Healthcare Vertical Demo Script

This demo serves to replace the “Superstore” demo when working with healthcare institutions. The main advantage it has over Superstore is a far more relevant data source**. The table contains a line for each patient medical claim record.** There is info on Payer, reject/accept status, place of service, and geographical information. Regarding order of content, Tableau Server can be shown before or after this desktop portion depending on emphasis. For those wishing to position Tableau as the ad-hoc discovery and analysis tool start in desktop, for those positioning as part of a reporting workflow starting in desktop or server both work.

INTRO:

I am an analyst at ACME Healthcare. I was told that our Claims Department wanted to see a report that will give them some insight about our rejected claims. Although I have been using excel to analyze my data, I have found that this process can be time consuming and once I’m finished, it can be a pain to get the report distributed to the right people.

For these reasons, I am going to create the report in tableau desktop instead and then publish it to Tableau Server so that it can be viewed by the relevant users whenever they want.

CONNECTING TO DATA:

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| *The first thing that we need to do to start building out our report is to connect to our data*  ***NOTE: use this time to walk through our data connection pane, also show how to connect to certain databases that might be more relevant to their use case.*** | * Drag Medical Claims into the view * Drag Member Info – Policy Into the view * Double check that the join is an inner join on the Patient ID field for both tables | A screenshot of a cell phone  Description automatically generated |

Sheet 1: Rejection Reasons

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| *Now that I’m connected to data, I can begin doing some analysis.*  *One thing I’m interested in answering is WHY my claims are being rejected. Looking through my list of dimensions, I notice a field titled “Rejection Reasons” This would probably be a good place to start.*  ***NOTE: When I drag rejection reasons to rows, I can see that the Null category by far has the most number Records. This is because we have not filtered out the claims that were accepted.***  ***When I exclude the null values the Rejection Reasons pill is added to the filters shelf. If I edit the filter I can see my options for filtering***  *I can clearly see that “Additional Information Needed by Doctor” is responsible for most of my rejected claims. This is a good viz that directly answers our first question so let’s move on to some other analysis.* | * Drag "Rejection Reasons" on to rows * Drag Number of Records onto columns * exclude Null values * -Sort be Descending * Drag Number of Records to label * OPTIONAL: create new group on Rejection Reasons titled “Administrative Issues” containing “Awaiting Transfer Documents”, “Missing Information, and “Waited too long to file claim” | A screenshot of a cell phone  Description automatically generated  A screenshot of a social media post  Description automatically generated |

Sheet 2: Rejections Over Time

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| *Now that I’ve answered the WHY, I want to answer the WHEN. Specifically I’d like to see if there is a trend In how often our claims are being rejected over time.*  *To do this, I was thinking about using a measure that gives me the ratio of rejected claims vs. total claims that are made, however, if I look at my measures, I can see that we do not have anything like this in our database, in that case we will have to create one using a calculated field.*  ***NOTE: When you create the rejections reasons calc, it will default to be displayed as a decimal, however we want to see it as a percentage, use this time to explain that tableau allows you to manipulate your data even during the building process*** | * **New Sheet** * Create a Rejection Ratio calculation   Sum([Rejected])/ Sum([Number of Records])   * Drag ‘Rejection Ratio’ to rows * Change ‘Rejection Ratio’ to a percent * Drag MONTH(Start Service Date) to columns * Bring an average line onto the view * Change to show value of avg * Title sheet Claim Rejection Rate | A screenshot of a cell phone  Description automatically generated |

Step 3: Rejection Ratio by Payer

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| *Now that I’ve answered Why and When I want to answer the WHO. I know that my payers, or my insurance carriers, are the group in charge of approving claims, so I think a good start would be to see how many claims were rejected by each payer.*  *So although this tells me who has rejected the most claims, I want to know the odds that my claims are going to be rejected by each payer. So I’m going to replace that sum number of records with my Rejection Ratio Calc*  *Great, so I can clearly see that Humana is the mostly likely to reject a claim, while blue shield blue cross is the mostly likely to accept. This is a good view however, I want to make this more readable at a glance so people can quickly gain these insights. To do this I’m going to create another calculated field to show which of my payers have an above average rejection ratio and which ones have a below average rejection ratio.*  ***NOTE: This is a good time to explain table calcs and how we can use these as a powerful tool to add deeper layers of analysis*** | * **New Sheet** * Drag Rejection Ratio to Columns * Drag Payer to Rows * Drag Charge AMT to columns next to Rejection Ratio * Create a new calculation field titled "Coloring" * Coloring =   IF  [Rejection Ratio] > Window\_AVG([Rejection Ration])  THEN "Above Average"  ELSE "Below Average"  END   * Drag Coloring onto Color on the marks card * Change Colors so that "Above Average" is highlighted in Orange and "Below Average" Is highlighted in Blue * OPTIONAL: Remove "Coloring" from the Charge AMT Tab and replace with Charge AMT * 7) OPTIONAL: Drag a reference line onto Rejection Ration to display more visually which Payers are above or below average | **A screenshot of a cell phone  Description automatically generated**  **A picture containing screenshot  Description automatically generated**  **A screenshot of a cell phone  Description automatically generated**  A screenshot of a cell phone  Description automatically generated |

Sheet 4: Patient Map

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| *Now that we have a good picture about our claims, let’s dive into the finding out where our patients are.*  ***I would like to see where our patients are located.***  ***Looks like most of our patients are from Wisconsin. Land of beer and cheese*** | * **New Sheet** * Double click State of Residence, discuss how dots represent states where you have data * Drag Number of records to color * Title sheet State of Residence |  |

OK - I’ve created several views to gain insights into my rejected claims and patient demographics. Let’s put together a dashboard to share with management

A close up of a map

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* Create Dashboard titled Payer Analysis
* Bring out Patient Map into the view
* Bring out Rejections Over Time to the right of the Map
* Bring out Rejection Ratio by Payer under the Patient Map and Rejections Over Time
* OPTIONAL: Remove Legends and filters from the sidebar
* Add a global filter to each of the Selected viz’s
* Navigate back to Patient Map and add Rejection Reasons to tooltip