



# Appointment Analysis Summary



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Women in Technology Jul-2022  
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Patients fail to make their appointments consistently cause problems for medical practices. Therefore medical practices trace their no-show rate to realize the impact that can have on their daily processes and their revenue.

To gain insights and identify trend regarding appointments no-shows and which variable is the most important one that affects patient no-show to the appointment, I created visuals using appointment data provided from medical practices.

This dataset Consists of 110,527 total patients with same number of appointments. 14 associated variables. Medical Practice is in Greater Atlanta.

This could be one of the drawbacks for identifying the Patients who would miss the most appointments.

Good to have unique identification number for each patient.

Conyers seems to be the city with most no-shows in percentages, but looking at the number of patients for that specific city, it is an outlier.

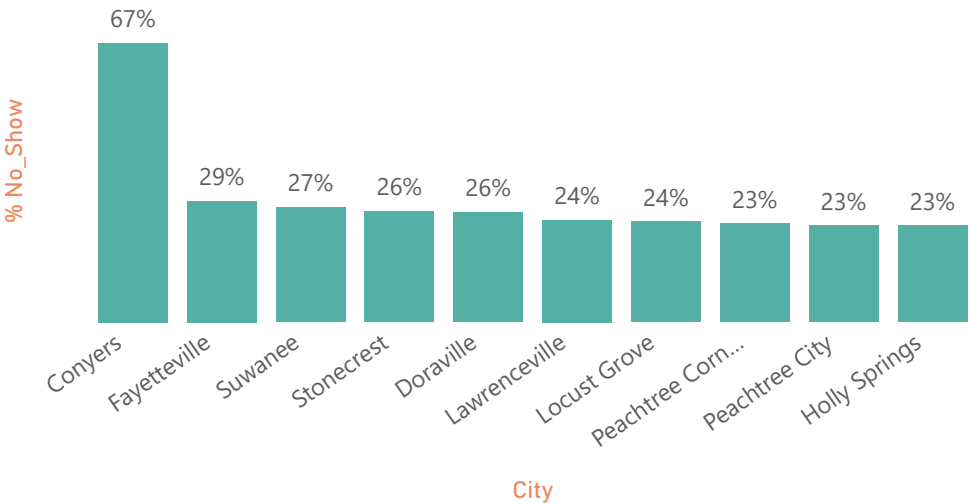
Medical Practice is in Atlanta but 21% of the patients have no-show. so distance may not be the factor.

22,319 total patients didn't show up for their appointments.

Please click on No-Show Analysis button to see the further analysis dash board.

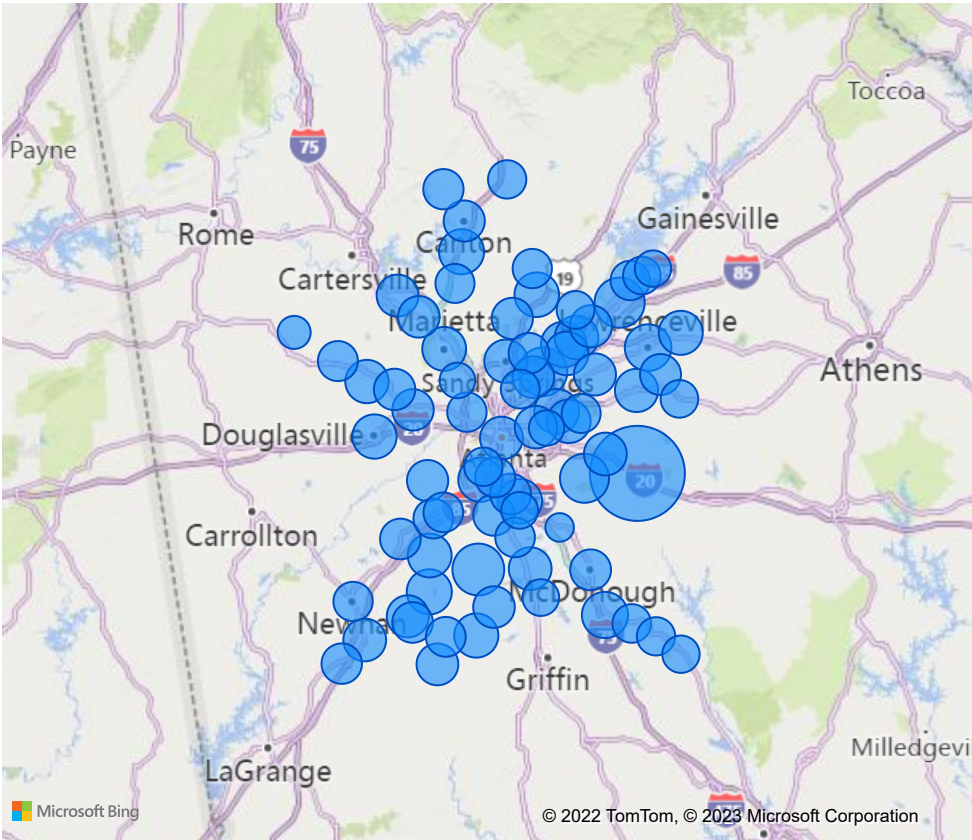
No-Show Analysis

Top-10 Total No-Show Cities



22,319  
Total No-Show

No Show by City



88,208  
Total Show

110,527  
Total Appointment

110,527  
Total Patient



## About this Dashboard

**Use this Dashboard to analyze patients' appointment no-shows based on various factors**

**Health Conditions:**

Hyper tension

Diabetes

Alcoholism

Handicap

No-Show by gender

No-show by days of the week'

No-show based on SMS received or not received

No-Shows by different age groups.

**Select different years to see no-show numbers for above factors.**

**You can also select date and time errors **True** or **False** buttons for checking how schedule errors affected no-Shows.**

Here **True** means error in date/time schedules. **False** means there is no error in date and time schedule.

**For above health conditions **True****- indicates number of no-shows with the mentioned conditions and **False** indicates just the opposite.



# Hospital Appointment No-Show Analysis

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Year: All

Select all

2015

2016

True: **Error**False: **No-Error**

Schedule Error

Time Error

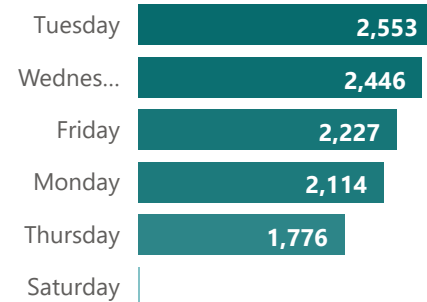
False

True

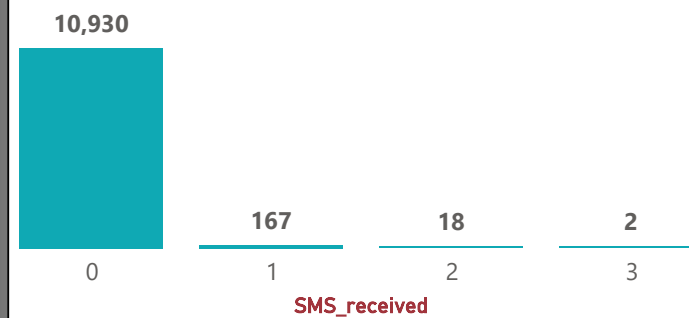
False

True

## Total No-Show by Day-Name



## Total No-Show by SMS\_received



11,117

Total No-Show

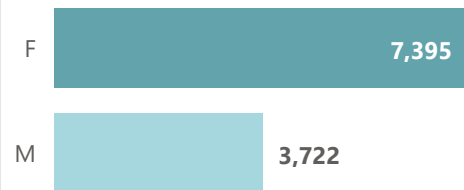
11,117

Total-TimeErr-NoShow

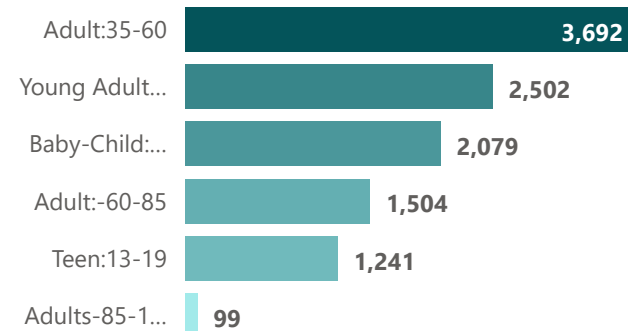
11,117

Total Sch-Error No-Show

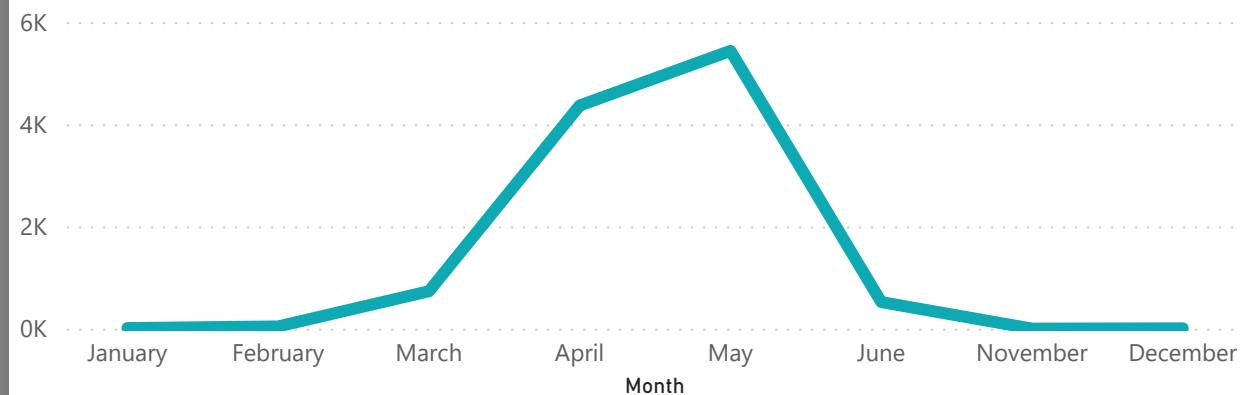
## Total No-Show by Gender



## Total No-Show by Age Bin



## Total No-Show by Month

True: **Condition Exists**False: **Condition doesn't exist**

Handicap

True

5,591

False

5,526

Hypertension

False

9,121

True

1,996

Diabetes

False

10,376

True

741

Alcoholism

False

10,765

True

352



Scheduled Date

Appointment Date

PatientId	Year	Month	Day	Schedule Error	Year	Month	Day
1	2015	November	10	True	2016	May	3
1	2015	December	3	True	2016	May	1
10	2015	December	7	True	2016	June	2
10	2015	December	8	True	2016	May	10
11	2015	December	8	True	2016	May	17
8	2015	December	8	True	2016	May	24
8	2015	December	8	True	2016	May	31
6	2015	December	14	True	2016	May	3
7	2015	December	15	True	2016	June	7
1	2016	January	4	True	2016	May	8
2	2016	January	5	True	2016	April	28
1	2016	January	5	True	2016	May	2
1	2016	January	5	True	2016	May	10
1	2016	January	7	True	2016	May	10
11	2016	January	7	True	2016	May	18
1	2016	January	7	True	2016	May	31
5	2016	January	11	True	2016	April	28
2	2016	January	11	True	2016	May	31
1	2016	January	13	True	2016	May	10
1	2016	January	14	True	2016	May	3
1	2016	January	14	True	2016	May	4
1	2016	January	14	True	2016	May	31
1	2016	January	19	True	2016	May	8



## Summary of my findings

By looking at the all the analysis I have done so far I concluded the following:

- 1) scheduling error seemed the largest problem, but it started declining after May - 2016
- 2) After scheduling error 2nd most missed appointments are due to lack of reminder calls or SMS. Sending more reminders might help.
- 3) Most missed age groups are adults(35-60) and Young Adults.
- 4) Tuesday is the most busy day with the missed appointments. Limit scheduling most missed age groups on Tuesday.
- 5) People with disabilities are the most missed as well . So consider spreading out the scheduling - above age groups, and handicapped patient appointments.