configuration is confirmed, a confirmation message will be displayed. Click "OK" to continue.
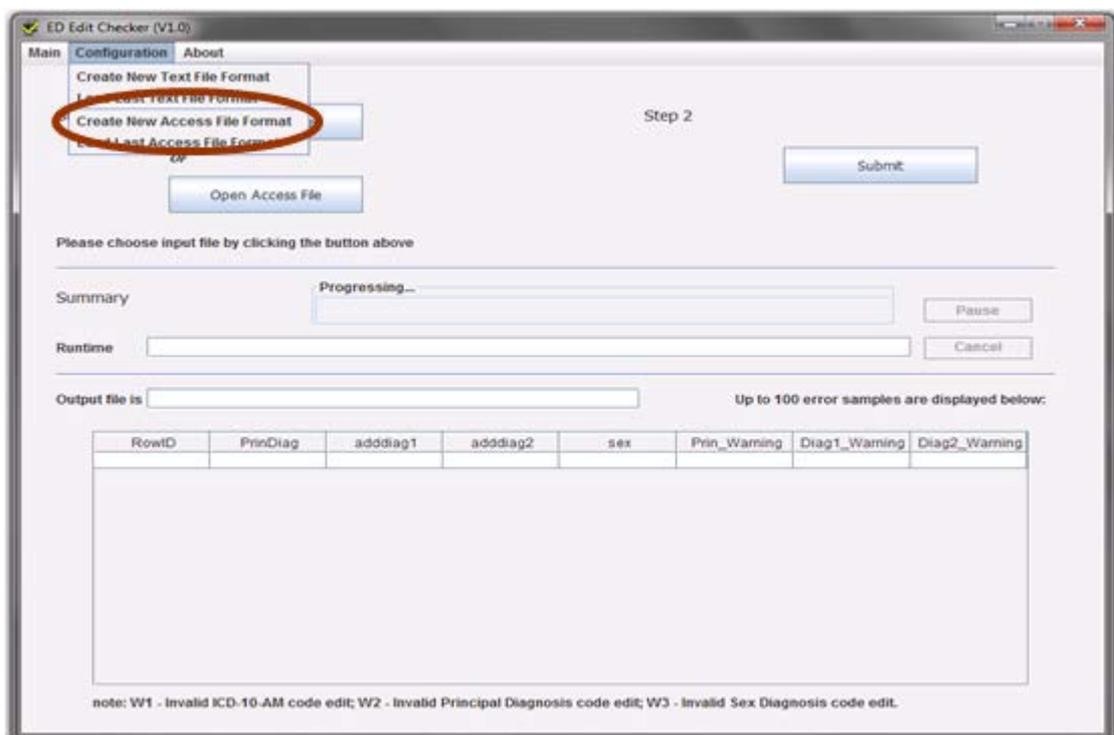
Access File

13. To open an Access file, click on the "Open Access File" button,
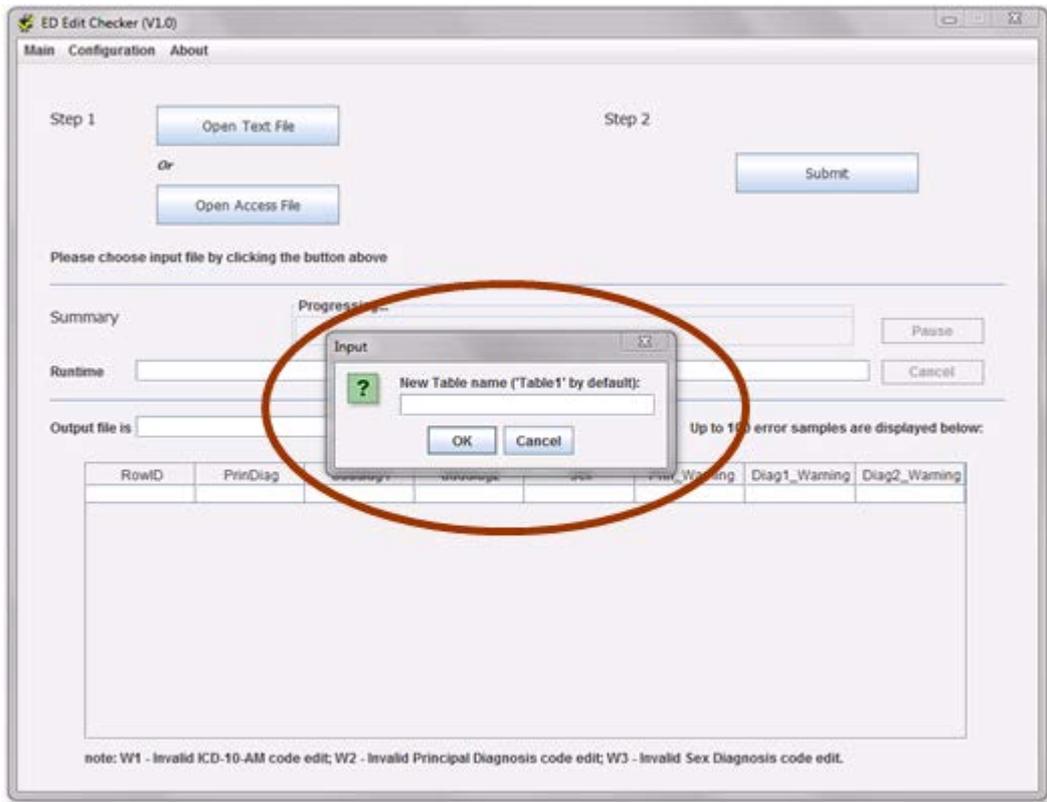

14. The default setting works when the table name in the Access File is lined up with the parameters specified in the table in the previous "Input Field" section. To configure the table name of the four input fields manually, select "Configure" menu and then "Create New Access File Format".
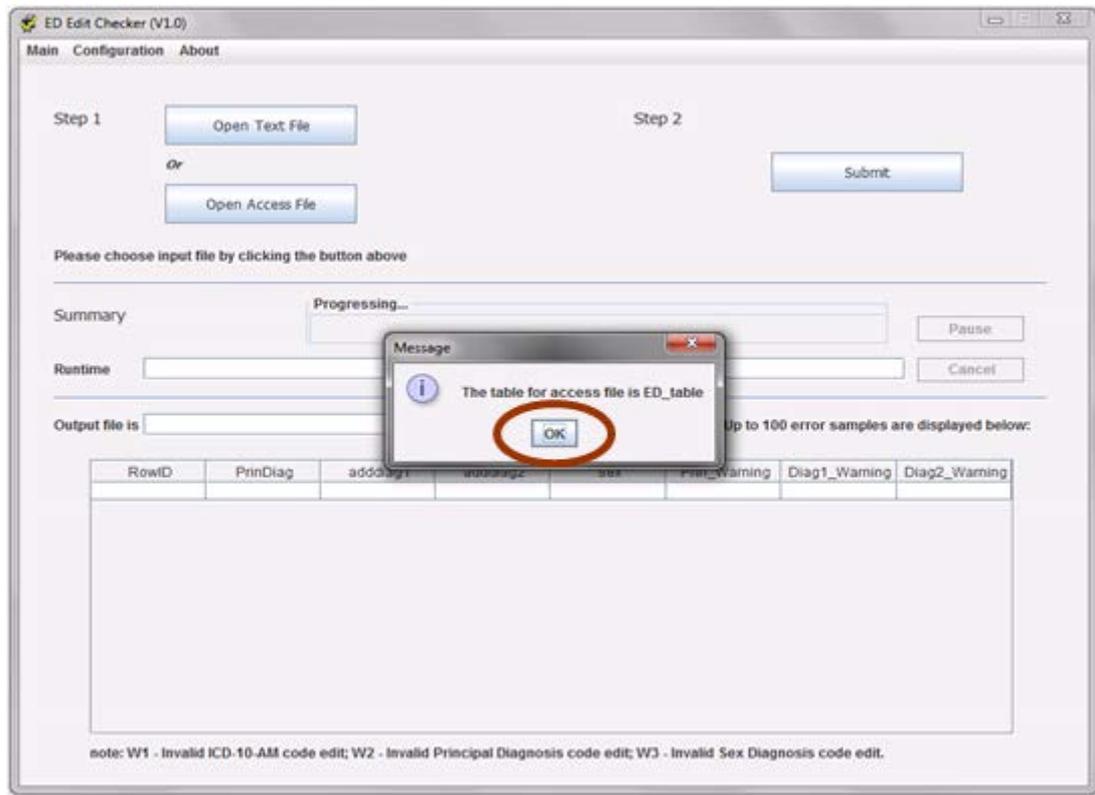
15. A pop up window will appear to enter the table name of inputs.

16. Once a configuration has been created and saved, a user can apply this configuration by using "Load Last Access File Format" function under "Configuration" menu. Once the configuration is confirmed, a confirmation message will be displayed. Click "OK" to continue.
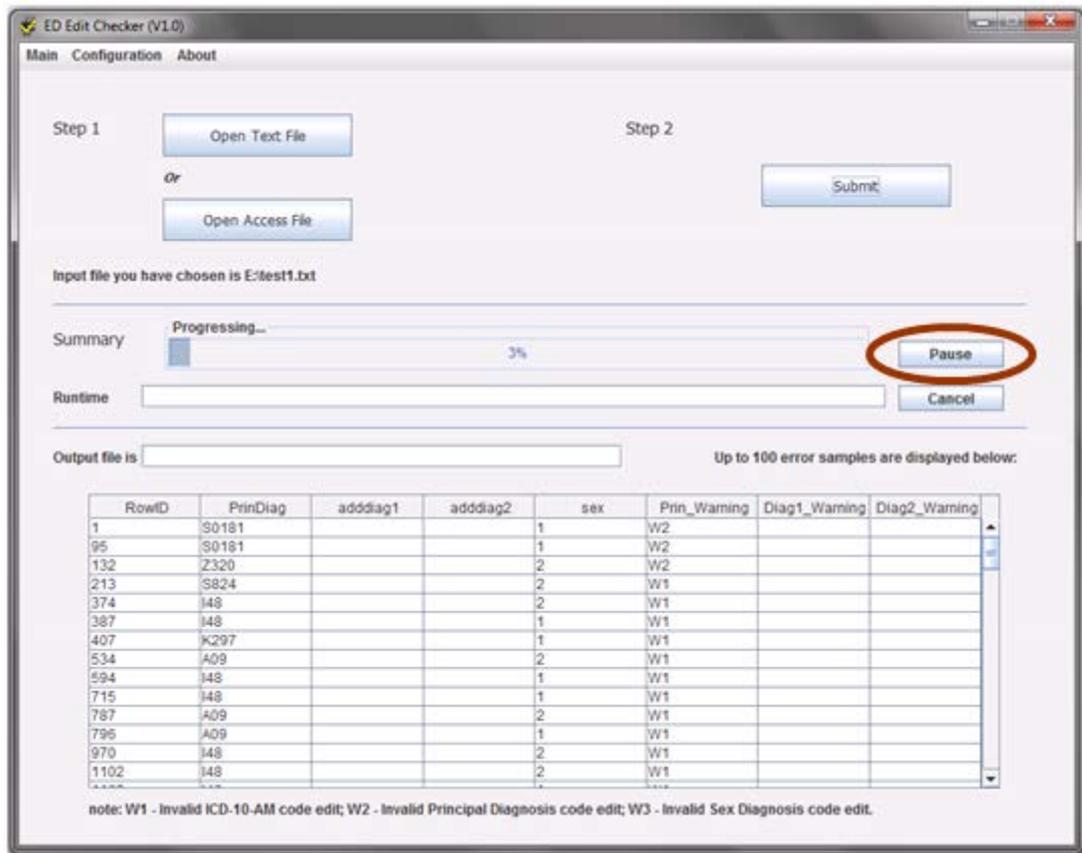
Running the program

17. Once the input has been selected and configured, click the "Submit" button to run the program and start checking the data. The Edit Checker validates the ED presentations one by one. The progress bar displays the percentage completed as the program runs.


RowID	PrinDiag	adddiag1	adddiag2	sex	Prin_Warning	Diag1_Warning	Diag2_Warning
1	S0181			1	W2		
95	S0181			1	W2		
132	Z320			2	W2		
213	S824			2	W1		
374	I48			2	W1		
387	I48			1	W1		
407	K297			1	W1		
534	A09			2	W1		
594	I48			1	W1		
715	I48			1	W1		
787	A09			2	W1		
796	A09			1	W1		
970	I48			2	W1		
1102	I48			2	W1		

note: W1 - Invalid ICD-10-AM code edit; W2 - Invalid Principal Diagnosis code edit; W3 - Invalid Sex Diagnosis code edit.
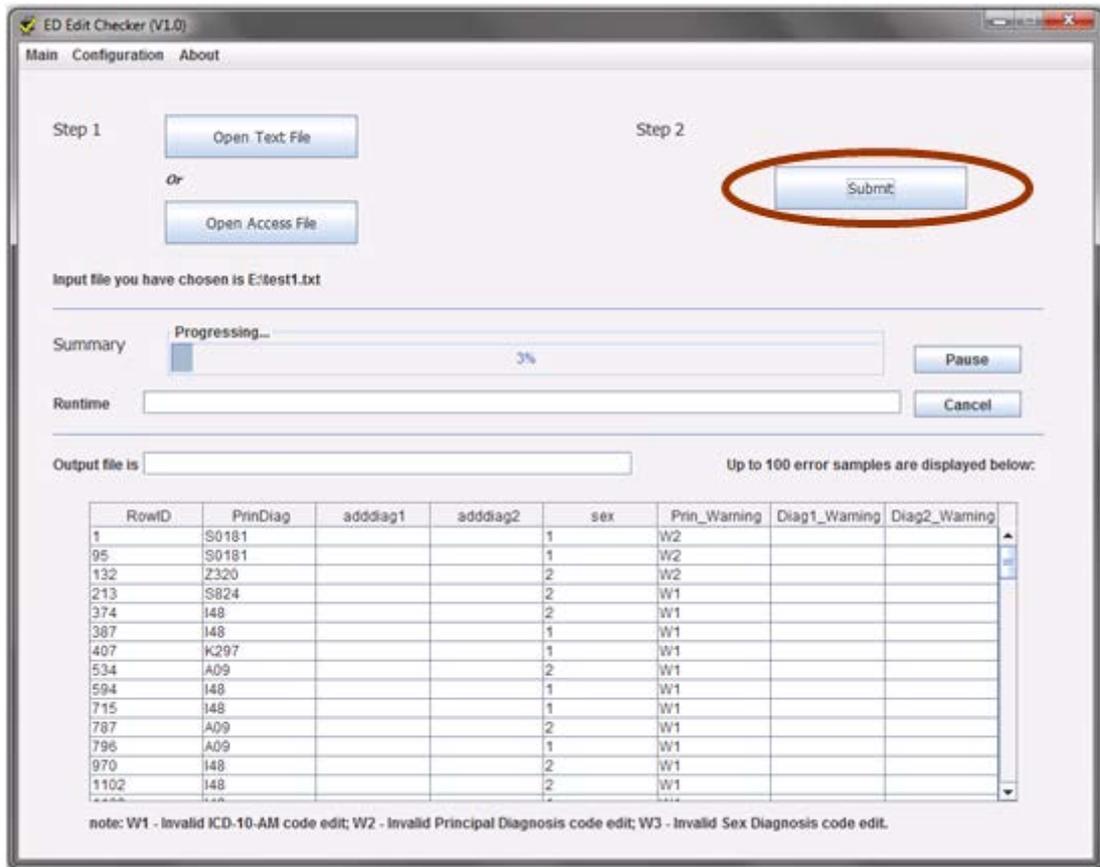
18. During this validation processing, the "Pause" button becomes enabled on the right side of the progress bar. Clicking on "Pause" results in temporally stopping processing records and the button will then display "Resume".
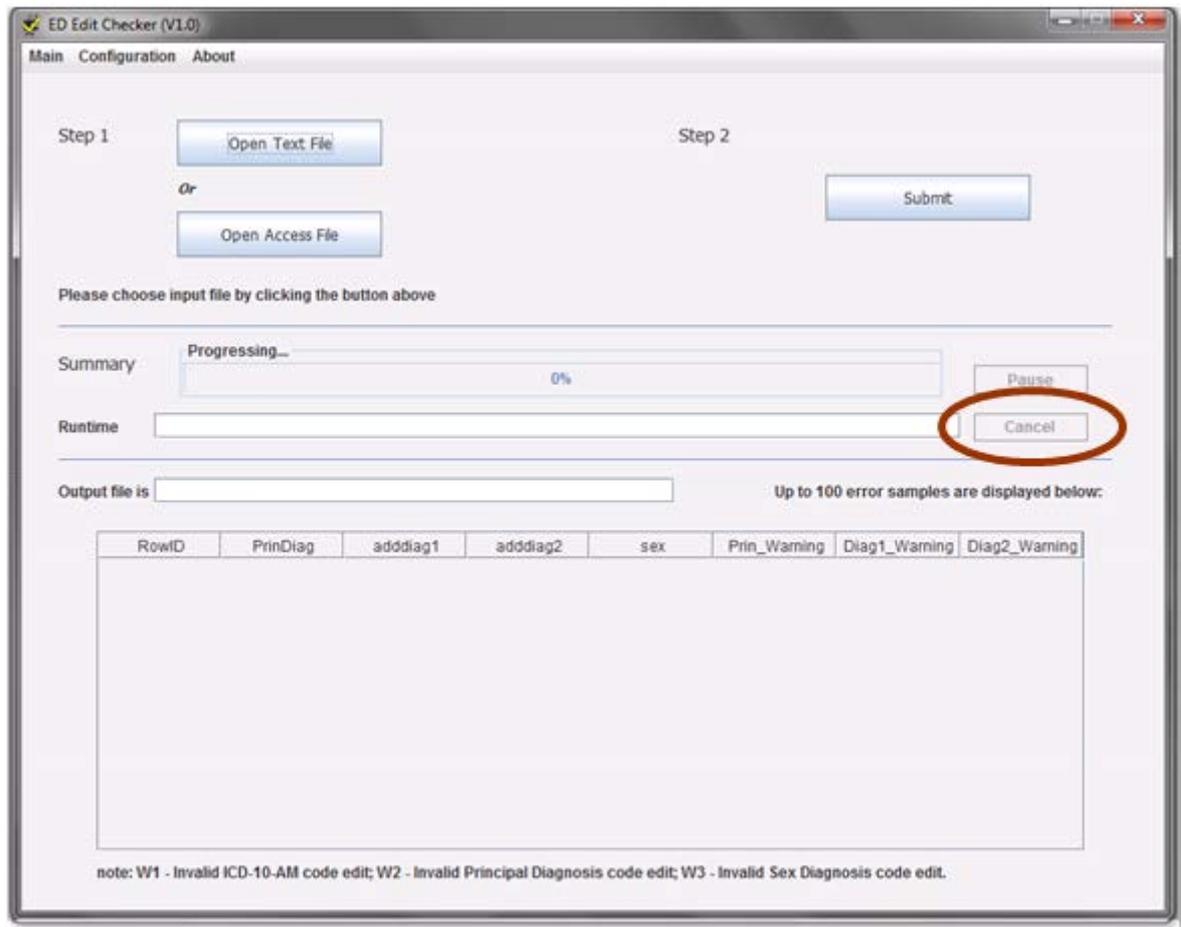
19. Clicking the "Resume" button will continue record processing from where the program was paused.
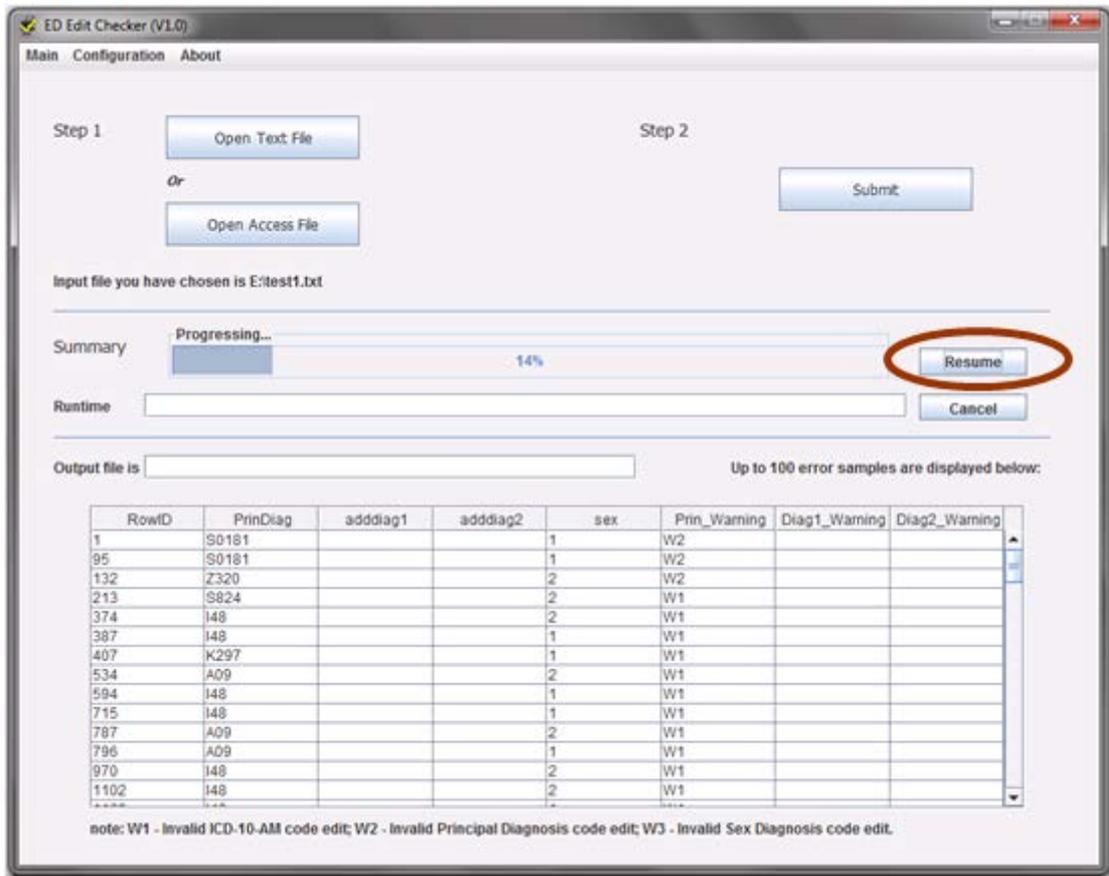
20. In a similar manner, clicking the "Cancel" button will terminate processing records. The output will be cleared. Any intermediate text file or Access table produced will be deleted for clean-up.

21. Please note the "Pause" and "Cancel" functions can only be used during the record process, otherwise these two buttons are inactive and greyed out.

Interpreting the summary output information

22. Once Edit Checker has finished processing all records, up to 100 records with error warnings are displayed in the user interface window table for quick reference.

23. The table includes a row identifier for the input data as well as the principal diagnosis, additional diagnosis code 1, additional diagnosis code 2 and sex values for the record.

24. The RowID for each output record is automatically generated by the system, in order to facilitate linking the output with the original record.

25. In addition to the input data fields, the table includes three columns which display the primary warning error applied to each record for the principal diagnosis, additional diagnosis code 1 and additional diagnosis code 2 where applicable.

26. The output file path is displayed above the table, as is the time taken to complete, number of records checked, and the number of errors identifies.
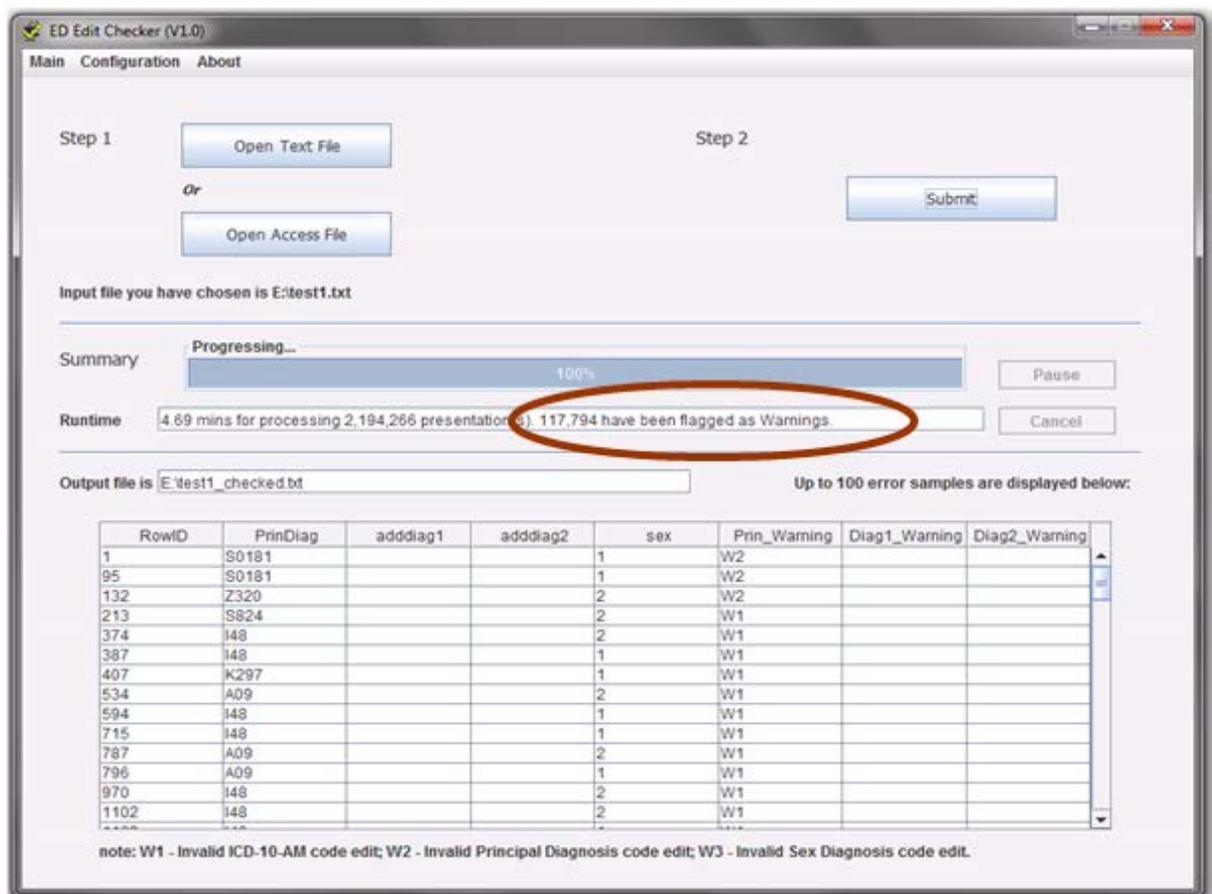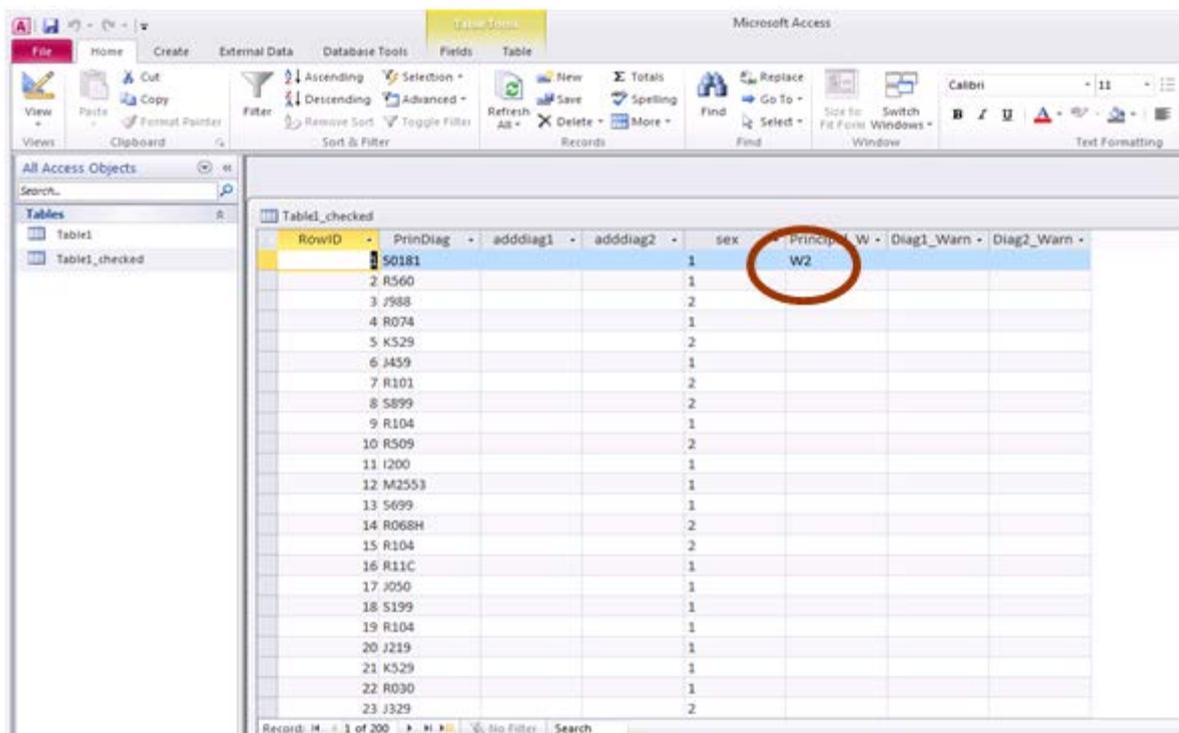
Output file location

27. Please note the output data will be the same format as the input data, ie, if input file format is text, the output file format will also be text.

28. For a text file, the output file is saved to the same folder location as the input file. The output filename will be "<input file name>_checked", eg, an input file named "IHPA" will result in an output file named "IHPA_checked". The warning errors for each record are appended to the original data in the output file:
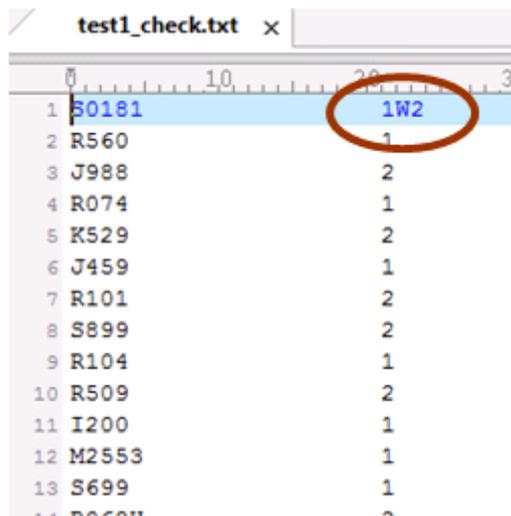
29. For an Access file, a new table within the original input access file is created to display the output data. The output table name will be "<input table name>_checked", eg an input table named "IHPA" will result in an output table named "IHPA_checked". The warning errors for each record are appended to the original data in the output table.