

# Proposal for EMR Data Extraction *For Relativity and Negotiations*

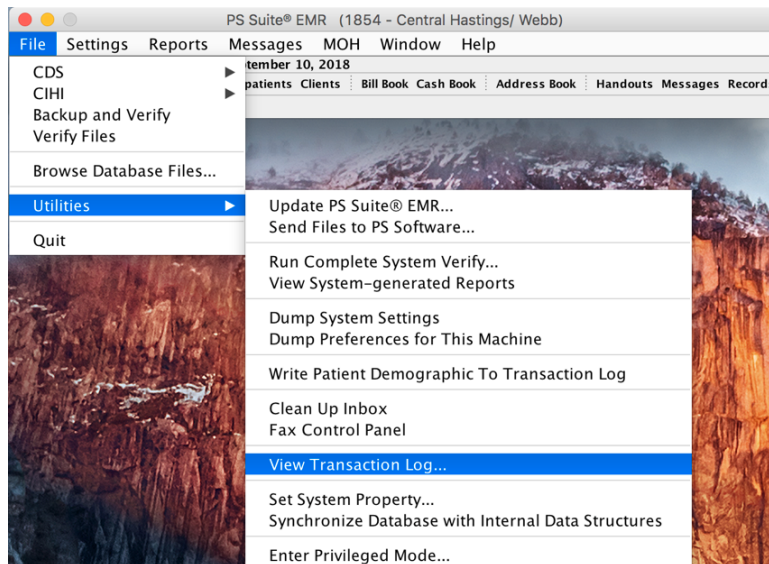
April 22, 2019

TELUS EMR's "Transaction Log" can be used to search data with respect to certain types of **time-stamped EMR activity**. This data could then be analyzed to provide a more accurate account of the work physicians perform that is not adequately depicted by OHIP billings.

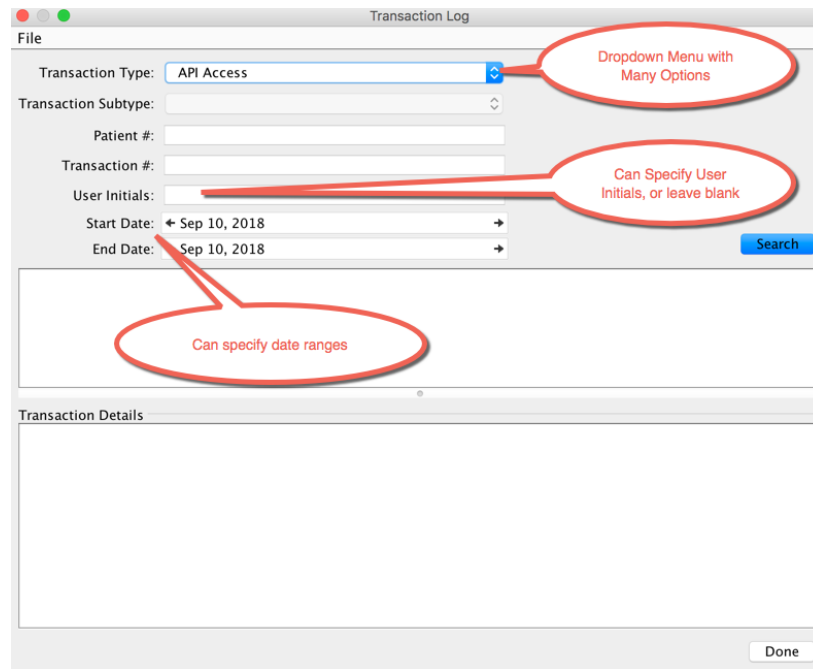
This data may be particularly helpful in clarifying the number of days, or even hours, that a physician works. Furthermore, it can more clearly elucidate the amount of work that is being done by physicians after hours or on weekends.

## How to Extract Data from the Transaction Log:

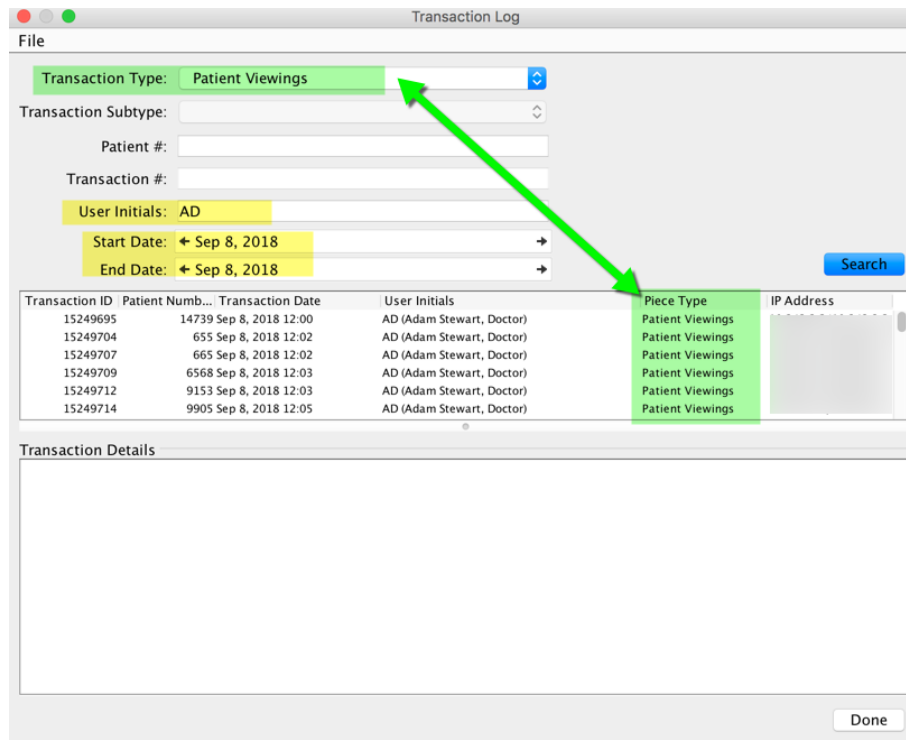
- Open TELUS EMR and go the EMRs main dashboard.
- Click File → Utilities → View Transaction Log



- This opens up the following window:

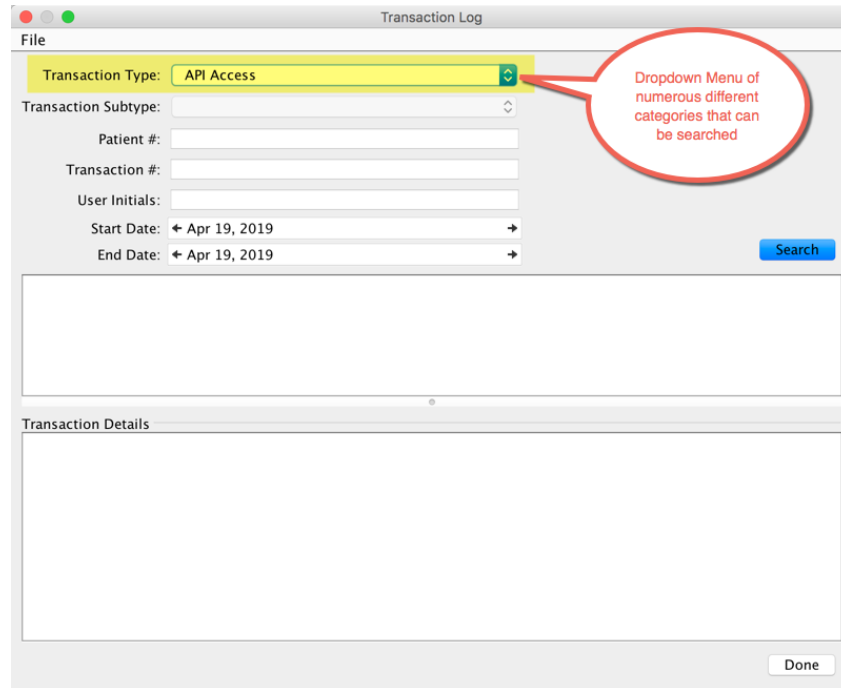


- Can choose from a variety of options that will report on the various types of EMR activities. One can even specify **Date Ranges** and limit results to a **Specific User**:
  - In the future, this process could even be used to analyze work done by physicians and/or their hire staff.



## “Transaction Type” Categories and Sub-Categories:

- Within the Transaction Log window, there are a number of categories (“Transaction Types”) that can be searched:



- The complete list of Transaction Types is as follows:
  - *API Access*
  - **Appointments**
  - *Billing*
  - *Billing file Import/Export*
  - *CIHI Export Transaction*
  - *Care Team Changes*
  - *Category Management*
  - *Conversion Issue*
  - *Deleted Multimedia*
  - *Demographics*
  - *Discarded Labs Messages*
  - *Drug Benefits*
  - **EMR Activity**
  - **Email**
  - *External Message Interaction Transaction*
  - *Fast Profile Entry Interaction Checking*
  - *HIAL*
  - *Imported Audit Information*
  - *Interactions Ignored*
  - **Lab Preview**
  - *Lab Report Upload*
  - *Lab Source Queries*
  - *Login/Logout*
  - *MC EDT & HCV*
  - *Medication Updates*
  - **Messages**
  - **Mobile Activity**
  - *Patient Assistance*
  - *Patient Import/Exports*
  - *Patient Merges*
  - *Patient Unmerges*
  - *Patient Viewings*
  - **Patients**
  - *Prescription Favourite Changes*
  - *Primary Health Number Changes*
  - *Record Disclosures*
  - *Roles*
  - *Scheduled Activity Transaction*
  - *Security Override*
  - *Shared Health Exchange*
  - *Suspicious Activity*
  - *System Settings*
  - *User Coverage*
  - *Users*

- Some of these Transaction Types (Categories) pull searches that contain different “Piece Types” (Sub-Categories) of EMR work.
  - For example, in the screenshot below a search was pulled using the “Patients” Transaction Type. The highlighted green column then shows the different types of Piece Types that this search pulls:

The screenshot shows a 'Transaction Log' window with a search interface and a data table. The search filters are: Transaction Type: Patients, Transaction Subtype: (blank), Patient #: (blank), Transaction #: (blank), User Initials: AD, Start Date: Jun 1, 2018, and End Date: Jun 30, 2018. A 'Search' button is visible. The data table has columns: Transaction ID, Patient Number, Transaction Date, User Initials, Piece Type, and IP Address. The 'Patient Number' column is highlighted in blue, the 'Transaction Date' column is highlighted in red, and the 'Piece Type' column is highlighted in green. Callouts provide additional context: a purple callout points to the search filters stating 'Could leave blank to pull ALL users data, staff and all. To be filtered as needed in Excel.'; a green callout points to the 'Piece Type' column stating 'Various Types of Transaction Types (describes the type of task being done in the EMR chart. Could be filtered to analyze different types of tasks.'; a blue callout points to the 'Patient Number' column stating 'Data could be filtered to unique patient numbers if needed.'; and a red callout points to the 'Transaction Date' column stating 'All tasks are date and time stamped. Could be filtered to isolate after-hours and weekends.'

Transaction ID	Patient Number	Transaction Date	User Initials	Piece Type	IP Address
14575763		619 Jun 1, 2018 09:02	AD (Adam Stewart, Doctor)	Patient Viewings	
14575773		657 Jun 1, 2018 09:03	AD (Adam Stewart, Doctor)	Patient Viewings	
14575781		657 Jun 1, 2018 09:03	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575782		657 Jun 1, 2018 09:03	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575784		3975 Jun 1, 2018 09:03	AD (Adam Stewart, Doctor)	Patient Viewings	
14575789		3975 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575790		3983 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	Patient Viewings	
14575794		3983 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575795		6567 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	Patient Viewings	
14575801		6567 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	290 (Custom Form)	
14575802		6567 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575803		6567 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575806		6568 Jun 1, 2018 09:04	AD (Adam Stewart, Doctor)	Patient Viewings	
14575808		6568 Jun 1, 2018 09:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575809		6568 Jun 1, 2018 09:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14575811		12371 Jun 1, 2018 09:05	AD (Adam Stewart, Doctor)	Patient Viewings	
14575814		12371 Jun 1, 2018 09:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	

- Here are the types of EMR activity (“Piece Types”) that come up in the Transaction Type searches that are relevant to this project:
  - **A search of “EMR Activity” searches for:**
    - Prescriptions Faxed
    - Prescriptions Printed
    - Search Run
    - Report Printed
    - Patient Records Emailed
    - Patient Records Faxed
    - Patient Records Printed
    - Patient Records Exported
  
  - **A search of “Patients” searches for:**
    - Progress Note
    - Letter Sent
    - Treatment
    - Pending Test
    - Custom Form
    - Medical Report
    - Lab Data
    - Risk Factor Block
    - Family History
    - Problem List
    - Past Health
    - Refused Intervention
    - Demographics
    - Patient Viewings
  
  - **A search of “Email” can differentiate between:**
    - Manual Send
    - Batch Letter

- Other categories of searches just search for single Piece Type.
  - For example, searching the Transaction Type “Lab Preview” only retrieves “Lab Preview” EMR activities:

The screenshot shows a window titled "Transaction Log" with a "File" menu. The search filters are as follows:

- Transaction Type: Lab Preview (highlighted in yellow)
- Transaction Subtype: (empty)
- Patient #: (empty)
- Transaction #: (empty)
- User Initials: AD
- Start Date: ← Apr 19, 2019 →
- End Date: ← Apr 19, 2019 →

A blue "Search" button is located to the right of the date fields. A green arrow points from the "Transaction Type" dropdown to the "Piece Type" column in the results table below.

Transaction ID	Patient Num...	Transaction Date	User Initials	Piece Type	IP Address
16892526	12200	Apr 19, 2019 07:58	AD (Adam Stewart, Doctor)	Lab Preview	
16892527	330	Apr 19, 2019 07:58	AD (Adam Stewart, Doctor)	Lab Preview	
16892528	729	Apr 19, 2019 07:58	AD (Adam Stewart, Doctor)	Lab Preview	
16892529	1130	Apr 19, 2019 07:58	AD (Adam Stewart, Doctor)	Lab Preview	
16892530	9952	Apr 19, 2019 07:58	AD (Adam Stewart, Doctor)	Lab Preview	
16892531	9952	Apr 19, 2019 07:58	AD (Adam Stewart, Doctor)	Lab Preview	

The "Transaction Details" section below the table is empty. A red callout bubble points to the "Lab Preview" entries in the table with the text: "Only 'Lab Preview' EMR activity is reported in this search". A "Done" button is located at the bottom right of the window.

## The “Transaction Details” Window:

- A search within the transaction log retrieves all the applicable transactions, line by line, under the columns “Transaction ID”, “Patient Number”, “Transaction Date”, etc.
- Each of these lines can be drilled down for additional details by highlighting the transaction in the list.

Transaction Log

File

Transaction Type: Patient Viewings

Transaction Subtype:

Patient #:

Transaction #:

User Initials: AD

Start Date: Apr 1, 2019

End Date: Apr 19, 2019

Search

Transaction ID	Patient Number	Transaction Date	User Initials	Piece Type	IP Address
16757082	7262	Apr 1, 2019 08:01	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757099	9052	Apr 1, 2019 08:02	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757737	7040	Apr 1, 2019 08:28	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757775	2045	Apr 1, 2019 08:30	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757788	9443	Apr 1, 2019 08:31	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16758595	7577	Apr 1, 2019 09:13	AD (Adam Stewart, Doc...	Patient Viewings	AdamSOOffice.CHEHT2.1

Transaction Details

Done

This is blank unless a specific transaction is highlighted in the search results

Transaction Log

File

Transaction Type: Patient Viewings

Transaction Subtype:

Patient #:

Transaction #:

User Initials: AD

Start Date: Apr 1, 2019

End Date: Apr 19, 2019

Search

Transaction ID	Patient Number	Transaction Date	User Initials	Piece Type	IP Address
16757082	7262	Apr 1, 2019 08:01	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757099	9052	Apr 1, 2019 08:02	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757737	7040	Apr 1, 2019 08:28	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757775	2045	Apr 1, 2019 08:30	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16757788	9443	Apr 1, 2019 08:31	AD (Adam Stewart, Doc...	Patient Viewings	10.242.2.2/10.242.2.2
16758595	7577	Apr 1, 2019 09:13	AD (Adam Stewart, Doc...	Patient Viewings	AdamSOOffice.CHEHT2.1

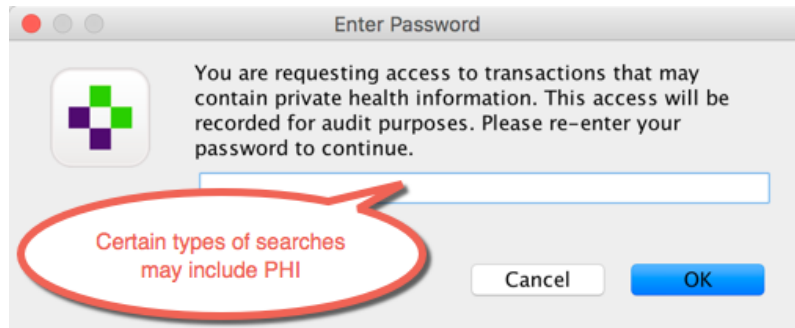
Transaction Details

Patient View Log Entry  
 Patient Number: 7040  
 Viewed by user: AD (Adam Stewart, Doctor)  
 Date Viewed: 2019-04-01T08:28:59-05:00  
 Viewer IPAddress: 10.242.2.2/10.242.2.2

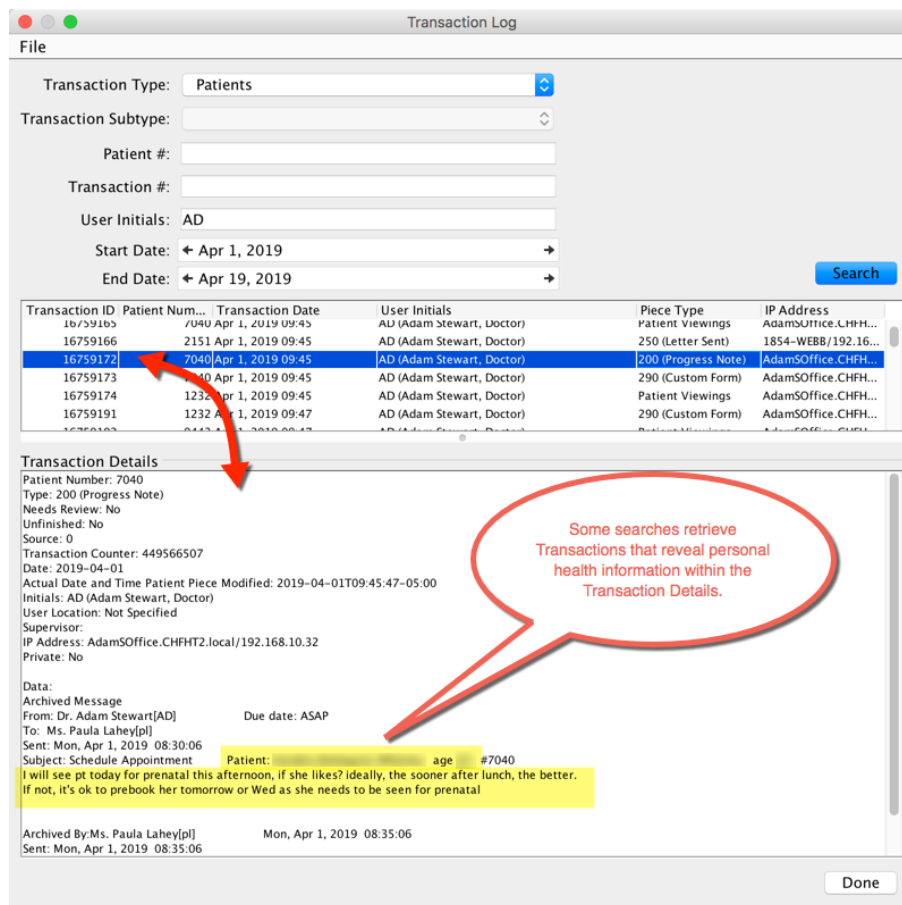
NOTE: none of the Transaction Details here contain Personal Health Information.  
 (Searching “Patient Viewings” never reveals any personal nor sensitive information.)

Done

- Note that in the search above, none of the Transaction Details contain any Personal Health Information (PHI).
- Certain types of searches will reveal PHI, though.
  - Before these searches can be performed, they require the user to enter her/his password.



- For example, searching the Transaction Type “Patients” can reveal PHI:





**NOTE:**

Searching the Transaction Type **“Patient Viewings”** does **NOT** reveal any Personal Health Information and does **NOT** require user password entry.

Whereas, searching the Transaction Type **“EMR Activity,” “Messages,” “Email,”** or **“Patients”** **DOES** reveal Personal Health Information and **DOES** require password entry.

**This is an important reason why “Patient Viewings” will be suggested as a simplified surrogate metric for meaningful EMR activity.**

## Completing the Transaction Log Search:

- NOTE: the search only pulls 1001 lines of data at a time. Need to repeatedly scroll down to the bottom and click "Fetch more rows" until that option is no longer available.

Transaction Log

File

Transaction Type: Patients

Transaction Subtype:

Patient #:

Transaction #:

User Initials: AD

Start Date: Jun 1, 2018

End Date: Jun 30, 2018

Search

Transaction ID	Patient Number	Transaction Date	User Initials	IP Address
14587421	5621	Jun 4, 2018 11:29	AD (Adam Stewart, Doct	
14587422	12370	Jun 4, 2018 11:29	AD (Adam Stewart, Docto	
14587424	12370	Jun 4, 2018 11:29	AD (Adam Stewart, Doctor)	
14587425	4629	Jun 4, 2018 11:29	AD (Adam Stewart, Doctor)	
14587433	4629	Jun 4, 2018 11:29	AD (Adam Stewart, Doctor)	
14587434	4629	Jun 4, 2018 11:29	AD (Adam Stewart, Doctor)	
14587438	5914	Jun 4, 2018 11:30	AD (Adam Stewart, Doctor)	
14587456	1912	Jun 4, 2018 11:32	AD (Adam Stewart, Doctor)	
14587471	12406	Jun 4, 2018 11:33	AD (Adam Stewart, Doctor)	
14587485	12406	Jun 4, 2018 11:35	AD (Adam Stewart, Doctor)	
14587486	12406	Jun 4, 2018 11:35	AD (Adam Stewart, Doctor)	
14587487	12406	Jun 4, 2018 11:35	AD (Adam Stewart, Doctor)	
14587500	12406	Jun 4, 2018 11:36	AD (Adam Stewart, Doctor)	
14587577	12406	Jun 4, 2018 11:37	AD (Adam Stewart, Doctor)	
14587579	12406	Jun 4, 2018 11:37	AD (Adam Stewart, Doctor)	

Fetch more rows...

Transaction Details

The Search only pulls 1001 transactions at a time. Large date ranges will have THOUSANDS of transactions. So, need to keep scrolling down and clicking "Fetch more rows" until that option is no longer available (meaning all the data has been pulled).

Done

- If OntarioMD and/or EMR Vendors are building custom searches for this project, it is assumed they will be programmed to automatically pull the full set of data automatically all at once.

## Exporting the Data from the Transaction Log:

- Once all the data lines are showing (i.e. there are no further “rows to fetch”), highlight any transaction line and “select all”:

Transaction Log

File

Transaction Type: Patients

Transaction Subtype:

Patient #:

Transaction #:

User Initials: AD

Start Date: Jun 1, 2018

End Date: Jun 30, 2018

Search

Transaction ID	Patient Number	Transaction Date	User Initials	Piece Type	IP Address
14739631	13623	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739632	13623	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	33 (Personal Traits)	
14739633	13763	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739635	13763	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	33 (Personal Traits)	
14739636	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739637	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739639	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739640	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739641	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739643	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	290 (Custom Form)	
14739644	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	965 (Past Health)	
14739645	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739647	1591	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	290 (Custom Form)	
14739648	1591	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739649	7521	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739655	7521	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739656	6499	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	600 (Lab Data)	

Transaction Details

Patient Number: 1591

Type: 600 (Lab Data)

Needs Review: No

Unfinished: No

Source: 34

Transaction Counter: 425734806

Date: 2018-06-28T09:20:00-05:00

Actual Date and Time Patient Piece Modified: 2018-06-29T12:39:23-05:00

Initials: AD (Adam Stewart, Doctor)

User Location: Not Specified

Supervisor:

Private: No

Data:

Done

Click on any of the transactions to highlight it.

Then press Control+A to "Select All" [Command+A on Mac computers]

Transaction Log

File

Transaction Type: Patients

Transaction Subtype:

Patient #:

Transaction #:

User Initials: AD

Start Date: Jun 1, 2018

End Date: Jun 30, 2018

Search

Transaction ID	Patient Number	Transaction Date	User Initials	Piece Type	IP Address
14739644	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doc...	965 (Past Health)	AdamSOOffice.CHFHT2.1...
14739645	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doc...	Patient Viewings	AdamSOOffice.CHFHT2.1...
14739647	1591	Jun 29, 2018 12:40	AD (Adam Stewart, Doc...	290 (Custom Form)	AdamSOOffice.CHFHT2.1...
14739648	1591	Jun 29, 2018 12:40	AD (Adam Stewart, Doc...	965 (Past Health)	AdamSOOffice.CHFHT2.1...
14739649	7521	Jun 29, 2018 12:40	AD (Adam Stewart, Doc...	600 (Lab Data)	AdamSOOffice.CHFHT2.1...
14739655	7521	Jun 29, 2018 12:40	AD (Adam Stewart, Doc...	Patient Viewings	AdamSOOffice.CHFHT2.1...

Transaction Details

Patient Number: 1591

Type: 600 (Lab Data)

Needs Review: No

Unfinished: No

Source: 34

Transaction Counter: 425734806

Date: 2018-06-28T09:20:00-05:00

Actual Date and Time Patient Piece Modified: 2018-06-29T12:39:23-05:00

Initials: AD (Adam Stewart, Doctor)

User Location: Not Specified

Supervisor:

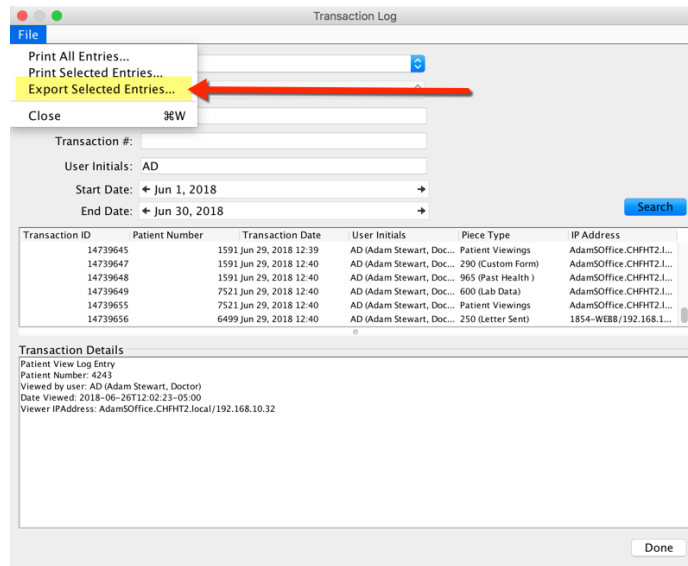
Private: No

Data:

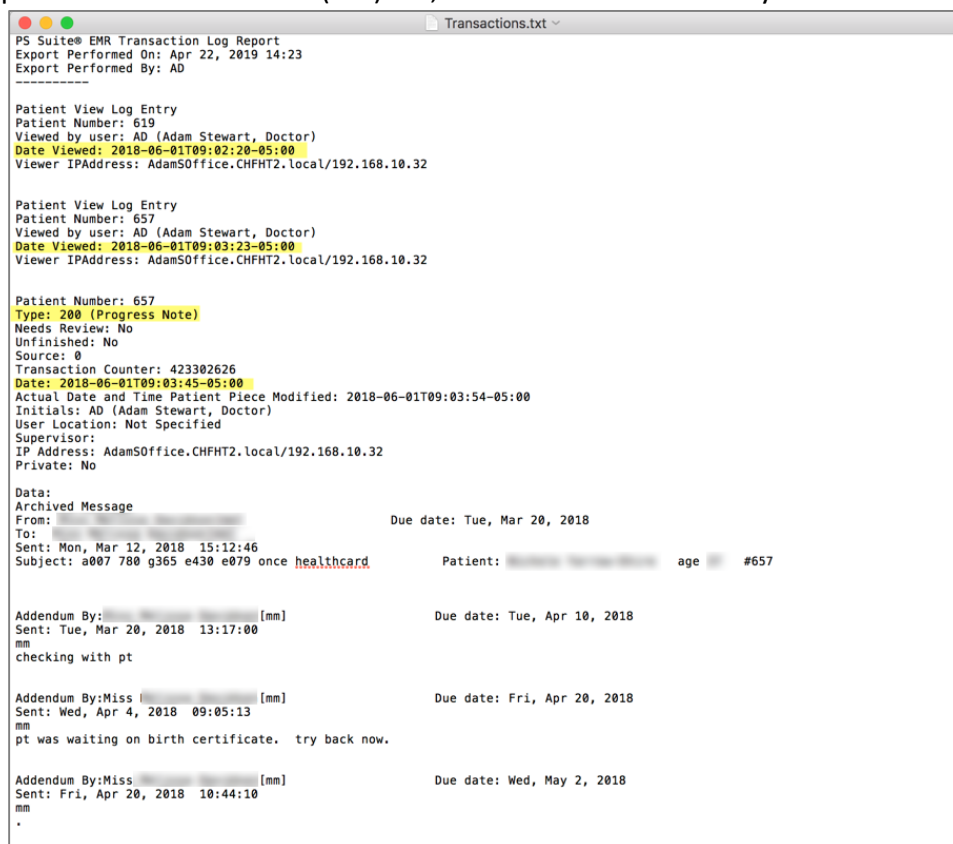
Done

"Control + A" select ALL the thousands of transactions, as shown here were all are highlighted.

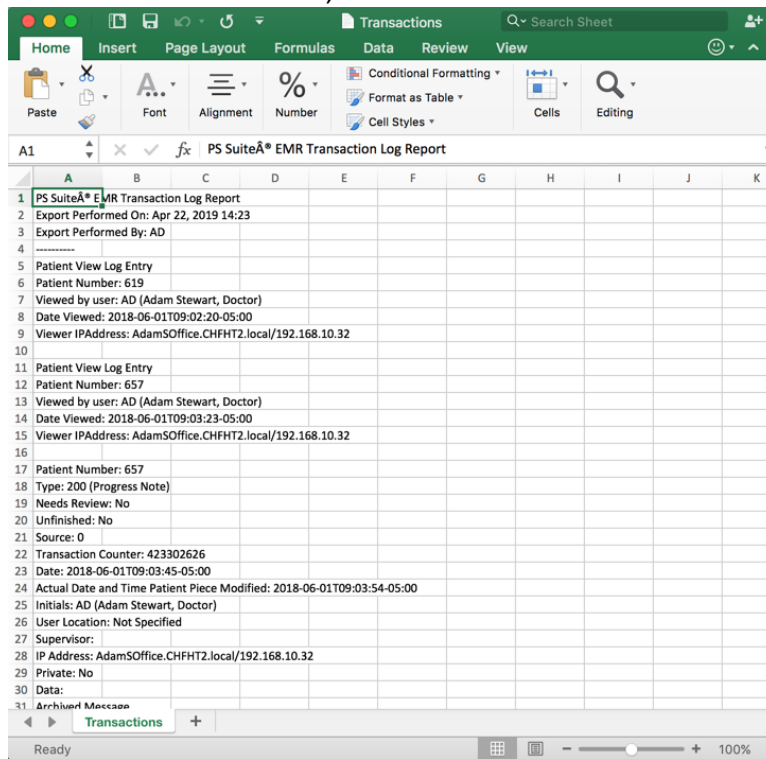
- The official explicit way to to “Export” Transaction Log entries is of little practical use.
  - From within the Transaction Log window:
  - go to FILE → Export Selected Entries



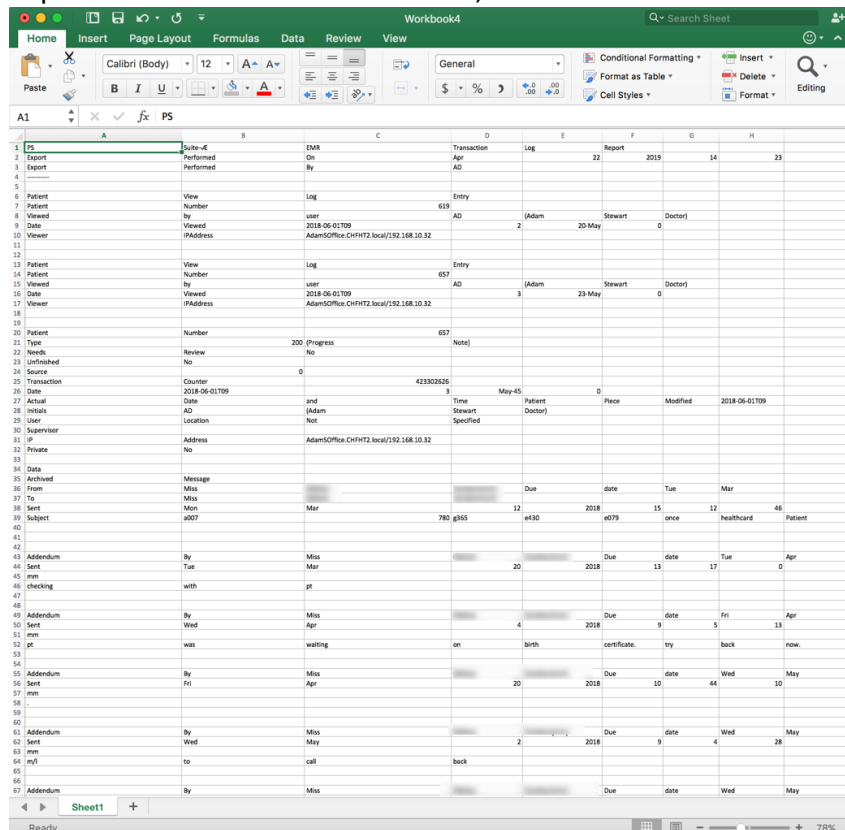
- This exports the data as a TEXT (.txt) file, which is of minimal analyzable value:



- Even when opened in Excel as a .txt file, it is not useful:



- Even when imported to Excel as Tab Delineated, it is still not that useful”



- **FORTUNATELY**, the Transaction Log search results can all simply be “Copy and Pasted” in organized columns.
  - After typing “Control + A” to select and highlight ALL the transaction items,
  - Then type “Control + C” to COPY:

The screenshot shows a window titled "Transaction Log" with a search interface and a table of results. The search filters are: Transaction Type: Patients, Transaction Subtype: (empty), Patient #: (empty), Transaction #: (empty), User Initials: AD, Start Date: Jun 1, 2018, End Date: Jun 30, 2018. A "Search" button is visible. The table below has columns for Transaction ID, Patient Number, Transaction Date, User Initials, Piece Type, and IP Address. All rows in the table are highlighted in blue. A red callout bubble points to the table with the following text:

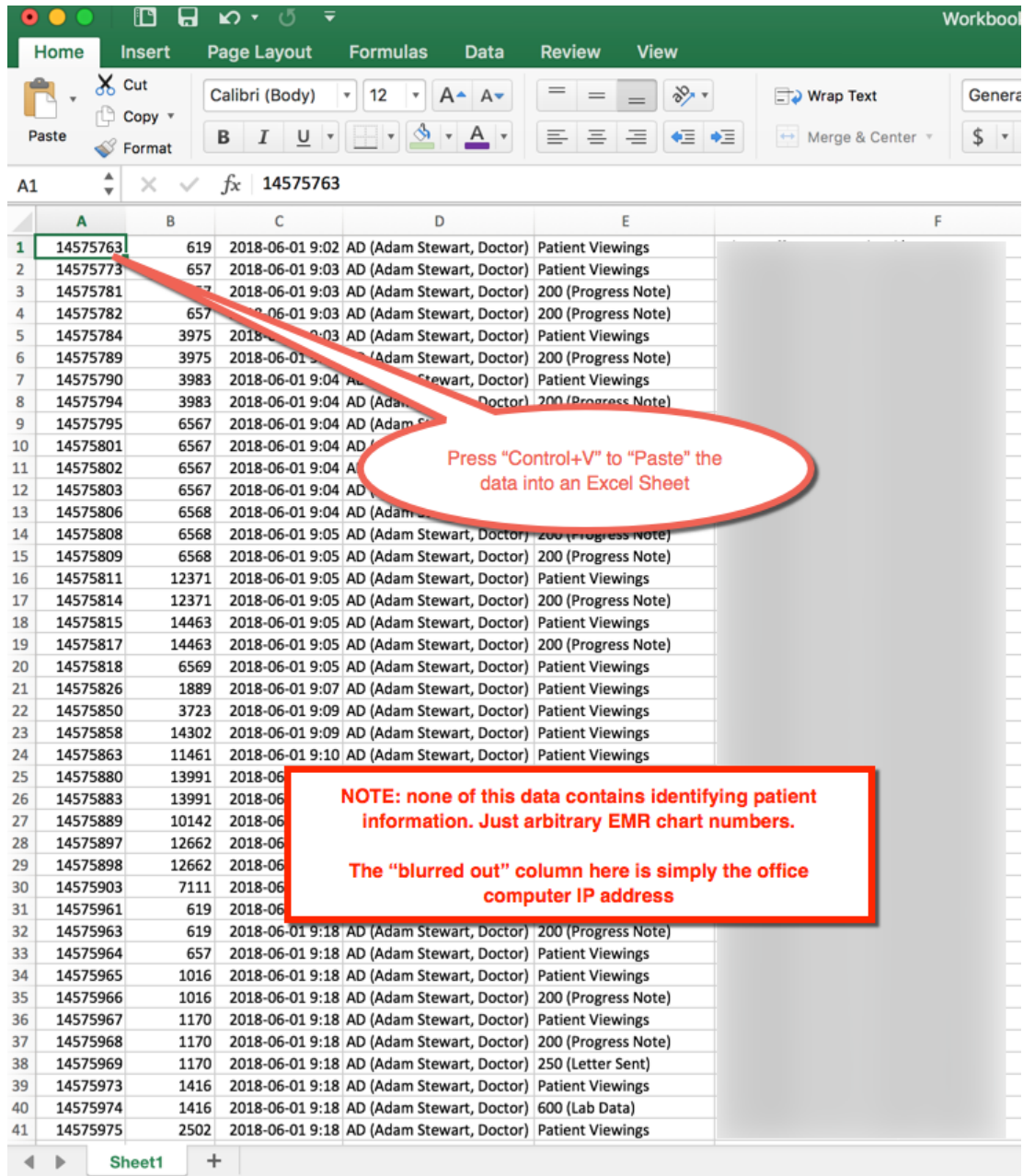
Once all the results are highlighted,  
Press "Control+C" to "Copy All"  
[Command+C on Mac computers]

At the bottom right of the window is a "Done" button.

Transaction ID	Patient Number	Transaction Date	User Initials	Piece Type	IP Address
14739631	13623	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739632	13623	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	33 (Personal Traits)	
14739633	13763	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739635	13763	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	33 (Personal Traits)	
14739636	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739637	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739639	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739640	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739641	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739643	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	290 (Custom Form)	
14739644	1720	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	965 (Past Health )	
14739645	1591	Jun 29, 2018 12:39	AD (Adam Stewart, Doctor)	Patient Viewings	
14739647	1591	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	290 (Custom Form)	
14739648	1591	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	965 (Past Health )	
14739649	7521	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	600 (Lab Data)	
14739655	7521	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	Patient Viewings	
14739656	6499	Jun 29, 2018 12:40	AD (Adam Stewart, Doctor)	250 (Letter Sent)	

Transaction Details  
Patient View Log Entry  
Patient Number: 619  
Viewed by user: AD (Adam Stewart, Doctor)  
Date Viewed: 2018-06-01T09:02:20-05:00  
Viewer IP Address:

- Then open up a blank Excel spreadsheet and paste the data in it:



- Note that the Transaction Details are not included in this data set, but they are not required for the purposes of this project. Plus, there is no way that confidential Personal Health Information is included using this method either.

- Add Headers to the Columns, if desired:

	A	B	C	D	E	F
1	Transaction ID	Patient #	Date & Time	User Initials	Type of Task	IP Address
2	14575763	619	2018-06-01 9:02	AD (Adam Stewart, Doctor)	Patient Viewings	
3	14575773	657	2018-06-01 9:03	AD (Adam Stewart, Doctor)	Patient Viewings	
4	14575781	657	2018-06-01 9:03	AD (Adam Stewart, Doctor)	200 (Progress Note)	
5	14575782	657	2018-06-01 9:03	AD (Adam Stewart, Doctor)	200 (Progress Note)	
6	14575784	3975	2018-06-01 9:03	AD (Adam Stewart, Doctor)	Patient Viewings	
7	14575789	3975	2018-06-01 9:04	AD (Adam Stewart, Doctor)	200 (Progress Note)	
8	14575790	3983	2018-06-01 9:04	AD (Adam Stewart, Doctor)	Patient Viewings	
9	14575794	3983	2018-06-01 9:04	AD (Adam Stewart, Doctor)	Patient Viewings	
10	14575795	6567	2018-06-01 9:04	AD (Adam Stewart, Doctor)	Patient Viewings	
11	14575801	6567	2018-06-01 9:04	AD (Adam Stewart, Doctor)	Patient Viewings	
12	14575802	6567	2018-06-01 9:04	AD (Adam Stewart, Doctor)	Patient Viewings	
13	14575803	6567	2018-06-01 9:04	AD (Adam Stewart, Doctor)	200 (Progress Note)	
14	14575806	6568	2018-06-01 9:04	AD (Adam Stewart, Doctor)	Patient Viewings	
15	14575808	6568	2018-06-01 9:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	
16	14575809	6568	2018-06-01 9:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	
17	14575811	12371	2018-06-01 9:05	AD (Adam Stewart, Doctor)	Patient Viewings	
18	14575814	12371	2018-06-01 9:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	
19	14575815	14463	2018-06-01 9:05	AD (Adam Stewart, Doctor)	Patient Viewings	
20	14575817	14463	2018-06-01 9:05	AD (Adam Stewart, Doctor)	200 (Progress Note)	
21	14575818	6569	2018-06-01 9:05	AD (Adam Stewart, Doctor)	Patient Viewings	
22	14575826	1889	2018-06-01 9:07	AD (Adam Stewart, Doctor)	Patient Viewings	
23	14575850	3723	2018-06-01 9:09	AD (Adam Stewart, Doctor)	Patient Viewings	
24	14575858	14302	2018-06-01 9:09	AD (Adam Stewart, Doctor)	Patient Viewings	
25	14575863	11461	2018-06-01 9:10	AD (Adam Stewart, Doctor)	Patient Viewings	
26	14575880	13991	2018-06-01 9:11	AD (Adam Stewart, Doctor)	Patient Viewings	
27	14575883	13991	2018-06-01 9:11	AD (Adam Stewart, Doctor)	290 (Custom Form)	
28	14575889	10142	2018-06-01 9:12	AD (Adam Stewart, Doctor)	Patient Viewings	
29	14575897	12662	2018-06-01 9:12	AD (Adam Stewart, Doctor)	Patient Viewings	
30	14575898	12662	2018-06-01 9:12	AD (Adam Stewart, Doctor)	290 (Custom Form)	
31	14575903	7111	2018-06-01 9:13	AD (Adam Stewart, Doctor)	Patient Viewings	
32	14575961	619	2018-06-01 9:18	AD (Adam Stewart, Doctor)	Patient Viewings	
33	14575963	619	2018-06-01 9:18	AD (Adam Stewart, Doctor)	200 (Progress Note)	
34	14575964	657	2018-06-01 9:18	AD (Adam Stewart, Doctor)	Patient Viewings	
35	14575965	1016	2018-06-01 9:18	AD (Adam Stewart, Doctor)	Patient Viewings	
36	14575966	1016	2018-06-01 9:18	AD (Adam Stewart, Doctor)	200 (Progress Note)	
37	14575967	1170	2018-06-01 9:18	AD (Adam Stewart, Doctor)	Patient Viewings	
38	14575968	1170	2018-06-01 9:18	AD (Adam Stewart, Doctor)	200 (Progress Note)	
39	14575969	1170	2018-06-01 9:18	AD (Adam Stewart, Doctor)	250 (Letter Sent)	
40	14575973	1416	2018-06-01 9:18	AD (Adam Stewart, Doctor)	Patient Viewings	
41	14575974	1416	2018-06-01 9:18	AD (Adam Stewart, Doctor)	600 (Lab Data)	

Insert a Column at top and add corresponding Headers

Note: the Date and time were automatically formatted correctly when pasted here, but some users may need/want to reformat the date and times, if needed.

From here, the data can be sorted, filtered, and analyzed based on date, time, user ID, Type of work, etc.



## **“Patient Viewings” Equals Work:**

As noted above in Pages 3 to 9, there are a number of different types of data that can be searched via the Transaction Log. Some of these searches may contain Personal Health Information and require User Passwords, whereas some do not.

“Patient Viewings” are time-stamped EMR activity where the user has opened a patient chart.

Some have criticized this Transaction Type, arguing that simply opening an EMR chart does not necessarily mean that true work was being done.

I maintain that whenever a physician opens a EMR chart, it is related to patient care and not simply “for the fun of it.”

To support this, I have explored the data even further.

Using the data extraction method for “Patient Viewings”, EMR data proves that I viewed patient charts on 310 unique days throughout the 2017 year. (*Refer to section on “EMR Data Extraction” on my website for complete details: <https://www.stewartmedicine.com/oma/relativity-and-negotiations/>*).

I have since extracted more granular data from my EMR, and limited it to the just the following **four** types of EMR Activity:

- ***Writing a progress note.***
- ***Sending a letter.***
- ***Charting with a “Custom Form” (PDF-like tools in TELUS EMR).***
- ***Reviewing lab data.***

**When the data is filtered down to just these specific tasks, the results show that I performed this EMR work on 306 unique days in 2017.**

**Thus, for this purpose, “Patient Viewings” was a 99% accurate surrogate marker for these 4 types of EMR activities.**

***What is even more to the point: in 2017 I only billed OHIP on 206 days compared to the 310 days I have documented proof that I was actually working.***

I then dove deeper into this data. In 2017, our FHO had five physicians. So, I pulled the same data for all five of our physicians.

For the 2017 year, the data is as follows:

<b>Doctor</b>	<b># Days Based on "Patient Viewings"</b>	<b># Days Based on Granular "Progress Note", "Letter", "Custom Form", or "Lab Data"</b>	<b>Percentage Accuracy</b>
<b>Adam Stewart</b>	310	306	99%
<b>2</b>	309	299	97%
<b>3</b>	260	211	81%
<b>4</b>	252	251	100%
<b>5</b>	239	237	99%

**As an optional step in this EMR Data Project, it may be beneficial to validate the accuracy of "Patient Viewings" as a surrogate metric by analyzing a representative sample population.**

**Alternatively, if OntarioMD and EMR Vendors can develop a solution that can pull the more granular data without containing Personal Health Information, then this would be the more ideal solution anyway.**

## Analyzing the Data:

- Regardless of whether the data pulled is “Patient Viewings” or more granular data, the fundamental question remains:

**“What defines a DAY of work?”**

- This may evolve depending on what formula the OMA and Government use for Relativity and Negotiations discussions.
- At this time, under CANDI, any unique day with at least *one* OHIP code billed counts as a “day” of work since a “day” is the smallest incremental unit that CANDI uses.
- Accordingly, is a “day” of work not also defined as at least *one* meaningful patient-care-related EMR Activity?
  - If not, then how many EMR Activities are required to count as a “day”?
  - Is it completing work in at least 3 unique charts? 5 charts? 10 charts?

- ***NOTE: current time-stamped EMR activity only documents the start time of each activity. It says nothing about the time spent on that one activity.***
  - For instance, how does one account for one doctor spending 30 minutes reviewing a single chart versus a doctor simply checking off a lab report within 30 seconds?

- With time-stamped EMR data, it could be possible to get more granular and document “hours” worked. Then a similar question remains:

**“What defines an HOUR of work?”**

- If CANDI counts even *one* OHIP billing as a “day” of work, then surely one meaningful EMR activity constitutes an “hour” of work?