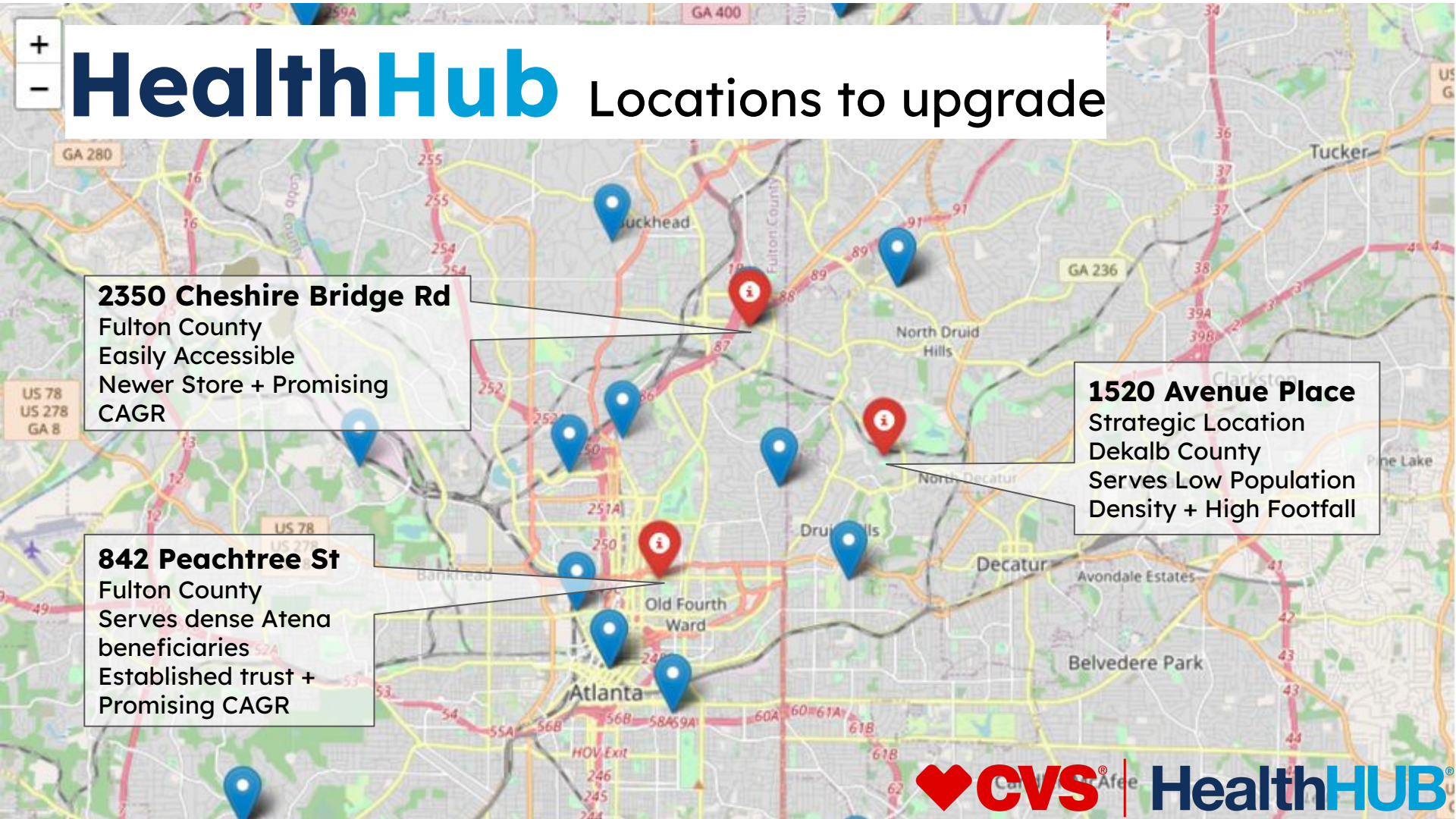
HealthHub Expansion

CVS Health wants to expand the “HealthHub” store format to Atlanta and would like a recommendation on which 3 of the potential 38 current CVS stores to convert.


HealthHub Locations to upgrade
2350 Cheshire Bridge Rd
Fulton County
Easily Accessible
Newer Store + Promising CAGR
1520 Avenue Place
Strategic Location
Dekalb County
Serves Low Population Density + High Footfall
842 Peachtree St
Fulton County
Serves dense Atena beneficiaries
Established trust + Promising CAGR
GA 400
GA 280
GA 236
US 78
US 278
GA 8
Buckhead
North Druid Hills
Tucker
Decatur
Avondale Estates
Belvedere Park
Old Fourth Ward
Atlanta
Bankhead
HOV Exit
CVS HealthHUB

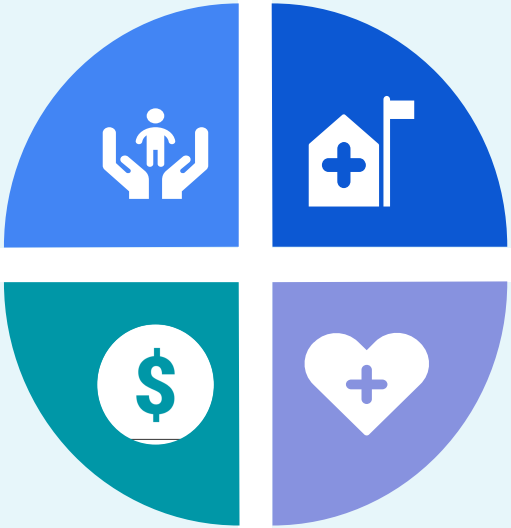
HealthHub Target Audience + Success Stories

Working Population

Patients looking for One Stop Care Shop, to accommodate their busy lifestyle

Medicare Beneficiaries

With comorbidities seeking continuous care



Atena Members

From implementations in Texas, Atena members have provided a +ve feedback

Chronic Care Patient

With chronic conditions that make regular visits, for medications and educational updates

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Why these Stores?

ATL7193
842 Peachtree Street

- Fulton County
- Highest : Footfall + Sales CAGR (4%) (Within all 38)
- Store faces max aetna + aetna medicare members
- Accessible to biggest chunk of uninsured.

ATL2235
2350 Cheshire Bridge Road

- Fulton County
- The store is only 3 yrs old yet shows 3% Sales CAGR over last 3 yrs
- Near highway + easily accessible
- Strategic to contrast population & ZIP code differences + importance

ATL5303
1520 Avenue Place

- Dekalb County
- Sales CAGR is 2% and moderately old, scope to peak
- Hopital Proximity + Comparable footfall despite sparse pop.
- Strategic to contrast county level differences

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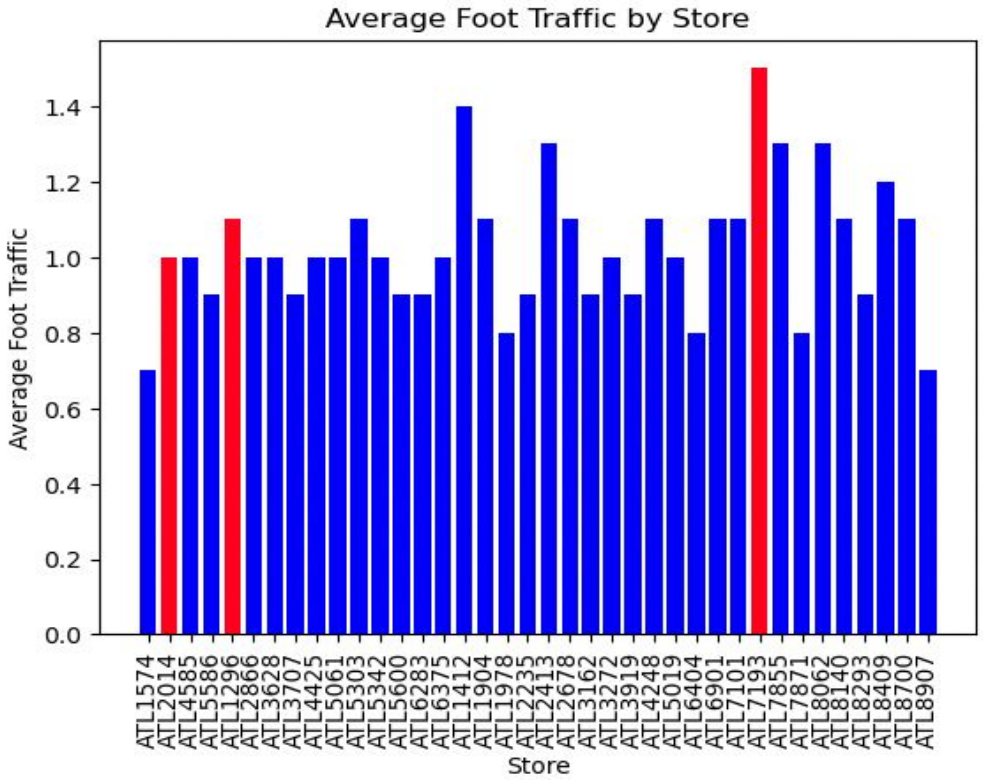
What does the Data say?

Patient Foot Traffic by Store



Highlighted Stores with highest foot traffic within county

Fulton : ATL7193

Dekalb: ATL5303, ATL1296

Cobb: ATL2014

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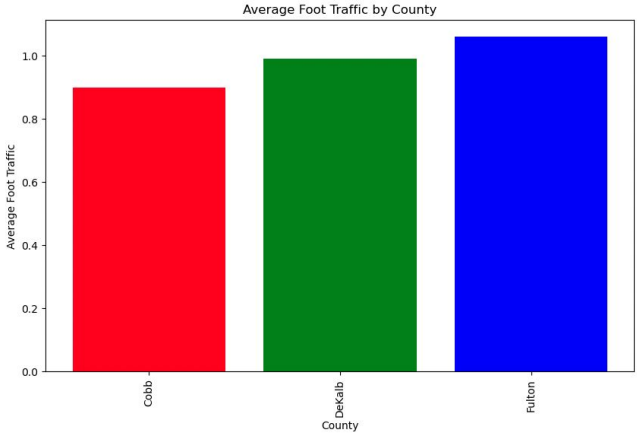
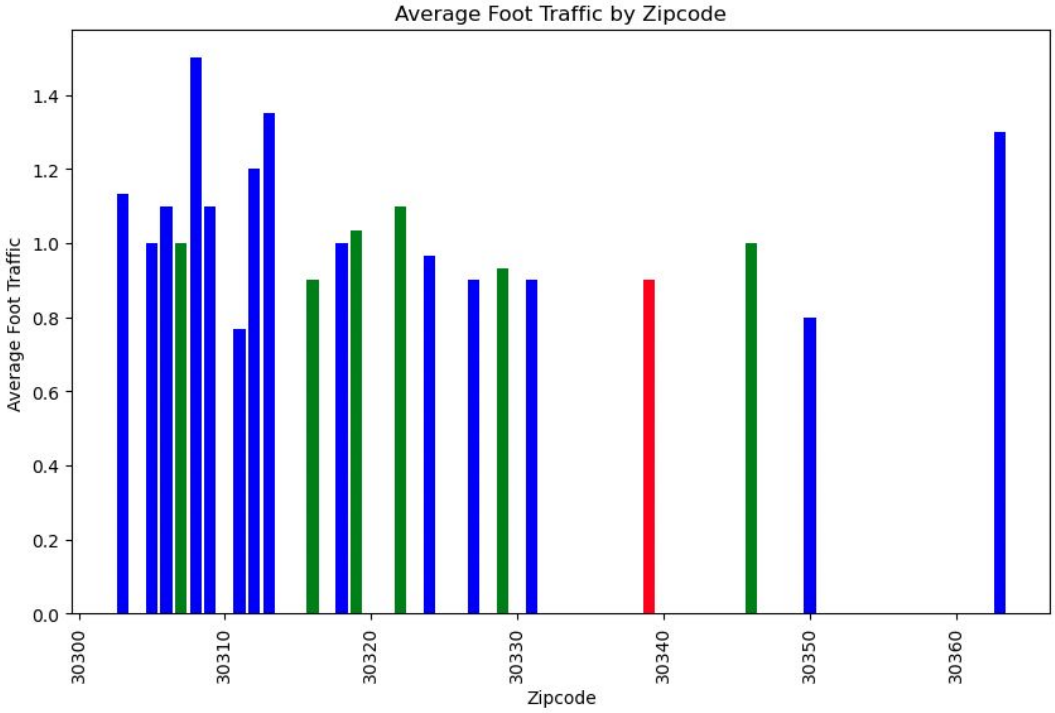
What does the Data say?

Store Foot Traffic at County & Zip Levels





Deepdive into **zip codes & stores** under each county

- **Fulton has the highest traffic**

Disadvantage of Cobb County

- All stores are within the **same proximity & zip code**
- **Difficult to draw comparisons** within and outside county

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Key Performance Metrics

Assumptions and basis of the recommendation

Sales CAGR

To track the growth of store post revamping into HealthHub

Avg. Foot Traffic

To see if we are attracting more traffic with upgrading our stores

Pharma Sales

Very Important

HealthHubs have been a hit because both CVS + Aetna have successfully been able to serve as caregivers before patient goes to ER or a Hospital.

Note: These are the key PERFORMANCE metrics based on which I have evaluated a store's potential.
I have considered other factors such as demographic lay of the geography, aetna penetration, income levels in the area - and saw how these KPM's stood with variations in this geographical and population factors.

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Why ATL2235 and ATL5303?

Comparing Stores in different counties

Demographic Feature	DeKalb	Fulton	Cobb
Population	26312.63	25122.521	23373.00
Density	1637.70	1906.03	861.10
Income	52272.72	56391.30	44000.00
Median Age	32.9	33.5	30.00
Aetna Penetration	0.079	0.082	0.070
% Population over 65	0.104	0.104	0.090

Both stores serve similarly structured counties.

Therefore, over time they are perfect statistical analysis or for A/B testing to determine the effect of other factors like: -

1) Proximity to hospital
2) Store Age
3) CAGR growth
4) Sales

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Why ATL7193 and ATL2235

Comparing Stores in same counties

	population	density	county_name	income	med_age	age_65p	unemp_rate
ATL7193	18099	3732	Fulton	73000	37	0.14	0.01
ATL2235	26818	1780.8	Fulton	56000	33	0.1	0.04

ATL2235

Newer Store
Slightly lower KMPs

Useful to explore market (uninsured)

ATL7193

Highest KPMs in Fulton County

Covers higher % of aetna beneficiaries

Good to understand

- Differences in **smaller regions**
- Effect of **demographic differences**
- **Aetna members benefit the most, but is there a market for uninsured population?**
- **Can they be converted into Aetna Members?**

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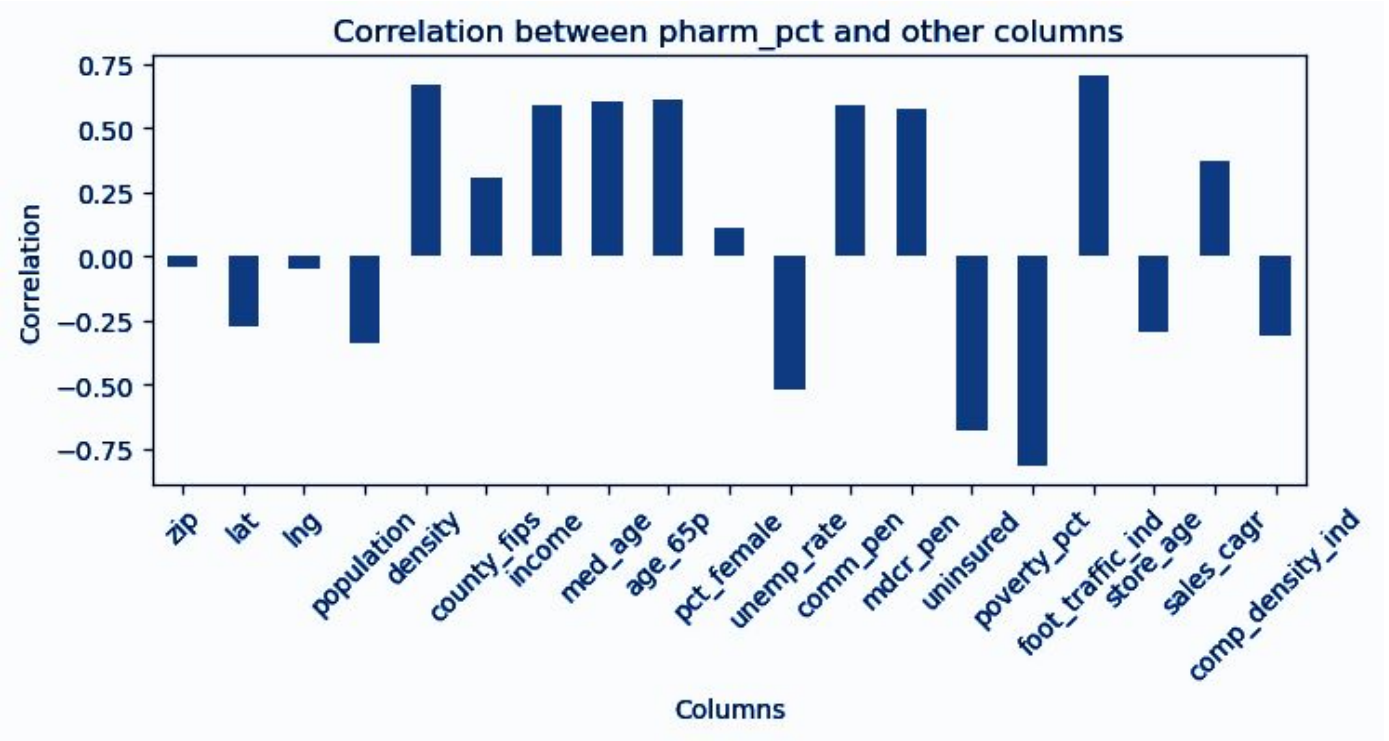
KPM Correlations

Looking at correlations between sales & other factors

Surprisingly

Competitor density is not a strongly correlated with pharma sales



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KPM Correlations

Correlations between growth, footfall @stores

Sales Compound Annual Growth

Positive: population density, income,comm_pen mdcr_pen, foot_traffic_ind
Negative: unemp_rate, uninsured, poverty_pct, population

```
one_vs_all_correlations #sales_cagr
```

zip	-0.273579
lat	-0.192741
lng	0.378517
population	-0.543499
density	0.797753
county_fips	0.381411
income	0.844249
med_age	0.781706
age_65p	0.745378
pct_female	0.099734
unemp_rate	-0.821435
comm_pen	0.750838
mdcr_pen	0.797772
uninsured	-0.727222
poverty_pct	-0.566984
foot_traffic_ind	0.651015
store_age	-0.344534
pharm_pct	0.371272
comp_density_ind	-0.096504

Name: sales_cagr, dtype: float64

```
one_vs_all_correlations #foot_
```

zip	-0.242461
lat	-0.219539
lng	0.252348
population	-0.497796
density	0.828526
county_fips	0.294483
income	0.823733
med_age	0.714159
age_65p	0.854479
pct_female	0.121211
unemp_rate	-0.778144
comm_pen	0.836033
mdcr_pen	0.819137
uninsured	-0.890339
poverty_pct	-0.790753
store_age	-0.404823
sales_cagr	0.651015
pharm_pct	0.705444
comp_density_ind	-0.214220

Name: foot_traffic_ind, dtype:

Store Busyness/Foot Traffic

Positive: population density, income, coverage
Negative: unemp_rate, uninsured, poverty_pct

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Strategy

1) **Selecting different stores within same county enables comparison:-**
    a) Community (Zip) level comparison
    b) Influence of Store Age and trust in community
    c) In our case, the income & unemployment levels, coverage and density are starkly different within the stores that cater to same community
    d) Do the stores act as each others competitors?
2) **Selecting stores in different counties**
    a) Enables evaluation over a slightly different but comparable
    b) Growth and KPMs were similar, so we can understand the weight of population for the success of a store.

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Drawbacks + Future Scope

Conclusions made in aggregated data

Taking a decision just based on population spread and historic performance metrics is not enough. The choice should be a good baseline for drawing correct statistical comparisons while planning to expand to other locations. And recommending only based on aggregated data is not enough.

More geographical variance

For this analysis, I could not recommend any store in the Cobb County, because the features were not comparable.

Wider Comprehensive Data

More data on SDOH, Diagnosis Groups and Healthcare Cost and Utilization Project to determine vulnerable + target beneficiaries

Thank You!

Aishwarya Kura