

Case Study - US Healthcare - II

Steps	Example In this case
Form a Hypothesis (Ho)	Billing Amount is Independent of Admission Type
Alternate Hypothesis (Ha)	Emergency Admission is Costlier
Test it	Use Average Billing By Admission Type
Fail to reject Ho or Reject Ho	If the difference is Huge, we say Ha is likely true.

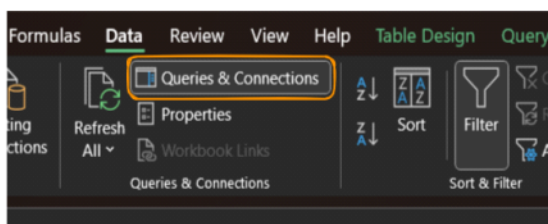
A	B	C	D	E	F
Row Labels	Average of Billing Amount		Admission Type	Average Of Billing Amount	% change in billing amount
Elective	23045.23706		Elective	23045.23706	-1%
Emergency	24289.12126		Emergency	24289.12126	$=(E3-SE$5)/SE5
Urgent	22737.09931		Urgent	22737.09931	-3%
Grand Total	23388.5746			23357.15255	

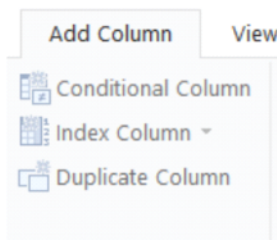
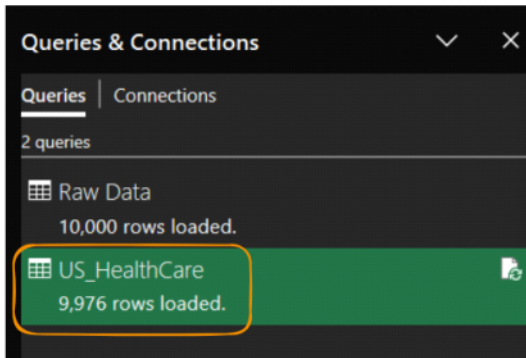
Admission Type	Average Of Billing Amount	% change in billing amount
Elective	23045.23706	-1%
Emergency	24289.12126	4%
Urgent	22737.09931	-3%
	23357.15255	

- > Rejecting the Null Hypothesis[Ho] And Accepting the Alternative Hypothesis.
- > Emergency Admission is Costlier.

Data Enhancement

Age Bucket	Age Range
Young	<35
Middle	<60
Senior	>=60





Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name

Age Bracket

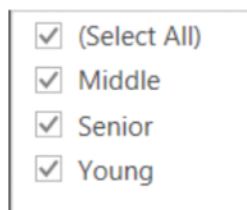
	Column Name	Operator	Value		Output
If	Age	is less than	35	Then	Young
Else If	Age	is less than	60	Then	Middle
Else If	Age	is greater than or...	60	Then	Senior

... Add Clause

Else

NA

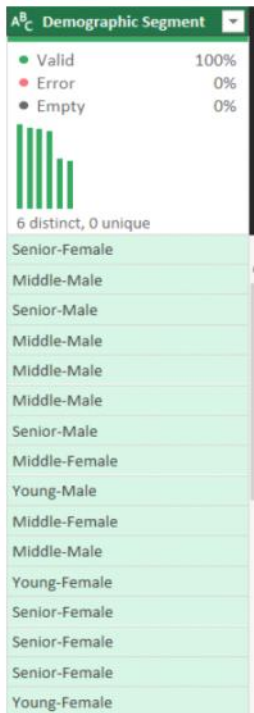
OK Cancel



Demographic column

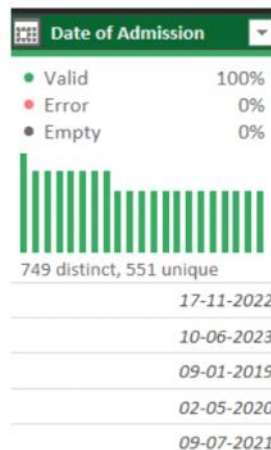
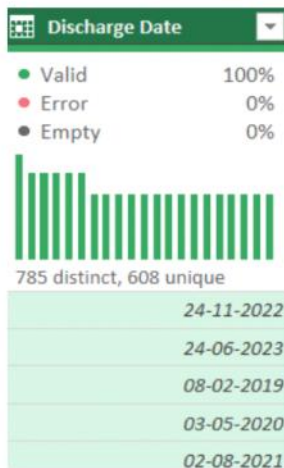
Merging Column of Age Bucket & Gender
(X) - Transform table -> Overwrite the data,
loosing important column.

Rather, we will prefer ADD Column From Example
to create a new column. I can also choose
Merge Column under Add Column Tab.



- ☒ Middle-Female
- ☒ Middle-Male
- ☒ Senior-Female
- ☒ Senior-Male
- ☒ Young-Female
- ☒ Young-Male

Duration of Stay



Custom Column

Add a column that is computed from the other columns.

New column name

Duration Of Stay

Custom column formula

= [Discharge Date] - [Date of Admission]

Available columns

Name
Age
Gender
Blood Type
Medical Condition
Date of Admission
Doctor

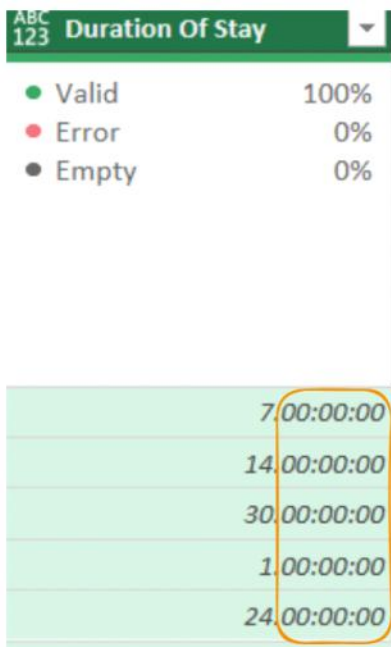
<< Insert

[Learn about Power Query formulas](#)

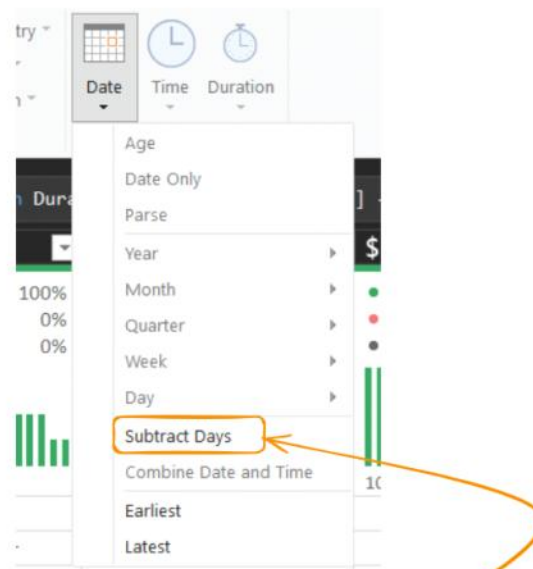
✓ No syntax errors have been detected.

OK

Cancel

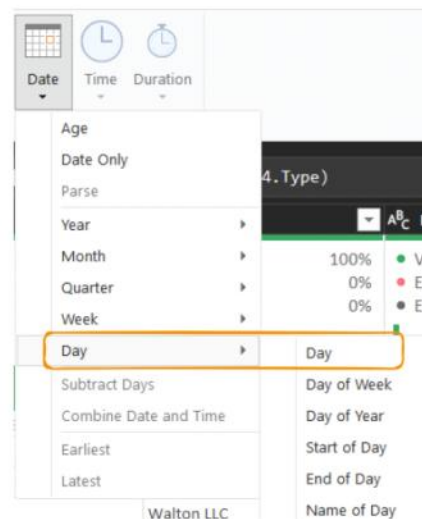
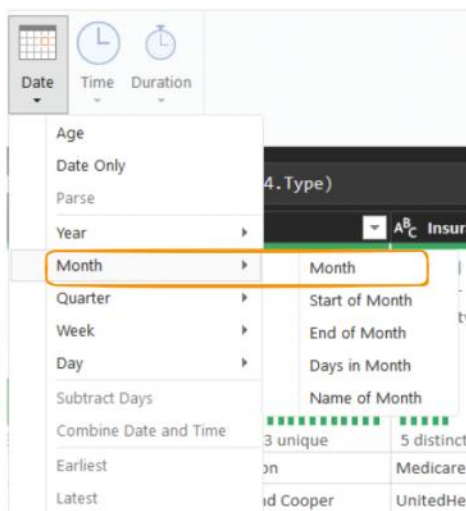
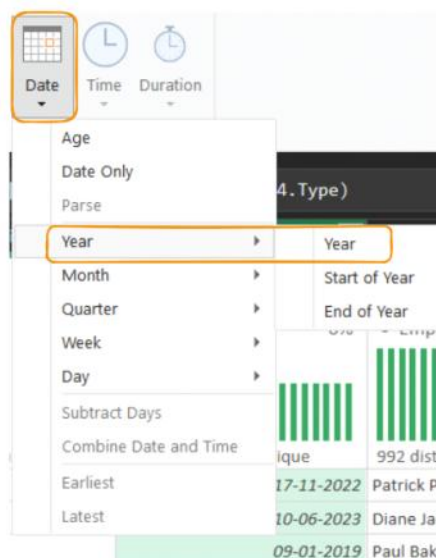


HH:MM:SS



Select Discharge Date and date of admission date

Age Bucket	Demographic Segment	Duration Of Stay	Year	Month	Day
Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%
3 distinct, 0 unique	6 distinct, 0 unique	31 distinct, 0 unique	6 distinct, 0 unique	12 distinct, 0 unique	31 distinct, 0 unique
Senior	Senior-Female	7	2022	11	17
Middle	Middle-Male	14	2023	6	10
Senior	Senior-Male	30	2019	1	9
Middle	Middle-Male	1	2020	5	2
Middle	Middle-Male	24	2021	7	9
Middle	Middle-Male	3	2020	8	20
Senior	Senior-Male	24	2021	3	22
Middle	Middle-Female	10	2019	5	16
Young	Young-Male	5	2020	12	17
Middle	Middle-Female	1	2022	12	15
Middle	Middle-Male	28	2021	4	13
Young	Young-Female	17	2019	6	9
Senior	Senior-Female	8	2021	11	29
Senior	Senior-Female	16	2021	7	29
Senior	Senior-Female	20	2021	6	14



sample_sales_analysis

A	B	C	D	E	F	G	H	I	J
Row Labels	Count of Name			Row Labels	Count of Name			Row Labels	Count of Name
Abbott Inc	8			Hypertension	2150			Female	5062
Acevedo and Sons	1			Cancer	1646			Male	4914
Acevedo LLC	1			Obesity	1622			Grand Total	9976
Acevedo, Rojas and Smith	1			Arthritis	1582				
Acosta and Sons	1			Asthma	1546				
Acosta PLC	1			Diabetes	1430				
Acosta, Saunders and Thompson	1			Grand Total	9976				
Acosta, Thompson and Schultz	1								
Acosta-Bailey	1								
Acosta-Chandler	1								
Acosta-Holmes	1								
Adams and Sons	3								
Adams Group	3								
Adams Inc	4								
Adams Ltd	1								

M	N	O	P	Q	R
Row Labels	Count of Name			Row Labels	Count of Name
A-	1234			2018	303
A+	1238			2019	1965
AB-	1271			2020	2041
AB+	1253			2021	2060
B-	1250			2022	1993
B+	1240			2023	1614
O-	1242			Grand Total	9976
O+	1248				
Grand Total	9976				

Each Year , Count of patient is consistent, as 2018 having only 3 months data, and 2023 having 10 month.