Medicare Inpatient Charges

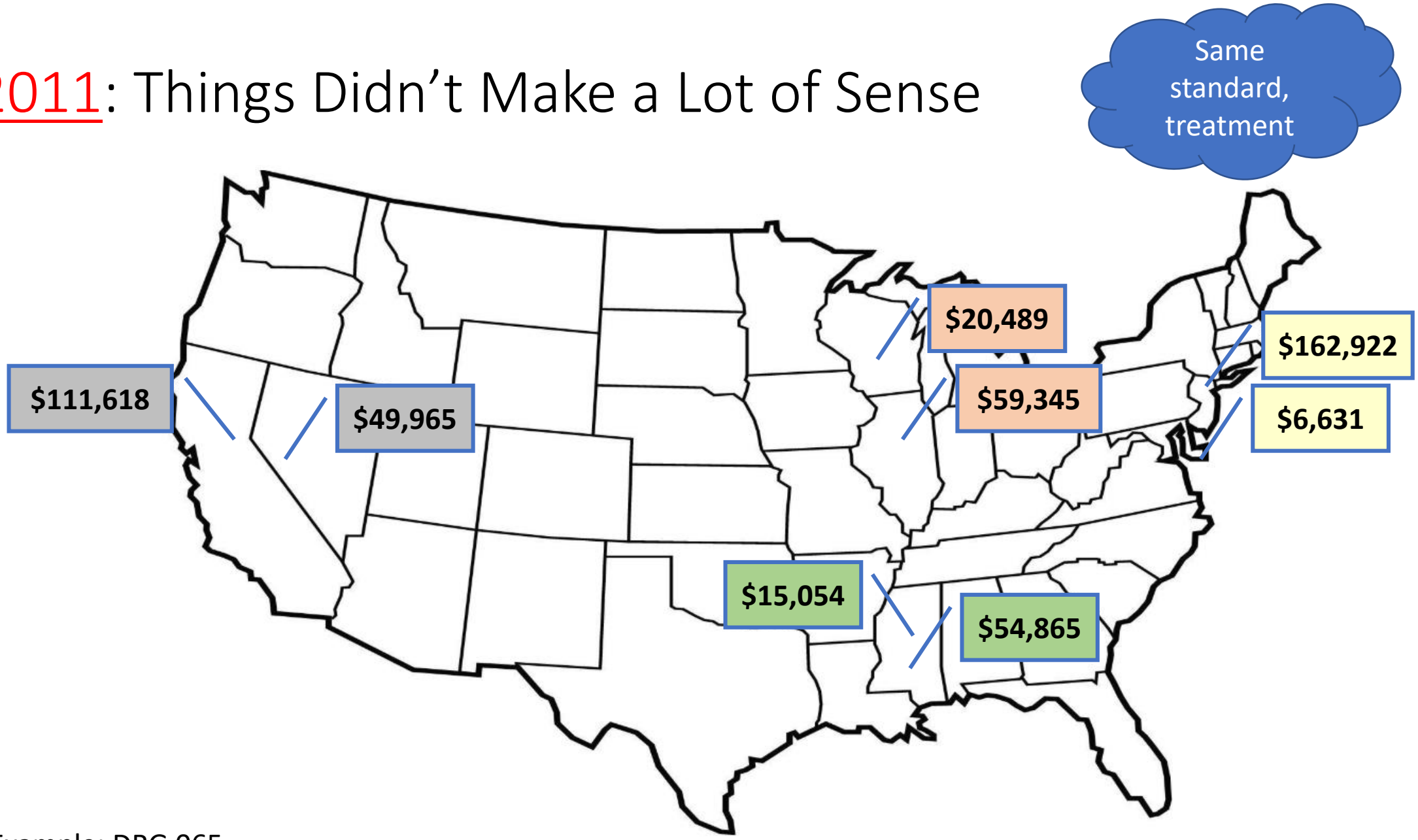
Springboard Capstone Final Report

Background

Goal: Reduce Costs by Making Them Visible

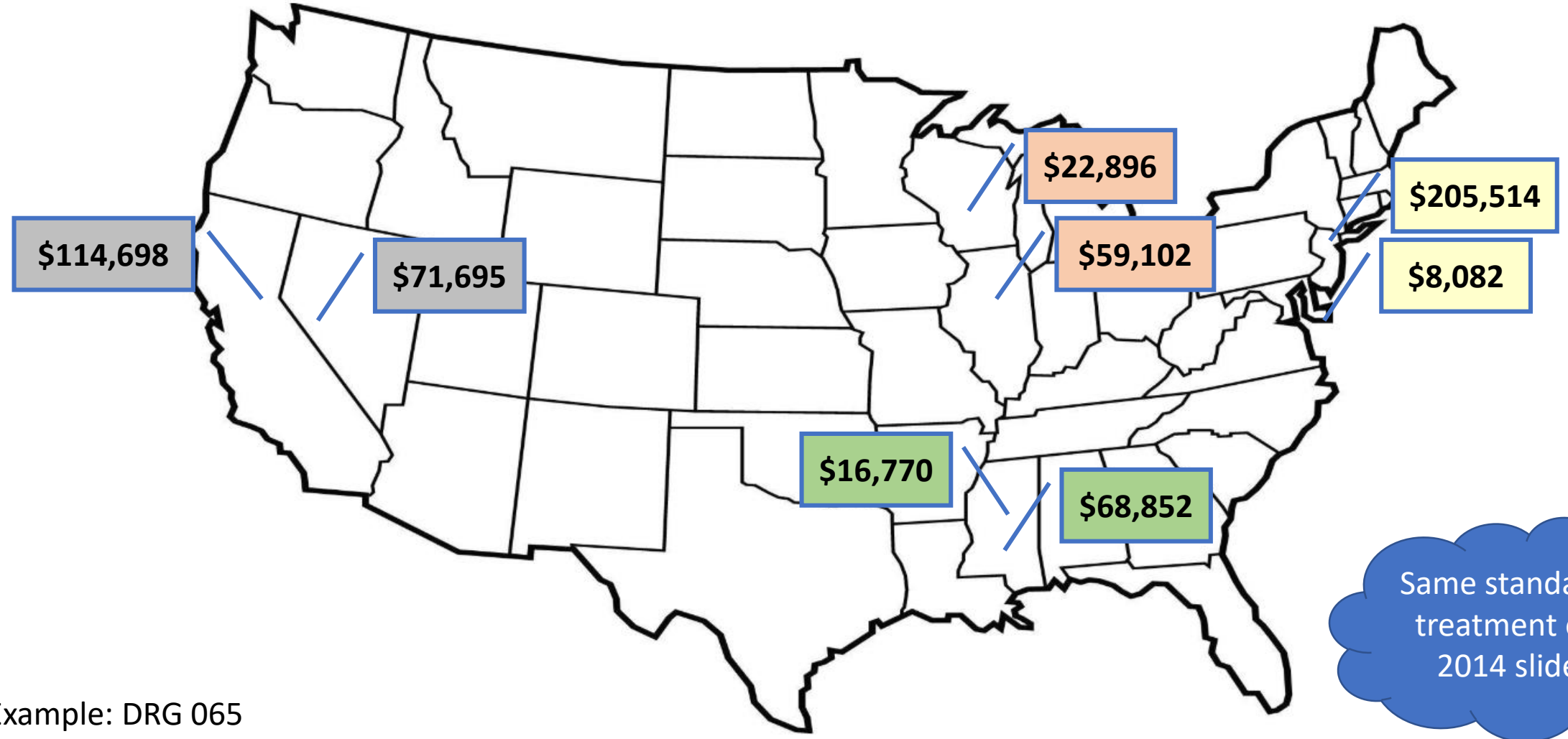
CMS.gov
Centers for Medicare & Medicaid Services

2011: Things Didn't Make a Lot of Sense



2011 Example: DRG 065
INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION

2016: Things Still Didn't Make Sense, and Costs Were Up



Same standard, treatment on 2014 slide

2016 Example: DRG 065
INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION
Most recent CMS data release

2019: Providers Must Now Also Report Charges at Their Facility

AHA Problem Statement:

Charges do Not Reflect What Consumers Pay: Posted Prior to Insurance Negotiations

- *"Unfortunately, there is no standard set of requirements that hospitals must follow; each insurer can set its own requirements as well as change those requirements at any time without consultation with the hospitals that must comply with them."*

- *"The complex and bewildering interplay among 'charges,' 'rates,' 'bills' and 'payments' across dozens of payers, public and private, does not serve any stakeholder well, including hospitals."*

More Publicity Won’t Address Charge Variability

- Reported Charges encompass:
  - Runaway costs
  - Inflated, pre-negotiated costs
  - More reasonable, market-appropriate costs

Project Initiation

Revised AHA Position

- Extreme Charge variability distracts from the ability to reduce costs and improve consumer benefits.

- Rather than issue more opposition statements to the 2019 mandate, the AHA commissioned this research to mine the data for insights.

Objective

- Identify the worst "Overcharge" offenders to develop strategies for:
    - Exploring cost-saving opportunities
    - Improving consumer benefits
    - Increasing financial stability among Providers

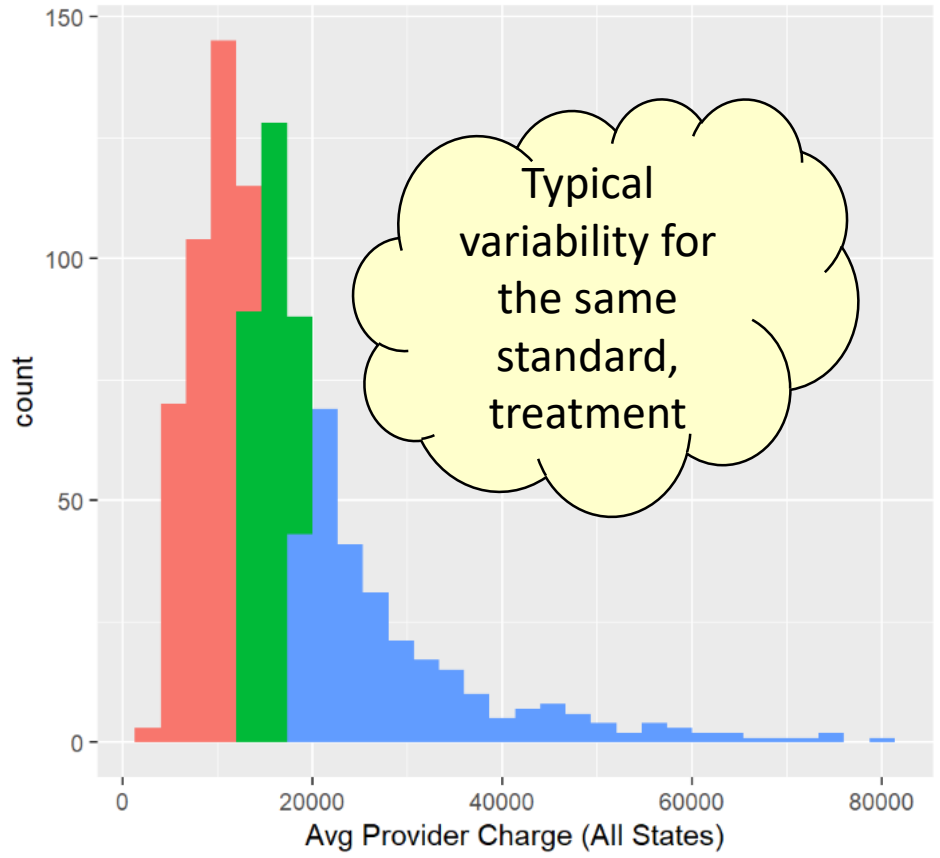
Definition of Terms

- Provider = Hospital
- DRG = Treated medical condition. There are 100 DRGs in the 2011 file.
- Total Discharges = Number of treated cases for a particular DRG
- Avg. Covered Charge = Avg. hospital bill for a particular DRG
- Avg. Medicare Payments = Avg. Medicare reimbursement for a particular DRG
- Avg. Total Payments = Avg. total reimbursements for a particular DRG (Medicare, copays, insurance companies, etc.). Total Payments are final; no outstanding charges are pending.

National-State Patterns

Benchmark Provider Charges vs. National

Charge Index: Avg. Provider Charge / National Avg. Charge



Type_of_Charge

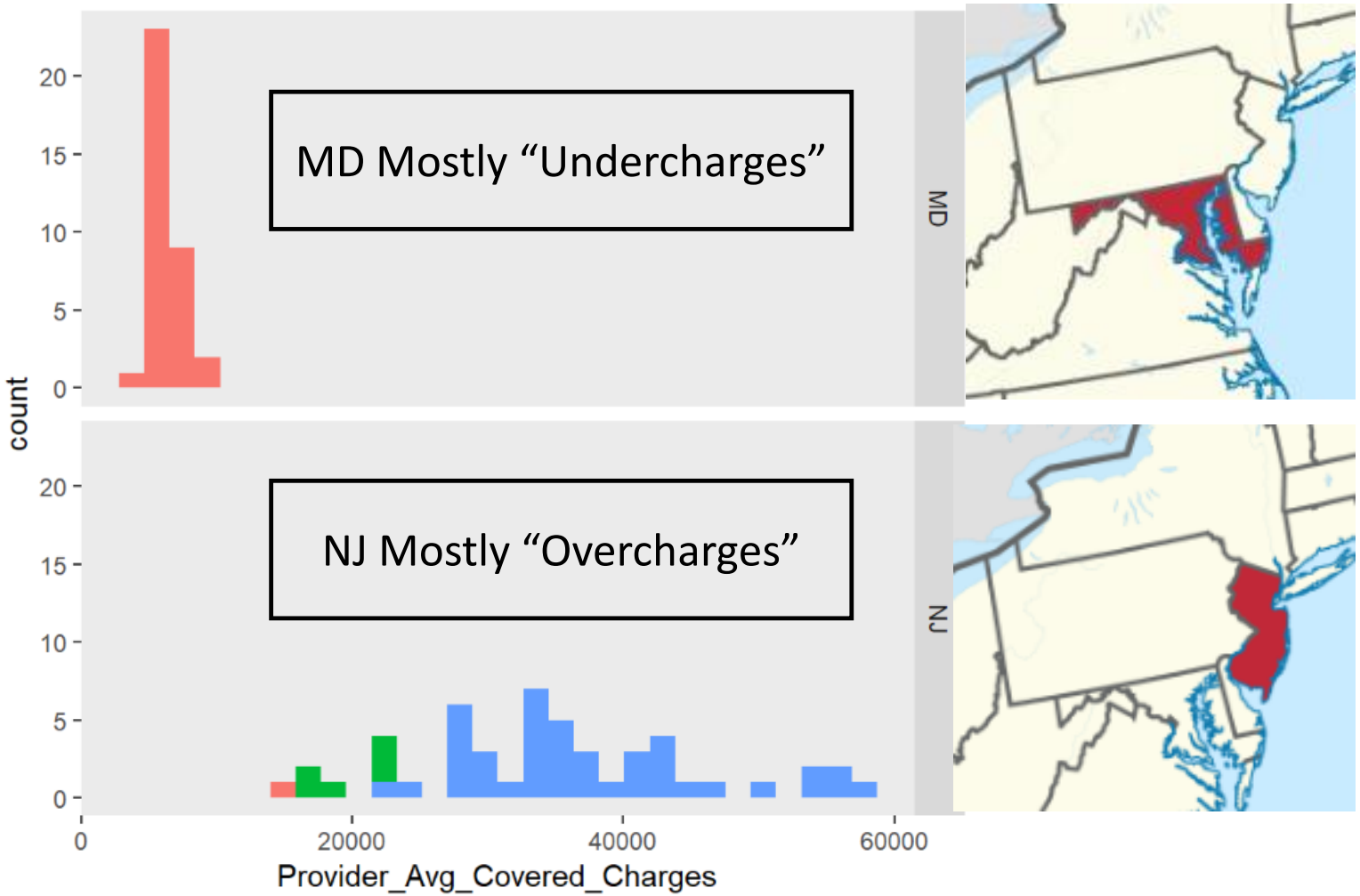
- Undercharge < 0.8
- Market-Appropriate Charge <= 0.8 < 1.2
- Overcharge >= 1.2

Example: DRG 897

ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC

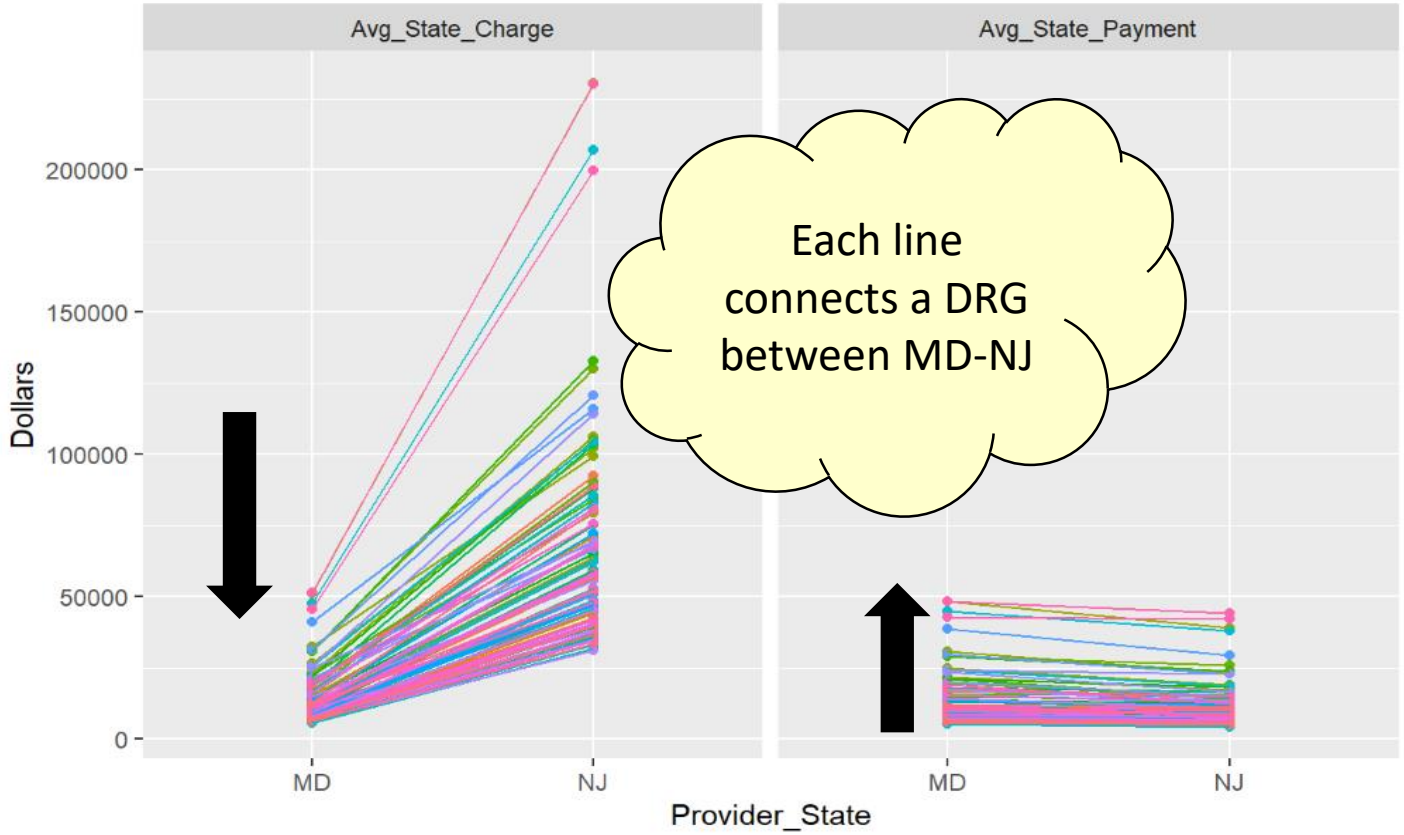
Neighbors Worlds Apart: MD vs. NJ

Pilot Analysis



Example: DRG 149
DYSEQUILIBRUIM

All MD Charges Were Lower, All Reimbursements Were Higher



Percent Reimbursement

Provider_State	Avg_Pct_Reimbursement	St.Dev
MD	94.4	0.6
NJ	16.0	2.5

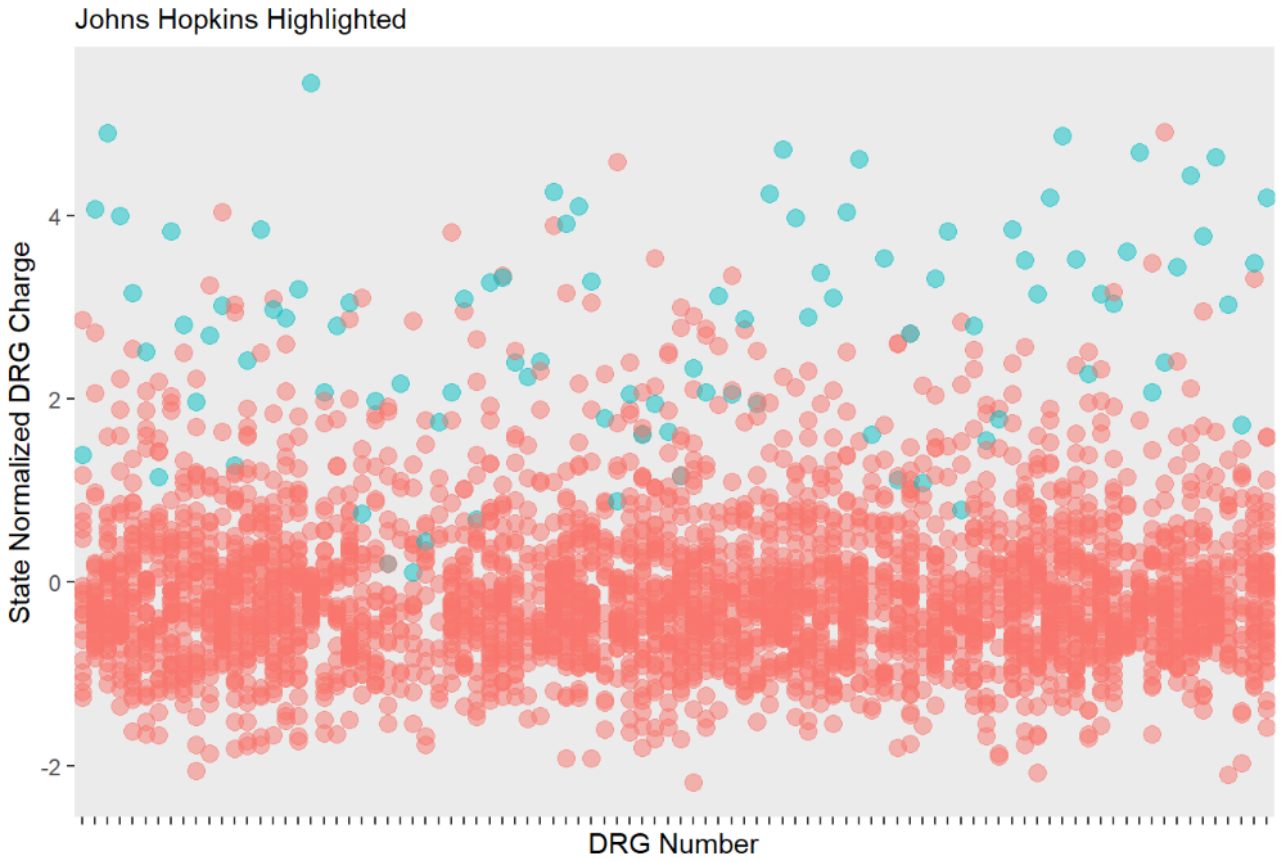
Broaden Analysis:
Only 4 DRG State Averages Were Less than MD

Exceptions: States with Avg Lower DRG Charges than MD

Provider_State	DRG_Number
MT	314
MT	698
ID	699
WV	885

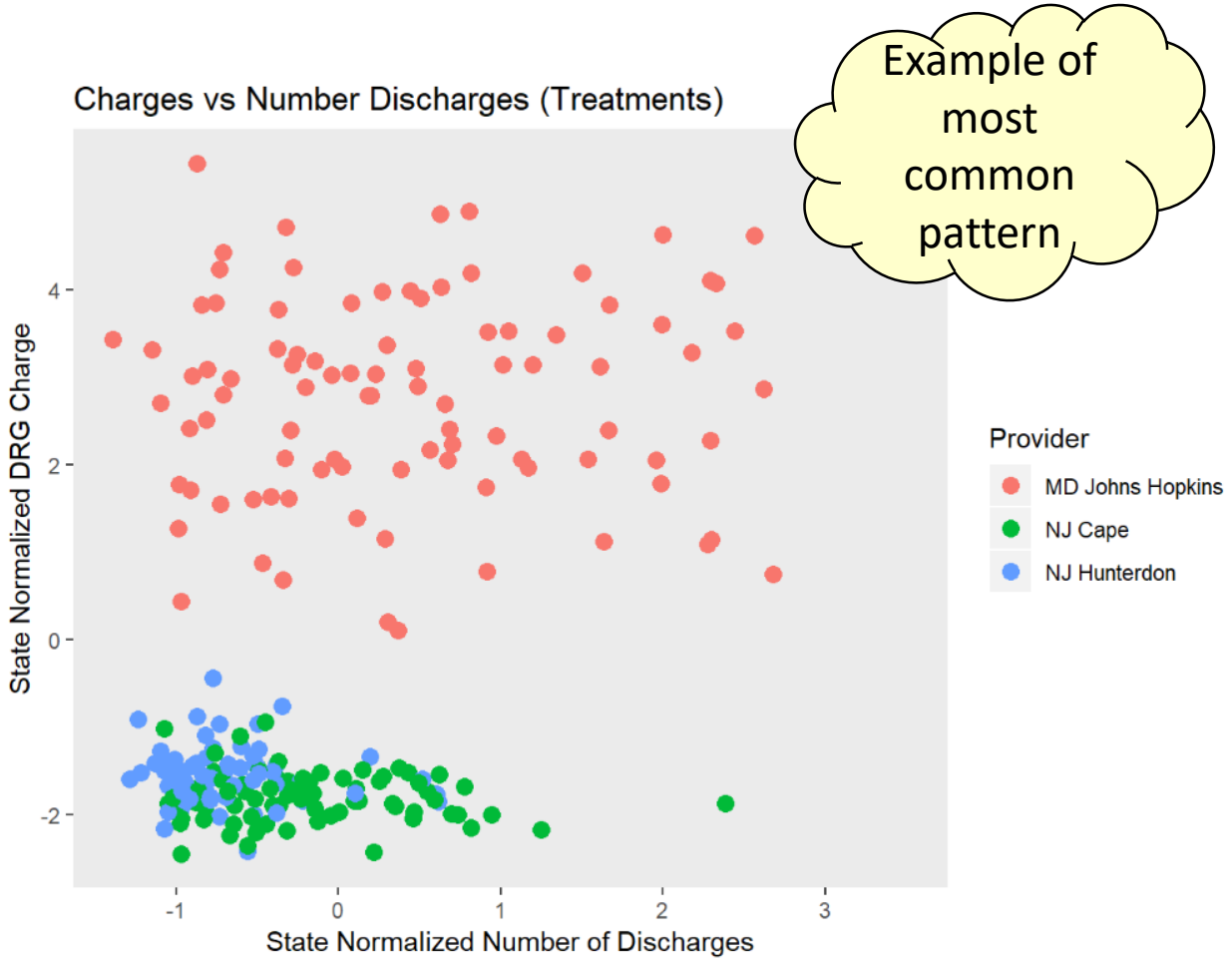
Provider Patterns

Provider Charge Patterns Tended to Be Consistent, Regardless of the DRGs Treated



Johns Hopkins was one of the few MD Providers with some "Overcharges", but all of its Charges trended higher

Charges Weren't Usually Affected by the Number of Treatments

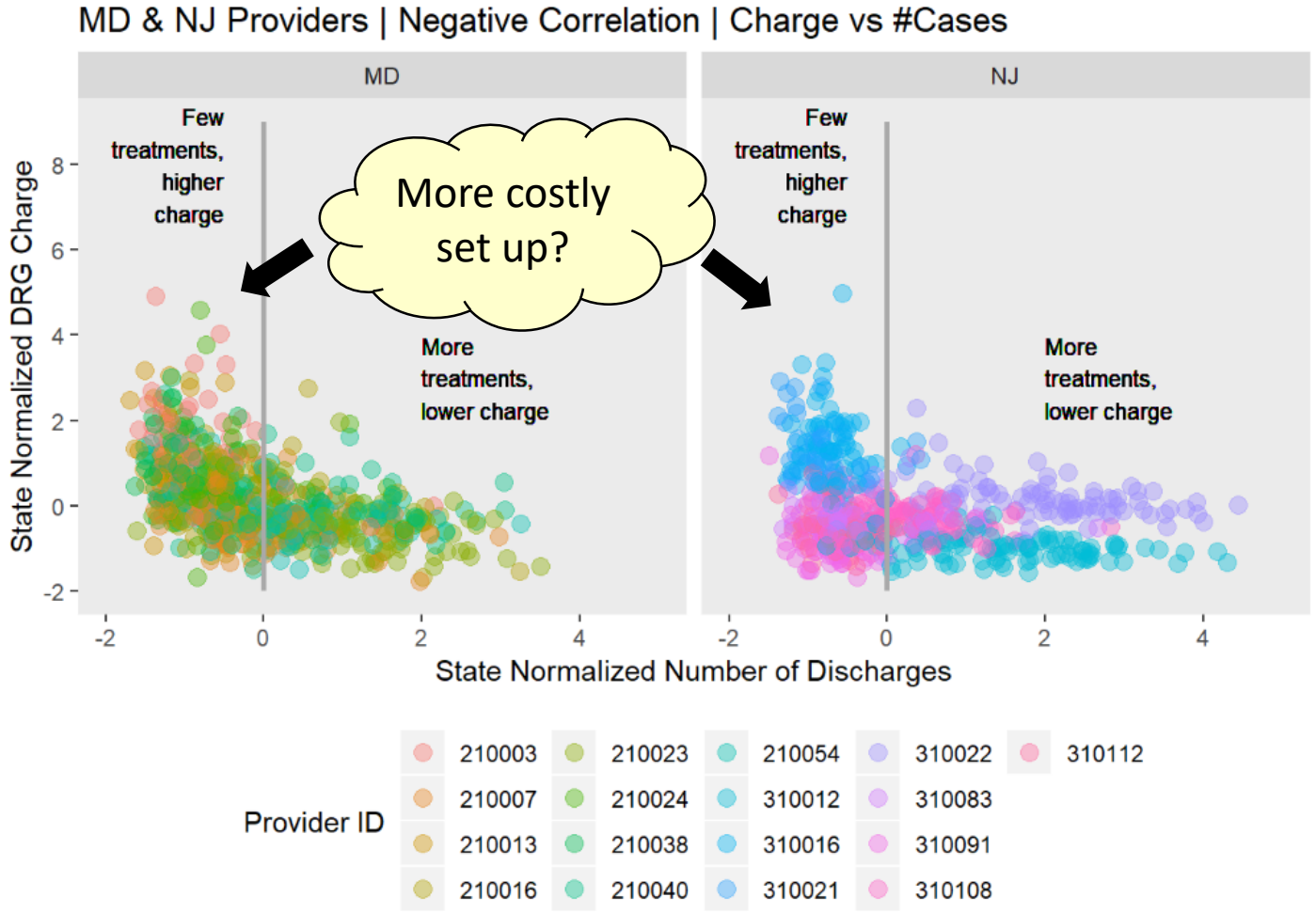


Example of most common pattern

Slope = 0

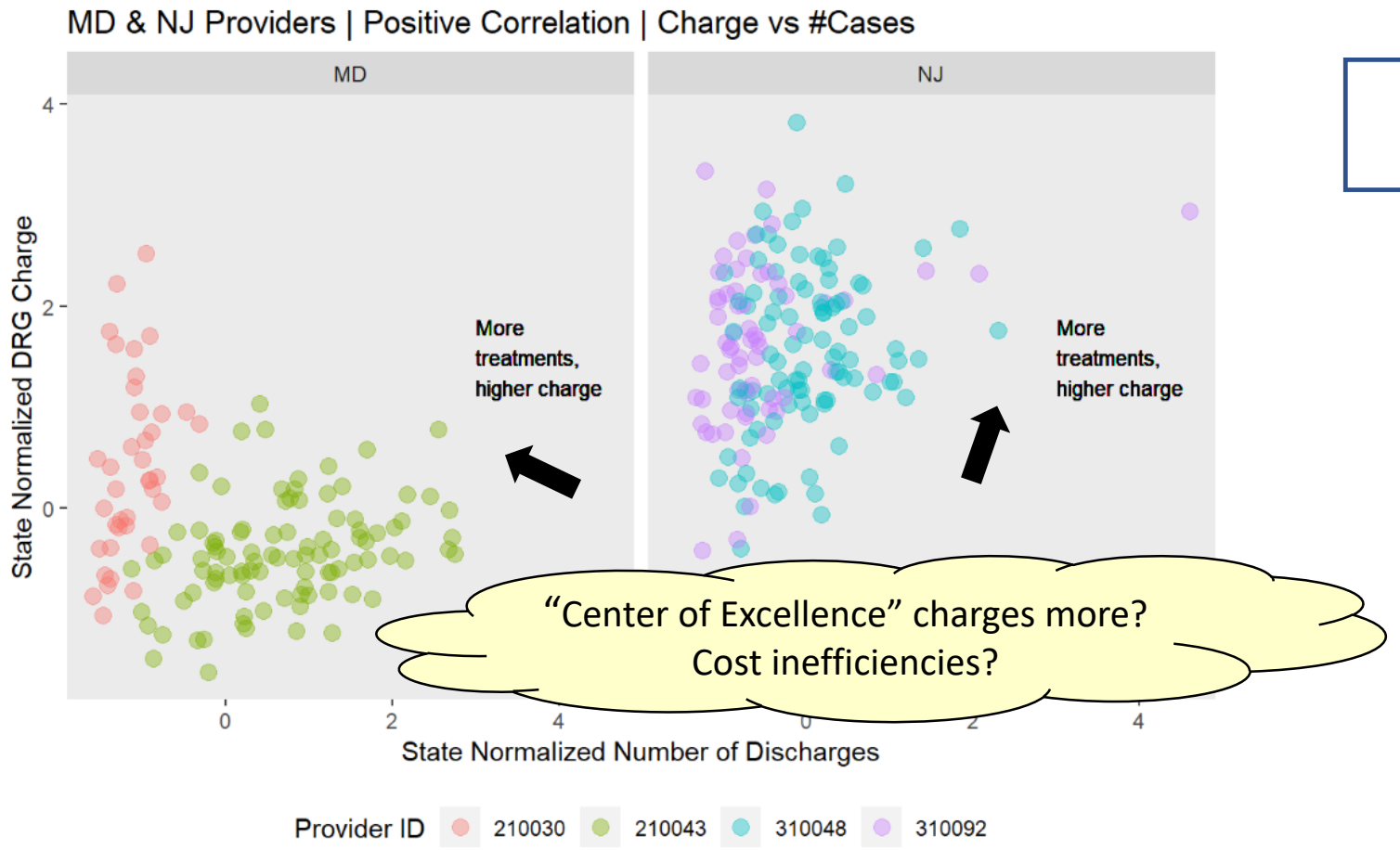
"Steady State"

But Sometimes Charges **Dropped** with More Treatments



Slope ≠ 0

And Sometimes Charges **Increased** with More Treatments



Slope ≠ 0

State and Provider Priorities

Benchmark all States Average Provider Charges vs. MD

Prioritize “Top 10 State Hit List” States with Most Costly DRGs

Top 10 State Hit List

Provider_State	Number_DRGs_Signficantly_More_Costly_vs_MD	Degree_of_Difference (most to least)
CA	100	0.0000000
NJ	100	0.0000000
NV	100	0.0000047
PA	100	0.0000363
TX	100	0.0001718
FL	100	0.0002129
NY	100	0.0086079
WA	100	0.0624550
AL	100	0.0712334
TN	100	0.0810542

Prioritize Providers with Charge Sensitivity vs. # Treatments

"Top 10 State Hit List"

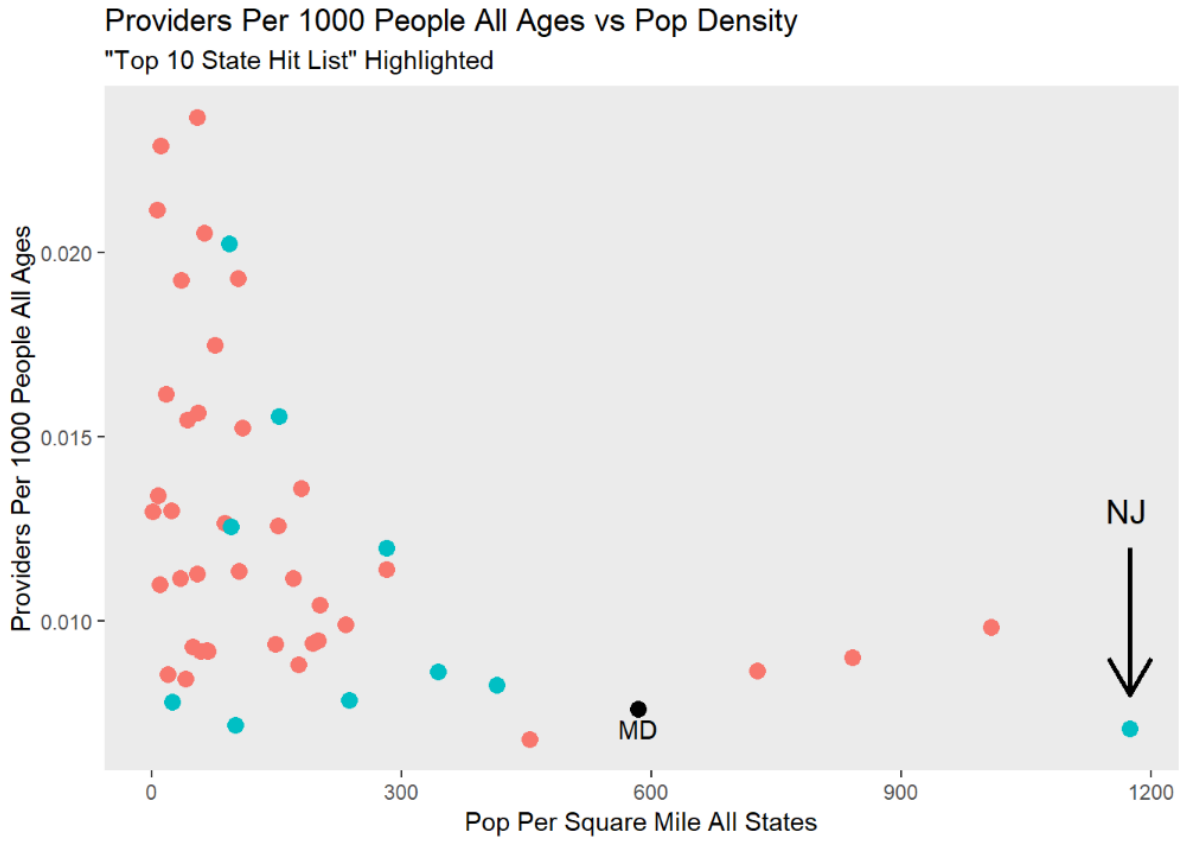
	Total_Providers	Providers_with_Neg_Association	Providers_with_Pos_Association
TX	310	8	42
CA	299	17	19
FL	166	10	8
NY	161	5	24
PA	151	6	33
TN	97	NA	15
AL	93	2	11
NJ	64	8	2
WA	47	3	1
NV	21	NA	1

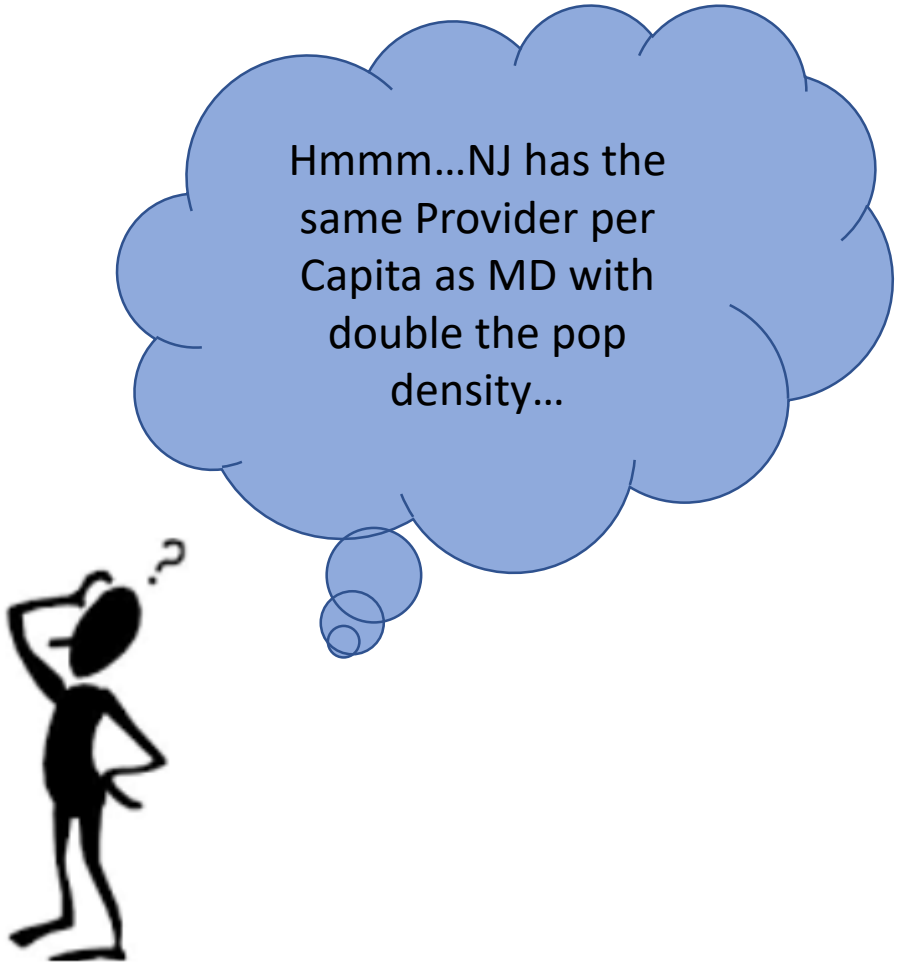
Cost inefficiencies?

"Centers of Excellence"?

Provider IDs and confidence intervals available upon request

In General, Providers per Capita Decrease with Increasing Population Density Across all States





Summary

- MD and NJ were used to develop a broader, National analysis given their unique status:
    - State neighbors with extreme Charge differences
- Since the State dominated a Provider's Charge pattern, a "Top 10 State Hit List" was created to identify most costly States vs. MD:
    - CA, NJ, NV, PA, TX, FL, NY, WA, AL, and TN (most extreme to less extreme)
- A Provider's Charge pattern typically did not vary by the types of DRGs treated.
- Linear regression identified Providers in the "Top 10" with significant fluctuations between Charge and Total Discharges:
    - Unrealized cost efficiencies?
    - "Centers of Excellence"?

Recommendations

1. Report Charges Post Insurance Negotiations

- At the risk of stating the obvious, consider reporting actual Charges.
    - Presumably, when Total Payments are reported, actual Charges will be known
- If enough Providers band together, perhaps they could rattle closed-door negotiations with insurers to foster consistency, thereby increasing Providers' financial stability.
    - For instance, MD Providers receive more in absolute dollars than NJ to yield a ~94% reimbursement rate for all its DRGs
    - NJ's reimbursements are not only lower but much more variable

2. Assess MD's model for the "Top 10 State Hit List"

- Follow-up research showed that MD has a longstanding all-payer system:
    - Providers are reimbursed the same amount regardless if the insurer is public or private
    - More recently, MD implemented a global budgeting system to consolidate resources, giving Providers freedom to specialize without having to worry about "filling beds" to stay financially solvent

3. Investigate Opportunities to Streamline Resources

- Some Providers showed higher Charges vs. number of treatments, perhaps because of unrealized cost efficiencies.

- Examine all Providers in NJ to see if its high number of Providers per capita is warranted given its dense population.

    - Providers per capita decrease as population density increases, but NJ had a similar Providers per capita as MD with double the population density

4. Scout out “Centers of Excellence” to Improve Quality

- Some Providers showed increasing Charges with more treatments, possibly because they are “Centers of Excellence”.

- Sharing “Best Practices” will improve quality and possibly identify opportunities to consolidate services across multiple “Centers of Excellence”.

Appendix

References

- CMS 2011 Dataset
- CMS 2016 Dataset
- New 2019 Provider Reporting Requirements
- AHA Response to Charge Reporting
- AHA Position Statement
- 2011 Census Statistical Brief
- Maryland Unique Health Care Model

Sample of Reported 2011 vs. 2016 Charges for DRG 065

INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION

Region	State	Provider ID	2011 Avg. Charge	2016 Avg. Charge
East	NJ	310025	162,922	205,514
	MD	210061	6631	8082
Midwest	WI	520021	20,489	22,896
	IL	140242	59,345	59,102
South	MS	250007	54,865	68,852
	MS	250050	15,054	16,770
West	CA	50228	111,618	114,698
	NV	290039	49,965	71,695