Demonstratives for the testimony of Professor David Dranove

FTC & State of Idaho v. St. Luke's Health System & Saltzer Medical Group

No. 1:13-cv-00116

October 2, 2013

Outline

1. Background and introduction
2. St. Luke's and Saltzer
3. Analytic framework
4. Relevant product market
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6. Market shares, concentration, and competitive effects
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8. Vertical integration and efficiencies
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1. Background and introduction

Qualifications

- Education
  - PhD, Economics, Business, and Policy, Stanford University
  - MBA, Cornell University
  - BA, Genetics, Cornell University

- Academic work
  - Research focuses on competition in healthcare markets
  - Director of the Health Enterprise Management Program, Kellogg School of Management
  - Walter McNerney Distinguished Professor of Health Industry Management, Kellogg School of Management; Department of Economics at Northwestern University
  - Associate Professor at the University of Chicago
  - Over 50 peer reviewed journal publications, 5 books

- Expert testimony
  - *Peoria Day Surgery Center v. OSF Healthcare System*
  - *Messner v. Evanston Northwestern Healthcare Corporation*

Scope of assignment

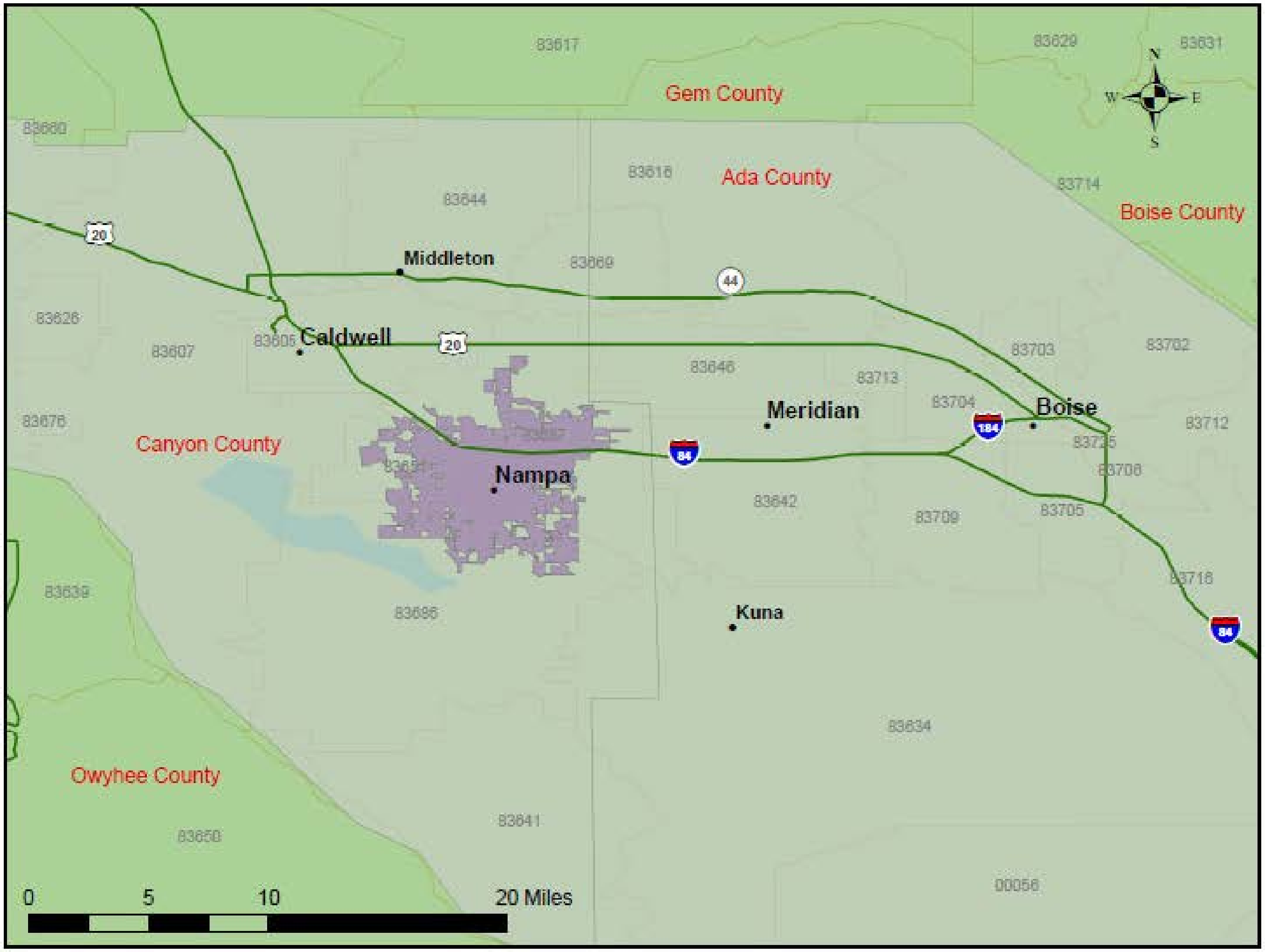
- The FTC and the State of Idaho asked me to conduct an economic analysis of the likely effects on competition and consumer welfare caused by St. Luke's Health System's acquisition of the Saltzer Medical Group
  - My examination of this question is independent
  - My compensation is based on time and not contingent on outcome or my conclusions
- I worked with a support staff from Bates White Economic Consulting

Evidence considered

- Testimony from all categories of market participants
  - Health plans, providers, employers
- Ordinary course of business documents from the merging parties and third parties
  - e.g., strategic plans, correspondence
- Claims data produced by Blue Cross of Idaho, Regence Blue Shield, and PacificSource (IPN)
- A wide array of published health economics literature
- Analyses and evidence from Defendants' experts

2. St. Luke’s and Saltzer

Nampa and the Treasure Valley



St. Luke's Health System

- Largest healthcare system in Idaho and in the Treasure Valley
  - Over 300 physicians in the Treasure Valley, including over 90 PCPs (excluding Saltzer)
  - General acute care hospitals in Boise and Meridian, children's hospital in Boise
  - More admissions, outpatient visits, and physicians than Saint Alphonsus
  - Described by Saltzer physician Dr. Randell Page as the "**dominant**" system in the Treasure Valley
- Acquired more than 20 PCP practices (excluding Saltzer) since January 2008
- Became the second largest provider of PCP services in Nampa when it acquired Mercy Physician Group (7 PCPs) in August 2011

TX 1848 (Dranove Report) § III.A, TX 1366 (SMG000033688) at 688

Saltzer Medical Group

- Largest independent physician group in Idaho (before the acquisition)
  - Includes over 30 physicians: adult PCPs, pediatricians, and specialists
  - Largest PCP group in Nampa
  - Seven surgeons left Saltzer rather than join St. Luke's
- KPMG, retained by St. Luke's to provide a valuation of Saltzer, identified Saltzer as having "maintained a **dominant** market position in Nampa for decades"

TX 1115, TX 1576 (SLHS0000001141) at 159, TX 1452 (SLHS0000007898)

3. Analytic framework

Selective contracting and two-stage competition

Selective contracting

- In healthcare provider markets, prices are determined in “selective contracting” negotiations between providers and health plans
  - Negotiations primarily focus on **total reimbursements**
  - Negotiations determine which providers are “in-network”
  - Patients have a strong financial incentive to select in-network providers

- In any bargaining setting, as one party to a negotiation gains greater leverage, it will be able to negotiate more favorable terms
  - Leverage is generally determined by each party’s “outside option” – i.e., the **B**est **A**lternative **T**o a **N**egotiated **A**greement (“**BATNA**”)

- Providers with greater bargaining leverage can negotiate higher total payments (i.e., reimbursements) from health plans, generally through an increase in prices

Two-stage competition in healthcare markets

Stage 1

Health plans form networks through negotiations with providers

- Exclusion of important provider groups reduces the value of a plan's network
- **Mergers of close substitutes can increase a provider's negotiating leverage by making health plans' outside option much less attractive**

Health plans market their networks to area employers and individuals

- Employers have an incentive to select health plans with networks that reasonably meet the needs of their employees and is affordable for the employer

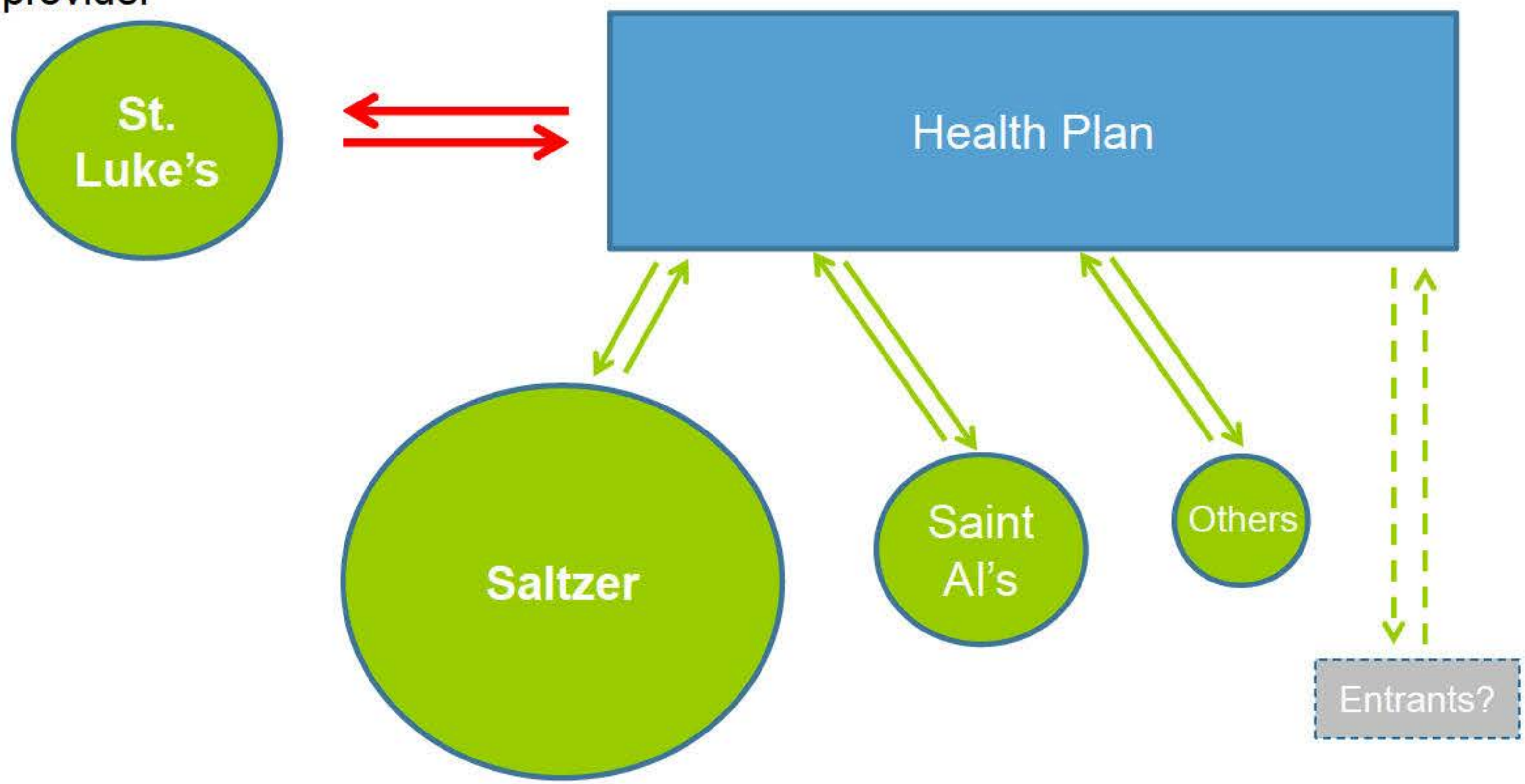
Stage 2

In-network providers compete for patients

- Highly valued providers draw higher volumes in Stage Two and have more leverage in Stage One
- Insurance benefits and price opacity make price a secondary consideration for patient choice of in-network providers

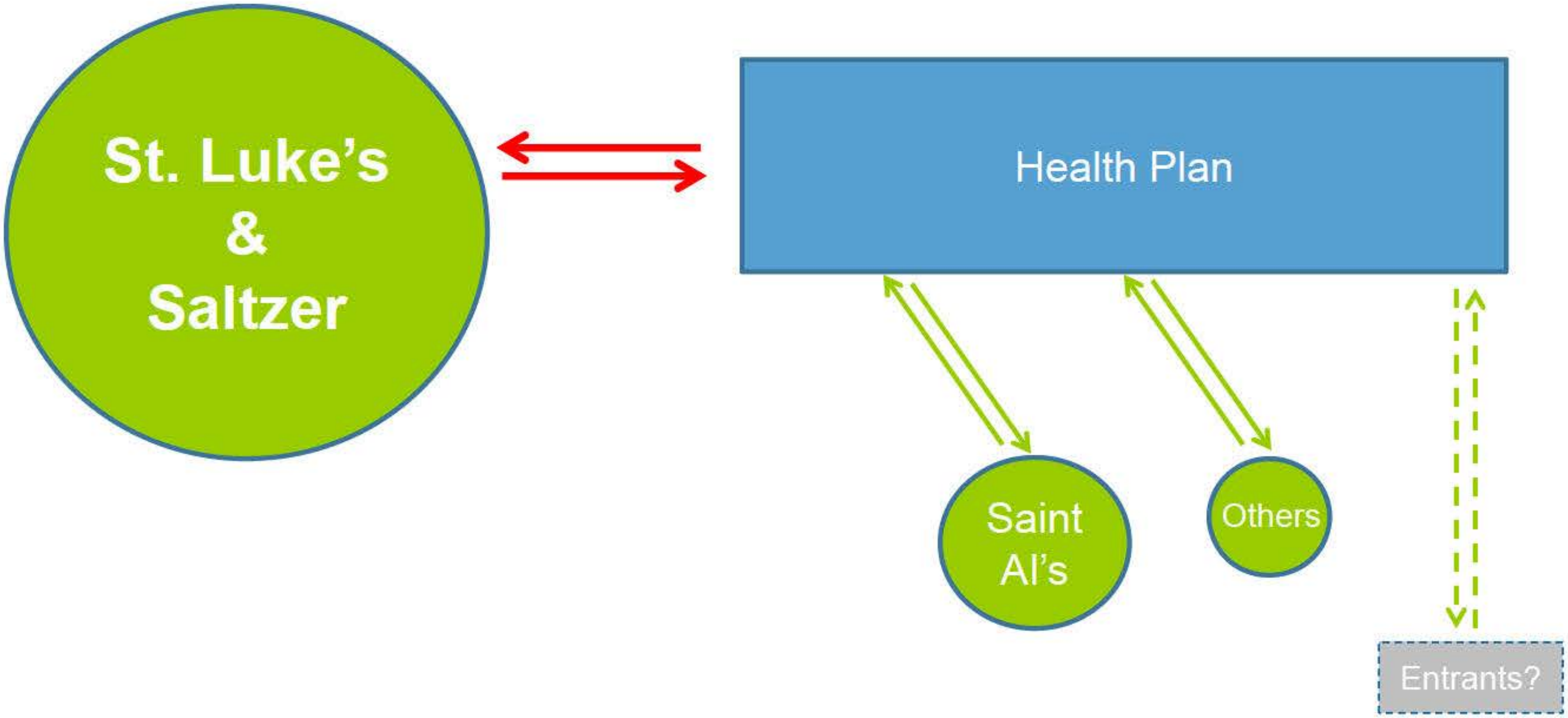
Bargaining leverage depends on substitute physician groups in the market

- *Before* the Acquisition: Saltzer PCPs offer an attractive substitute for St. Luke's PCPs, and vice versa
  - The health plan thus has a credible "outside option" when it negotiates with each provider

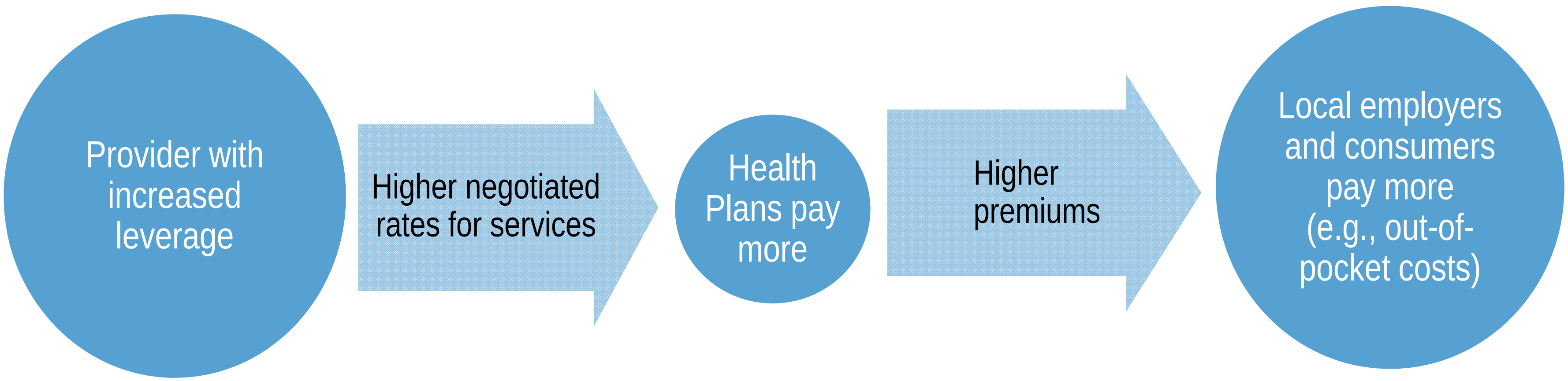


Bargaining leverage depends on substitute physician groups in the market

- *After* the Acquisition: the health plan loses a credible outside option, and the provider gains negotiating leverage



Increased provider leverage harms consumers



4. Relevant product market

The relevant product market is Adult PCP services

Market definition and the *Horizontal Merger Guidelines*

- The goal of market definition is to identify a set of sellers that are close substitutes, while excluding sellers that are not
  - The *Horizontal Merger Guidelines* outline the framework the FTC and DOJ use to analyze mergers
  - Created by antitrust economists and attorneys, with broad input from stakeholders and widely adopted as an analytical framework by courts

- The Agencies, antitrust economists, and courts follow the *Guidelines'* "hypothetical monopolist" or "SSNIP" test to define markets
  - **Hypothetical monopolist test:** *Could a hypothetical monopolist of all firms in the proposed market* <u>*profitably*</u> *impose at least a Small but Significant and Non-transitory Increase In Price ("SSNIP")*?
    - <u>If the SSNIP is *not profitable*</u>, the market should be expanded
    - <u>If the SSNIP is *profitable*</u>, the market is properly defined

The relevant product market is Adult PCP services

- No material dispute that adult primary care physician services sold to commercially insured patients (“Adult PCP services”) is a relevant product market (Argue Report, ¶ 100)

- Adult PCP services is a relevant product market because a **hypothetical monopolist of all Adult PCPs would be able to profitably impose a SSNIP**
  - To offer competitive products, health plans require Adult PCPs in their networks, and other specialties are not sufficiently substitutable

- Adult PCP services is a relevant product market, even though some patients see other types of physicians for primary care
  - e.g., some women see OB-GYNs, but health plans could not assemble a viable provider network with OB-GYNs but no Adult PCPs

5. Relevant geographic market

The relevant geographic market is Nampa

Nampa is the relevant geographic market

- **Hypothetical monopolist of all Adult PCPs in Nampa could profitably impose a SSNIP**
- Multiple, consistent points of support for Nampa as a relevant geographic market
  - Evidence from broad range of market participants that patients prefer local access to primary care physicians
  - Every health plan, including St. Luke’s health plan partner, recognizes the importance of including Nampa PCPs in-network
  - Data show a clear distinction between Nampa and Boise
  - All major health plans have PCPs very close to where their members live

Nampa patients demand access to Nampa PCPs

- "[W]e have patients that live in Nampa that have access to St. Luke's Health System outside of the Nampa area and **we really believe that it is important to have access points for those patients close to home**. And in that regard, the Saltzer clinic is . . . mainly a primary care base. It would improve access for those patients close to home."
  - Dr. Kurt Seppi, St. Luke's Executive Medical Director of Physician Services

- Patients in Nampa "**don't want to drive all the way to Boise/Meridian** to receive care. They want to receive it locally."
  - John Dao, consultant retained by St. Luke's

- It makes "business sense" to serve Nampa patients with primary care services in Nampa "[b]ecause **patients would prefer not to have to travel large distances** to – receive services."
  - Peter LaFleur, St. Luke's consultant involved in the Saltzer transaction

TX 1849 (Dranove Reply Report) at ¶ 30

St. Luke's and SelectHealth recognize the importance of Nampa PCPs

- St. Luke's own provider network, Select Medical Network, decided it should include Saltzer in the network because it "**needed providers in Nampa in order to market itself to employers**"
  - Steve Drake, St. Luke's System Director of Payer Contracting
- "My experience with past plans is that consumers **would like very much and they value having their primary physician close to home, within few miles**, ten to five minutes"
  - Patricia Richards of SelectHealth, St. Luke's health plan partner

Deposition Transcript of Steve Drake at 182-183, Deposition Transcript of Patricia Richards at 156-57

Health plans need local PCPs in-network

ATTORNEYS' EYES ONLY

[redacted]

St. Luke's analyzed the "Nampa Physician Market"

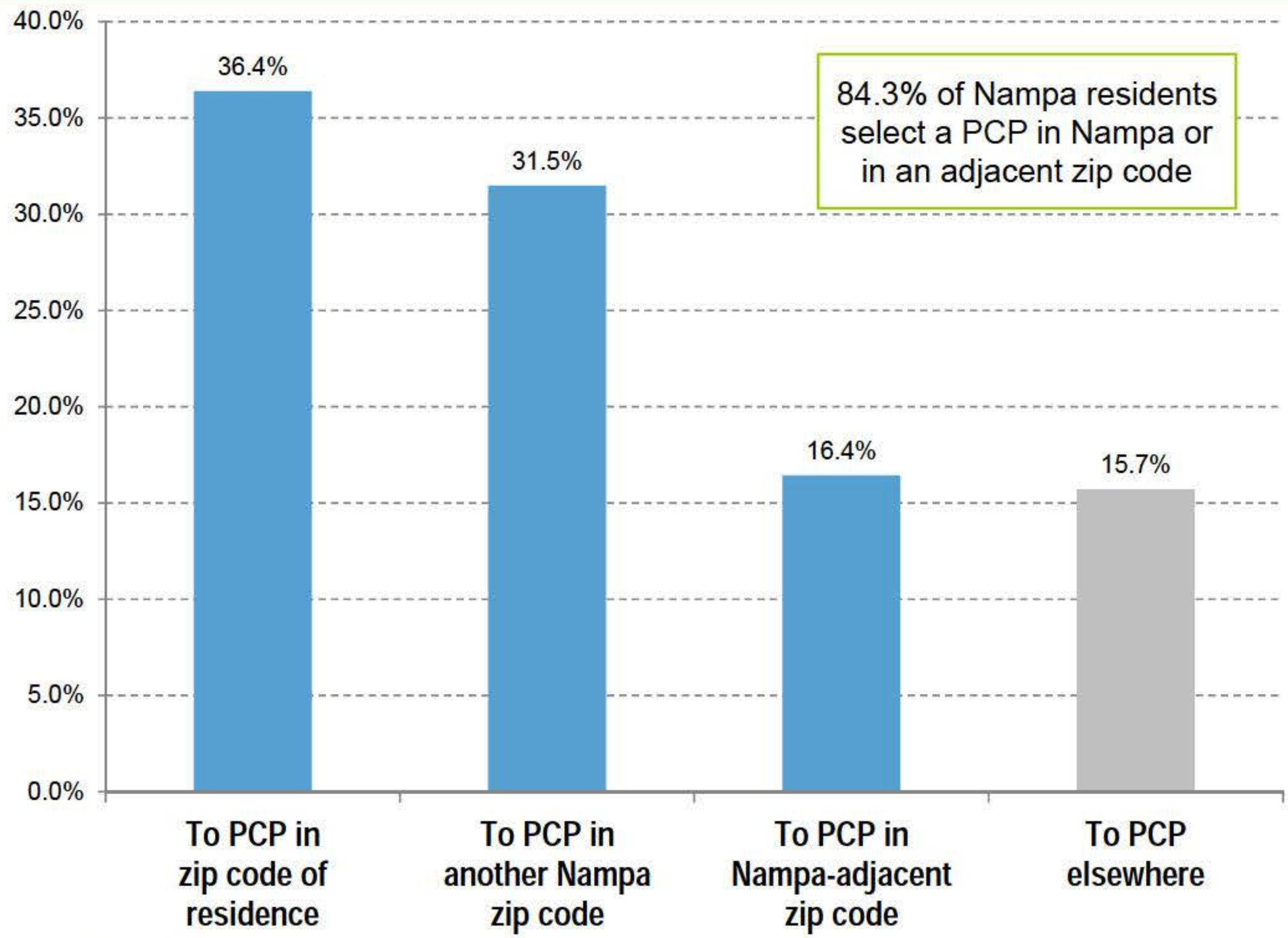
Nampa Physician Market Share

	Potential SLHS Practices							
Specialty	Saltzer	Mercy Group	St. Al's	PHMG	Independent	Total	Potential SLHS Practices	% of Total
Family Practice	11	7	14	2	4	38	18	47%
Internal Medicine	6	0	0	0	4	10	6	60%
Pediatrics	11	0	0	0	1	12	11	92%
OB	1	0	0	0	7	8	1	13%
General Surgery	2	0	1	0	1	4	2	50%
Orthopedics	4	0	0	0	0	4	4	100%
ENT	1	0	0	0	1	2	1	50%

- Saltzer and Mercy Group physicians represent the majority of primary care and surgical providers in Nampa.

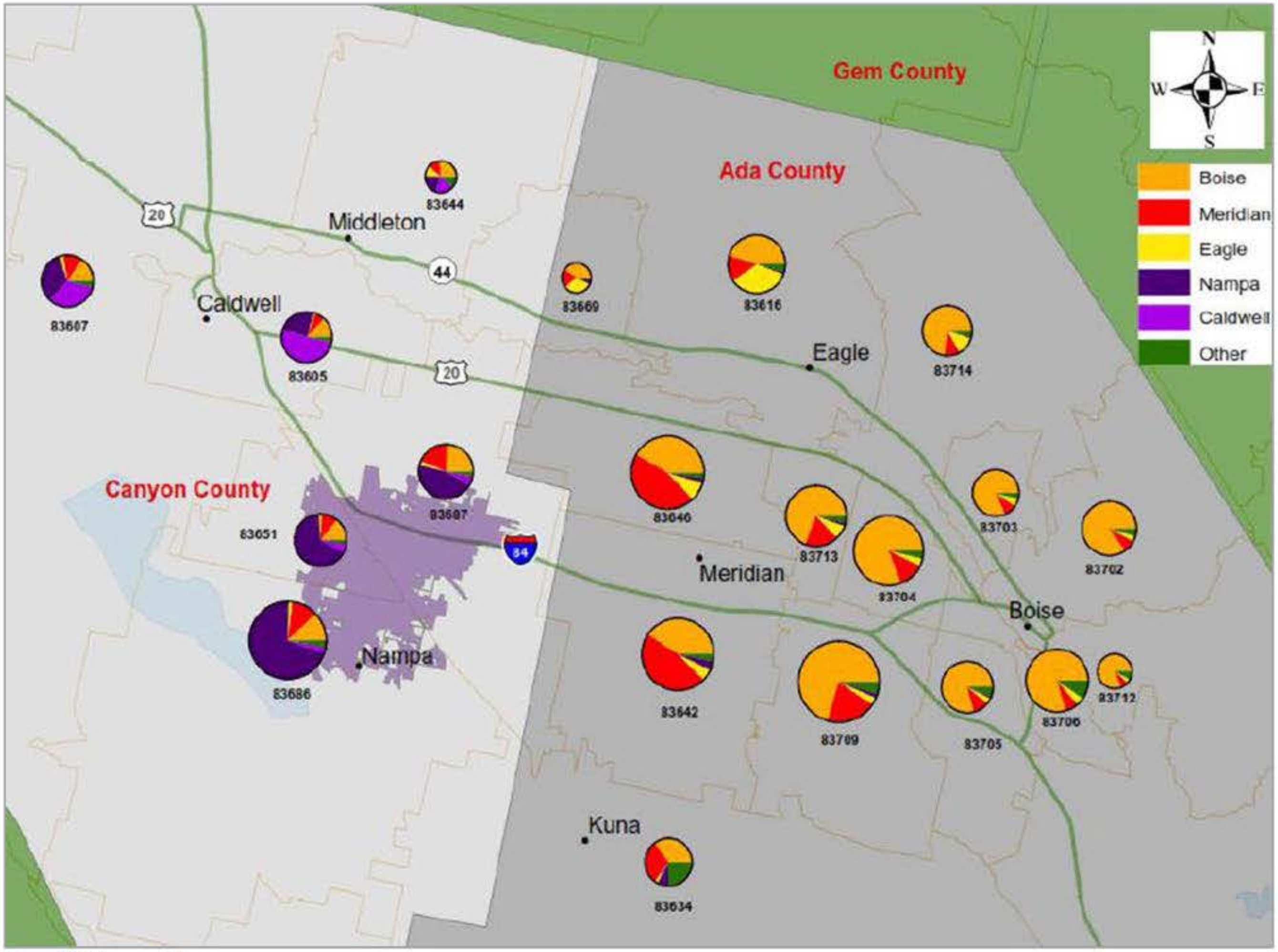
TX 1115 at Slide 6
Note: St. Luke's acquired the "Mercy Group" physicians in 2011 and Saltzer in 2012

Location of PCPs chosen by Nampa residents



TX 1783 (Dranove Report) Figure 12

Locations of PCPs visited by Treasure Valley residents

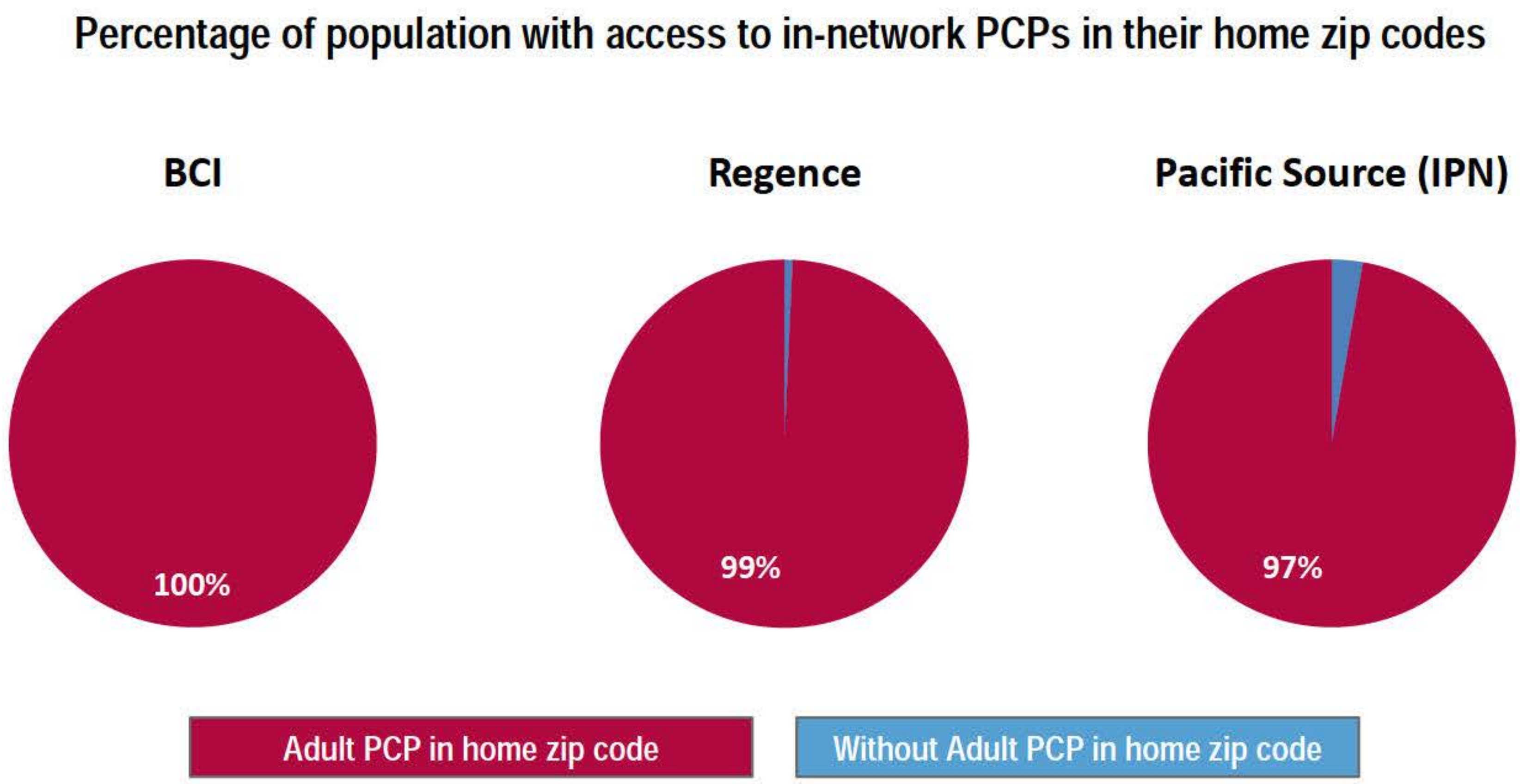


TX 1784 (Dranove Report) Figure 13

Some patients do travel

- Idiosyncratic factors often explain patient travel
  - Patient has moved, PCP has moved, personal relationships
  - Patients may select a PCP near their work
- Generally, observed patient travel is *not* the result of small differences in price
  - e.g., BCI uniform pricing schedule
- Therefore, such travel is not a reliable predictor of price responses

Health plan networks include Adult PCPs in virtually every Treasure Valley zip code

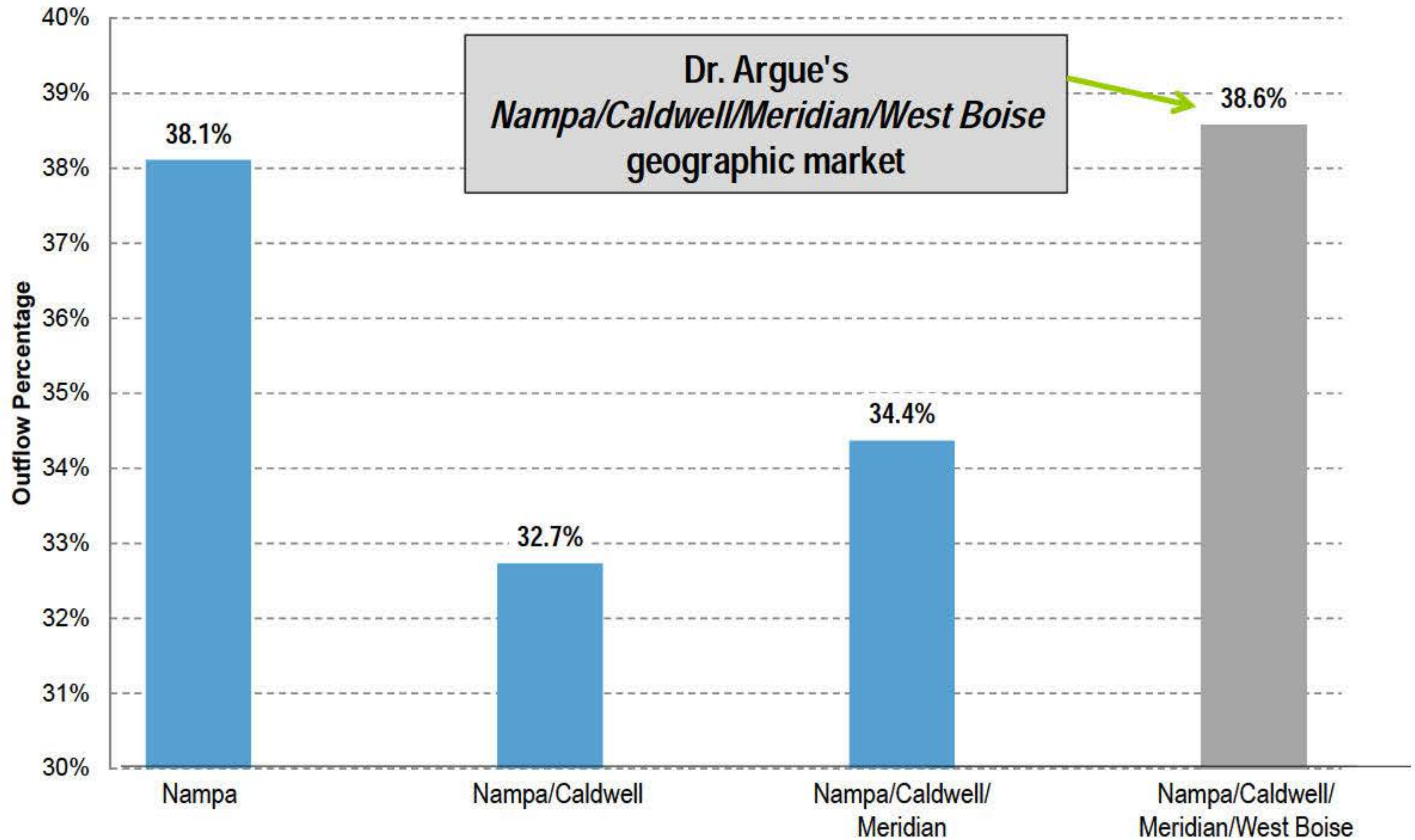


TX 1782 (Dranove Report) Figure 11

Dr. Argue’s geographic market analyses are flawed

- Dr. Argue never posits a well-defined relevant geographic market
- Dr. Argue's attempt to greatly expand the geographic market – to include “**at least**” Nampa, Caldwell, Meridian, and West Boise – is incorrect and lacks a consistent empirical basis
- Dr. Argue relies almost entirely on patient flow analysis
  - Ignores industry structure and economic research demonstrating that patient flows alone are an inappropriate basis for evaluating the profitability of a SSNIP
  - Both Dr. Argue’s original critical loss analysis and his revised critical loss analysis are inapt and flawed

Outflow percentages are not a reliable basis for defining the relevant geographic market



TX 2396 (Argue Report) Exhibit 13, Deposition Transcript of David Argue at 177-179

6. Market shares, concentration, and competitive effects

The acquisition substantially lessens competition

The acquisition substantially lessens competition

- The acquisition will substantially increase concentration in a market that is already highly concentrated
  - Will increase St. Luke's/Saltzer's leverage in negotiations with health plans, facilitating price increases
  - Health plans' best alternative, or outside option, to contracting with St. Luke's is much less attractive after the acquisition
  - Consistent with this, the increase in concentration is presumptively anticompetitive under the *Merger Guidelines*
- Testimony and documents support these conclusions
- Diversion analysis shows that for Nampa residents, St. Luke's and Saltzer are each other's closest substitute

Horizontal Merger Guidelines concentration thresholds

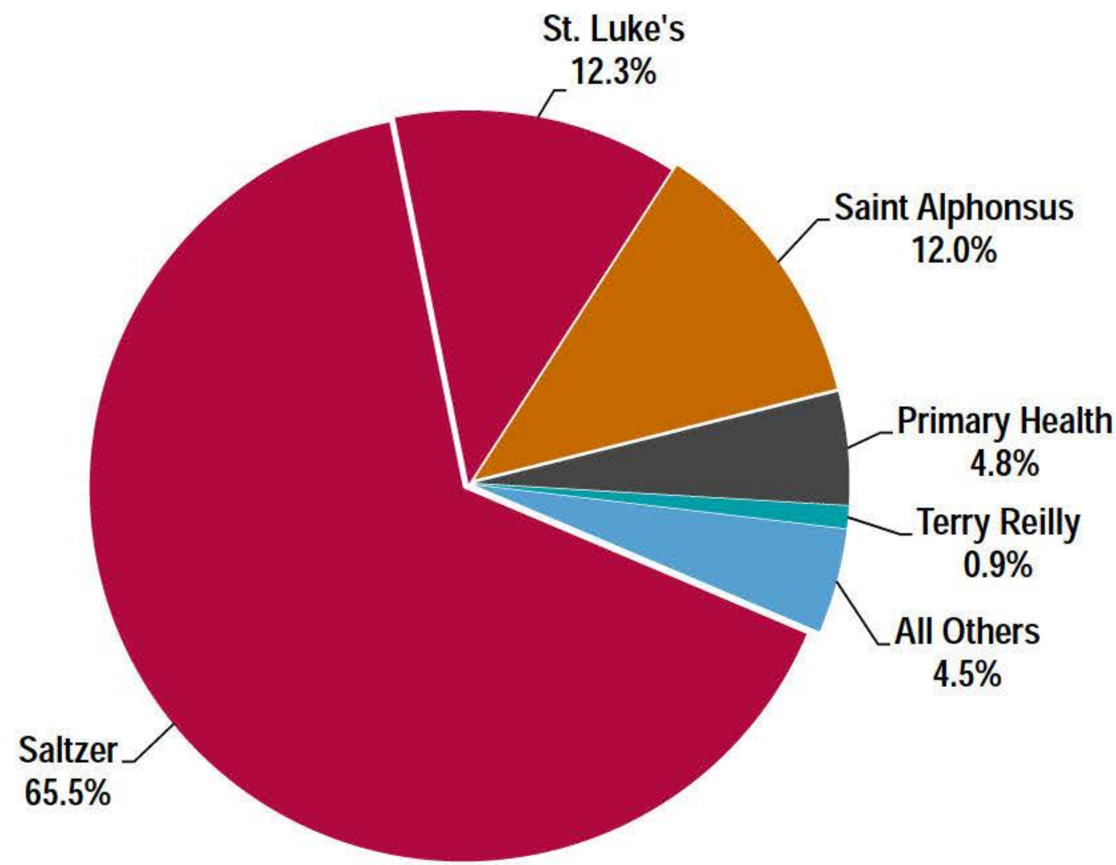
1. *Unlikely to have adverse competitive effects*:
   - HHI increase below 100 points, or
   - Post-merger HHI below 1500

2. *Potentially raise significant competitive concerns*:
   - Post-merger HHI between 1500 and 2500, and
   - Increase in HHI over 100

3. ***Presumed likely to enhance market power*:**
   - ***Post-merger HHI over 2500**, and*
   - ***HHI increase over 200 points***
   - "Presumption may be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power"

Horizontal Merger Guidelines (2010)

Market shares in the relevant market, by visits



TX 1789 (Dranove Report) Figure 18

St. Luke's and Saltzer account for nearly 80% of PCP services in Nampa

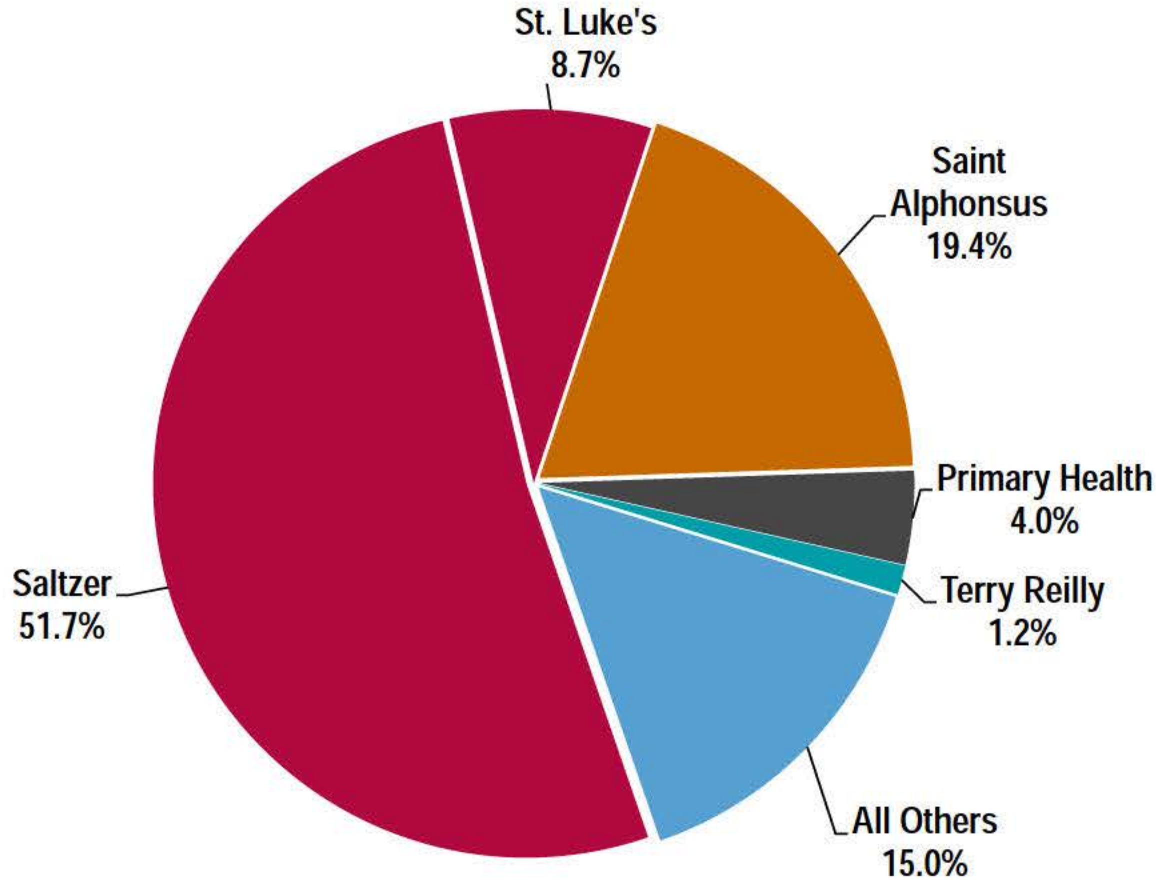
The acquisition substantially increases concentration in the Nampa PCP market

Group	Visits	Pre-merger visits share	Post-merger visits share	Delta HHI
Saltzer	**6,087**	**65.5%**	**77.7%**	+1,607
St. Luke's	**1,142**	**12.3%**		
Saint Alphonsus	1,113	12.0%	12.0%	
Primary Health	451	4.8%	4.8%	
Terry Reilly	88	0.9%	0.9%	
All Others	419	4.5%	4.5%	
HHIs		**4,612**	**6,219**	

TX 1789 (Dranove Report) Figure 18

The merger increases the HHI by 1,607 points, to 6,219

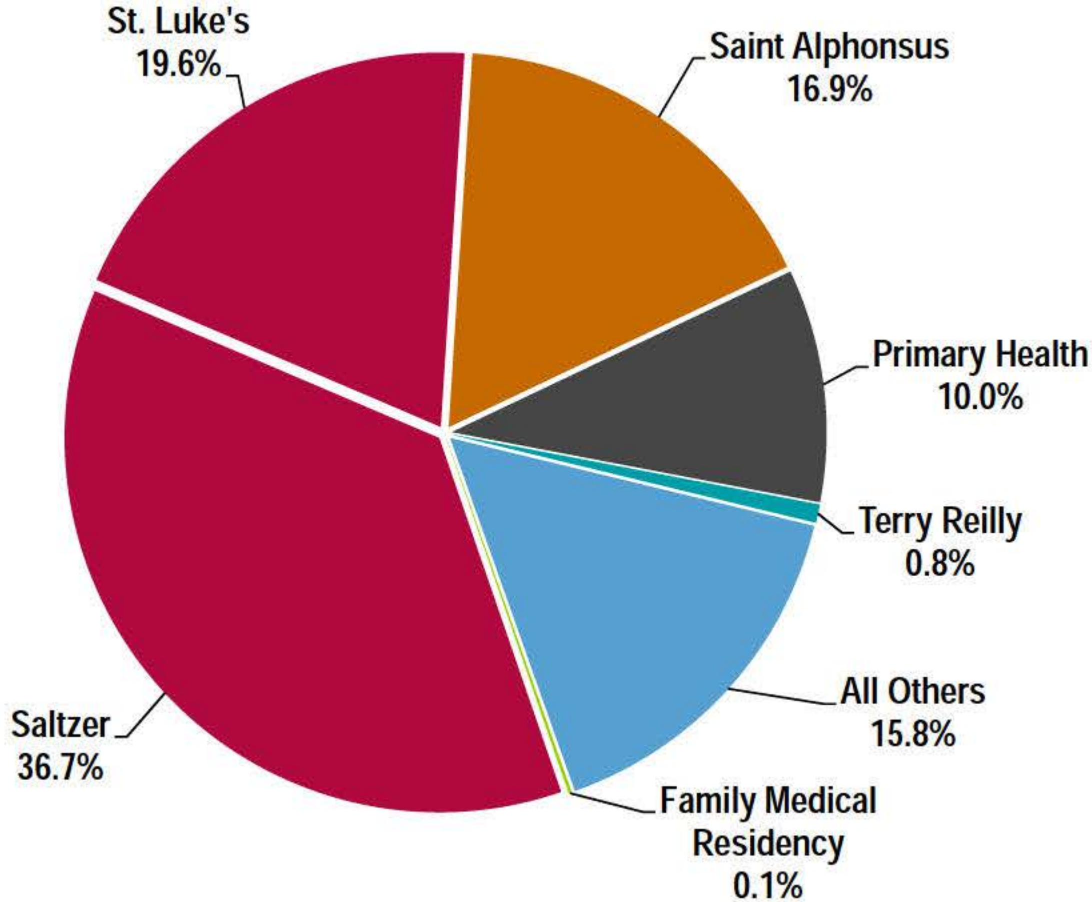
Results are qualitatively similar in broader markets: Nampa/Caldwell market shares by visits



TX 1790 (Dranove Report) Figure 19

St. Luke's and Saltzer account for over 60% of PCP services in Nampa and Caldwell

Results are qualitatively similar in broader markets: Nampa/Caldwell/Meridian market shares by visits



TX 1791 (Dranove Report) Figure 20

St. Luke's and Saltzer account for over 55% of PCP services in Nampa, Caldwell, and Meridian

Record evidence confirms that the acquisition will likely result in anticompetitive effects

- Dr. Randell Page, Chair of Saltzer's Contracting Committee, wrote:
  - If Saltzer closed its pending deal with St. Luke's, it may be able to re-open contract negotiations with Blue Cross, "as there would be the **clout of the entire network**"

ATTORNEYS' EYES ONLY

[redacted]

TX 1361 (SMG000315458) at 458, [redacted] ATTORNEYS' EYES ONLY [redacted]

Price increases and site of service

- Following an increase in market power from a hospital acquiring a physician group, payments can increase through multiple channels
  - e.g., negotiate higher unit rates, changes in the site of service, changes from office-based to hospital-based billing
- Both parties care about the total payments across all services

ATTORNEYS' EYES ONLY

[redacted]

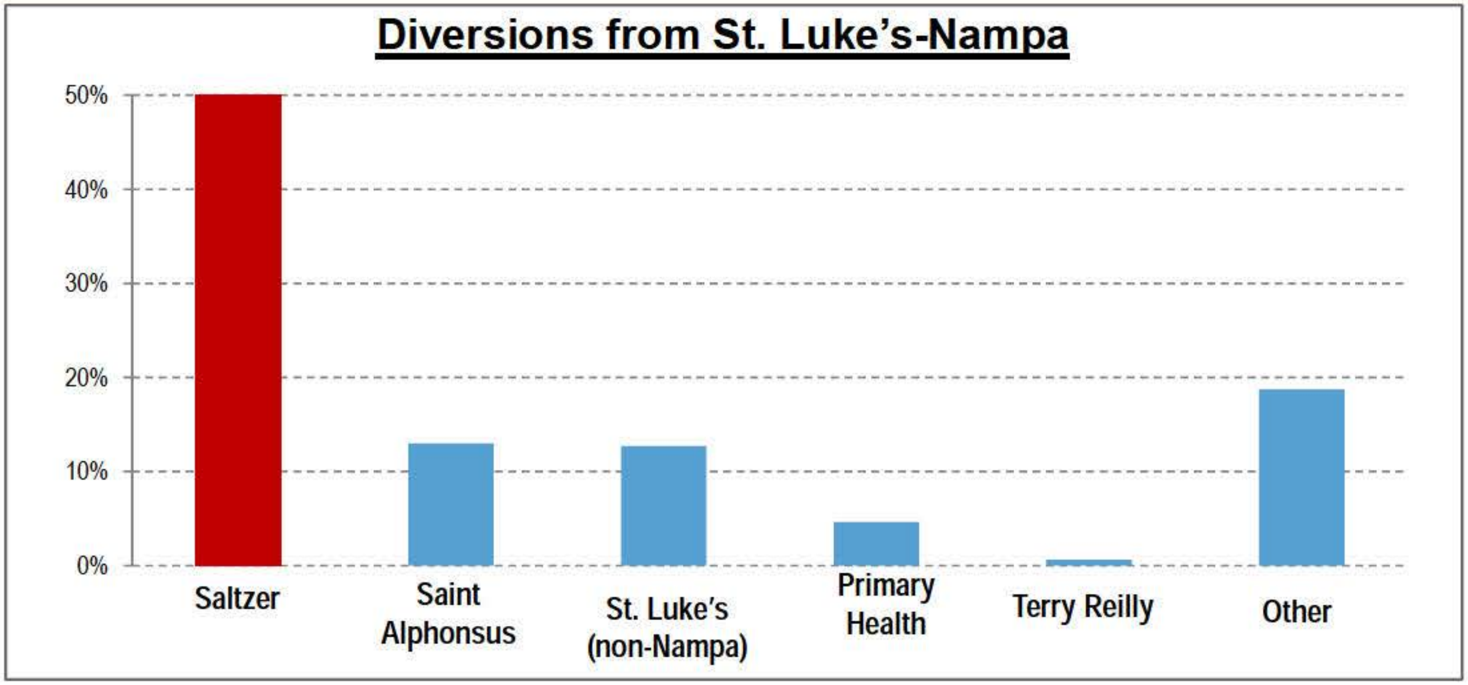
Diversion analysis suggests that the acquisition will substantially lessen competition

- What is diversion analysis?
  - A tool for measuring the extent to which firms or products are close substitutes for each other
  - Mergers of more closely substitutable producers increase the likelihood that the combined entity will be able to raise price
  - Calculating diversions does not depend on the defined relevant geographic market

- In healthcare markets, the ***diversion from Provider A to Provider B*** is the percentage of Provider A's patients that would switch to Provider B were Provider A to become unavailable

- Diversion analysis shows that St. Luke's and Saltzer PCPs are each other's closest substitute

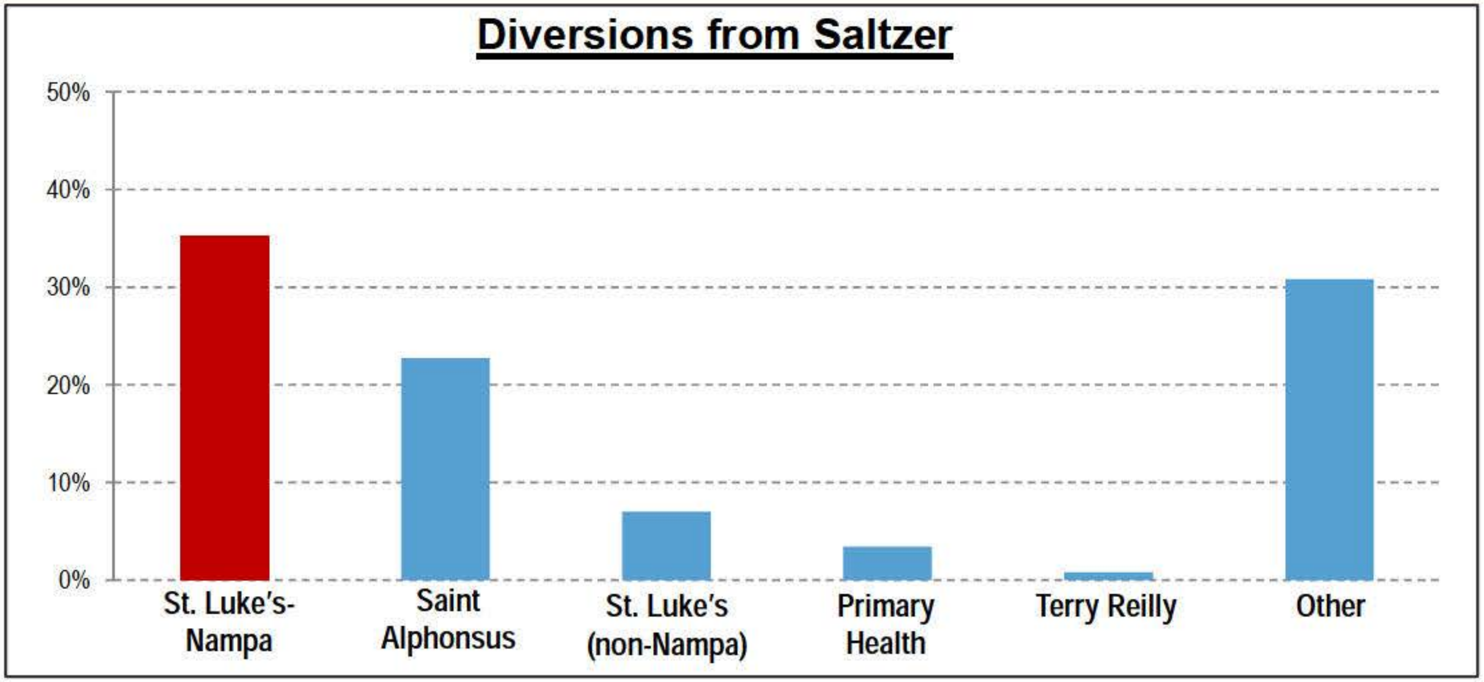
Saltzer is St. Luke's closest PCP competitor in Nampa



- If St. Luke's Nampa location were unavailable, *half* of its Nampa patients would switch to Saltzer
  - Post-acquisition, St. Luke's/Saltzer can force these patients into their *third choice*
  - Enhances St. Luke's/Saltzer bargaining leverage to negotiate higher reimbursements

TX 1794 (Dranove Report) Figure 23

St. Luke's is Saltzer's closest PCP competitor in Nampa



- If Saltzer's Nampa location were unavailable, over *one-third* of its Nampa patients would switch to St. Luke's
  - Post-acquisition, St. Luke's/Saltzer can force these patients into their *third choice*
  - Enhances St. Luke's/Saltzer bargaining leverage to negotiate higher reimbursements

TX 1794 (Dranove Report) Figure 23

Micron's tiered network experience supports my analysis and conclusions

- Dr. Argue relies heavily on Micron's tiered network to imply that patients would change PCPs in response to a small change in price, but Micron does not support his argument

- Key reasons that Micron supports my conclusions:
  1. Micron's experience is consistent with St. Luke's exercise of market power
  2. Micron is unique in the Treasure Valley

ATTORNEYS' EYES ONLY [redacted]

TX 1849 (Dranove Reply Report) § VI.B., ATTORNEYS' EYES ONLY [redacted]

7. Entry and expansion

Entry and expansion are unlikely to offset the anticompetitive effects of the acquisition

PCP entry will not constrain St. Luke's/Saltzer

- Evidence shows that recruiting PCPs into Nampa is challenging
- Entry by PCPs moving to Nampa from elsewhere is difficult and would not pose a near-term threat to St. Luke's-Saltzer
  - Patients value their relationships with physicians and would be reluctant to switch to a new physician without an established reputation
  - Patients typically select PCPs based on factors other than price
  - Generally, it takes substantial time and resources for new physicians to build their practices
- In recent years, Treasure Valley PCPs have been hired into established groups
  - No *de novo* PCP group entrants
- For these reasons, the prospect of entry is unlikely to constrain the exercise of market power

TX 1848 (Dranove Report) Fig. 27 and n. 203

Expansion is also unlikely to offset the anticompetitive effects of the Saltzer acquisition

- Difficult for existing in-network PCPs to expand their practices by cutting price
  - Saint Alphonsus has had little success expanding its Nampa PCP presence

- Suppose the combined St. Luke's/Saltzer increases price, and an insurer considers terminating in response
  - The insurer will need other Nampa-based PCPs, or it will struggle to compete against other insurers
  - Absent termination of St. Luke's/Saltzer, an existing PCP group would be unlikely to add PCPs
  - But until an existing PCP group expands, it would be difficult for an insurer to terminate St. Luke's/Saltzer

Deposition of Thomas Reinhardt at 47-50

8. Vertical integration and efficiencies

Theory and evidence indicate that the Saltzer acquisition is unlikely to result in efficiencies

Theory and evidence on vertical integration

- St. Luke's acquired a large number of PCP groups in recent years
- Neither economic theory nor research evidence is conclusive on whether vertical integration will reduce healthcare spending
  - Theory identifies advantages and disadvantages of vertical integration
  - Disadvantages were on display during the 1990s and 2000s, when many vertically integrated systems were created and, eventually, dissolved
  - Empirical studies of vertical integration by hospitals have generated mixed results (Dranove Report § V)
- St. Luke's experts have claimed that St. Luke's acquisitions have lowered the overall spending for healthcare services rendered to patients under its care
  - Enthoven Report, ¶¶ 49, 232; Argue Report, ¶¶ 11, 428-431

TX 1848 (Dranove Report) § V

Assessing the evidence from St. Luke's prior PCP acquisitions

Experiment: A systematic, empirical analysis of the effects of St. Luke's past acquisitions of PCP groups

- Use insurers' claims data to test whether St. Luke's PCP acquisitions reduced overall healthcare costs for the affected patients – i.e., test the assertions of Dr. Argue and Professor Enthoven

Methodology: *Difference-in-differences*

- Compare changes in overall healthcare spending for patients in two groups:
  - "Treatment group": patients under the care of PCPs acquired by St. Luke's
  - "Control group": patients under the care of comparable non-acquired PCPs

Findings: ***No evidence*** of systematic reductions in healthcare costs following St. Luke's past acquisitions of PCP groups

- Indeed, results suggest that St. Luke's past PCP acquisitions may have resulted in *increased* healthcare spending

Difference-in-Differences results

- Analyzed the data in 16 different ways to assess robustness of the findings*
  - **4 estimates** show statistically significant increases in spending
  - **12 estimates** show no statistically significant changes in spending
  - **0 estimates** show a statistically significant reduction in spending
    - *See* Dranove Reply Report, Figures 5 and 6

- Implications of these results:
  1. **No evidence of systematic reductions** in healthcare costs to consumers following St. Luke's past acquisitions of PCP groups. This robust finding is validated by all 16 specifications.
  2. Instead, the evidence is more consistent with the conclusion that St. Luke's past PCP acquisitions had no effect on healthcare costs or resulted in ***increased* healthcare costs**

- Findings are robust if they are insensitive to alternative valid modeling assumptions. Robustness is a key criterion for evaluating statistical analyses. TX 1819 (Dranove Reply) Figure 5, TX 1820 (Dranove Reply) Figure 6

Defendants’ efficiency claims are not merger-specific

- “Clinical integration” and “financial integration” are distinct
  - Clinical integration does not require financial integration
  - Financial integration does not necessarily improve cost or quality
- Risk-based contracting
  - Does not require employment of physicians

ATTORNEYS' EYES ONLY

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9. Summary

Summary of conclusions

1. Bargaining and selective contracting are the appropriate economic frameworks for evaluating the Saltzer acquisition
2. Nampa is the relevant geographic market, and even if the market is expanded significantly, my conclusions are the same
3. High market concentration indicates that the acquisition is likely to be anticompetitive
4. Economic analysis and record evidence confirm that enhanced market power is highly likely
5. Acquisition will likely lead to higher healthcare costs to local employers and consumers
6. Entry and expansion are unlikely to offset St. Luke's additional market power
7. No basis to expect that the acquisition will likely lead to efficiencies