

# Competition in Utah Health Care Markets

Report to the  
Privately Owned Health Care Organization  
Task Force of the Utah Legislature

May 5, 2006

Submitted by:

**Economists**  
INCORPORATED

*with*

OBER | KALER  
Attorneys at Law

Washington, D.C.

## PREFACE

This report is the product of more than five months of research and analysis. It relies on publicly available data provided by the Utah Department of Health's Office of Health Care Statistics, Utah Department of Insurance, Utah Hospitals and Health Systems Association, Utah Medical Society, individual providers and payers, and others. In the case of the Department of Health Data, the Office of Health Care Statistics provided detailed payer-specific information that had not previously been made public. All of these payer-specific data were offered for verification to the facilities that had submitted the data to the Department of Health.

The report also relies on information gathered in dozens of interviews of participants in Utah's health care markets as well as with other interested parties. Interviews were conducted of each acute care hospital system, each of the major managed care payers, many ambulatory surgery centers, and numerous physicians and physician representatives. For many of these entities, several different individuals were interviewed at multiple times. These interviews solicited opinions and information on how markets operated, problems with markets' functions, and suggestions on how to make improvements. All of the interviewees provided valuable insights, offered original data, verified publicly available data, and some offered perspectives from their own consultants' analyses.

Finally, the report relies on testimony and materials provided to the Task Force in its hearings. The Task Force minutes summarize the presentations of testifying parties and recordings of some hearings are available as well. The Task Force staff made available copies of all materials provided by testifying parties, which proved to be valuable sources of information.

Special thanks are extended to Nimish Dixit and Jaclyn Cote for their assistance in assembling the data and exhibits.

Submitted May 5, 2006.

*Economists Incorporated*

David A. Argue, Principal Investigator  
Barry C. Harris  
Robert A. Kneuper  
Stephanie M. Mirrow  
John M. Gale

*Ober/Kaler*

William E. Berlin  
John J. Miles

**TABLE OF CONTENTS**

**EXECUTIVE SUMMARY ..... 1**

**TASK ..... 3**

**FRAMEWORK FOR COMPETITIVE ANALYSIS..... 3**

**HOSPITAL AND AMBULATORY SURGERY SERVICE MARKETS..... 5**

    PRODUCT MARKETS FOR HOSPITAL AND AMBULATORY SURGERY SERVICES ..... 5

    PROFILES OF MAJOR PROVIDER SYSTEMS ..... 7

        Intermountain Health Care ..... 7

*IHC Wasatch Front Area Facilities..... 8*

*IHC Washington County and Cache County Area Facilities..... 9*

*IHC Rural Areas Facilities..... 10*

*IHC Facilities Planned or Under Construction..... 10*

        MountainStar ..... 11

        IASIS ..... 12

        University Health Care ..... 13

        Other Acute Care Hospital Providers ..... 13

        Non-hospital Facilities ..... 14

    GEOGRAPHIC MARKETS FOR HOSPITAL AND AMBULATORY SURGERY SERVICES ..... 15

        Hospital and Ambulatory Surgery Center Proximity ..... 17

        Service Area Overlaps ..... 17

*Service Areas for Acute Care Inpatient Services ..... 17*

*Service Areas for Normal Newborn Services..... 20*

*Service Areas for Ambulatory Surgery Services ..... 21*

        Patient Origin Analyses ..... 23

*Patient Origin for Acute Care Inpatient Services ..... 24*

*Patient Origin for Normal Newborn Services..... 25*

*Patient Origin for Ambulatory Surgery Services ..... 26*

    HOSPITAL AND AMBULATORY SURGERY SERVICES MARKET STRUCTURE ..... 27

        Inpatient Acute Care Services ..... 28

        Normal Newborn Services ..... 29

        Ambulatory Surgery Services..... 30

        Other Areas: Inpatient Acute Care/Normal Newborns/Ambulatory Surgery Services..... 31

        Unique Facilities and Services ..... 31

**HEALTH CARE FINANCING MARKETS ..... 32**

    PRODUCT MARKETS FOR HEALTH CARE FINANCING SERVICES..... 32

    PROFILES OF MAJOR PAYERS..... 33

        SelectHealth (IHC) ..... 34

        Regence BlueCross BlueShield of Utah..... 35

        Altius Health Plans ..... 36

        Public Employees Health Program..... 37

        Other Commercial Payers..... 38

---

GEOGRAPHIC MARKETS FOR HEALTH CARE FINANCING SERVICES .....	39
HEALTH PLAN PROVIDER NETWORKS .....	40
HEALTH CARE FINANCING SERVICES MARKET STRUCTURE.....	44
<b>VERTICAL INTEGRATION.....</b>	<b>48</b>
Perspectives on Vertical Integration in Health Care.....	49
Vertical Integration in Utah’s Health Care Markets.....	51
<b>STEERING OF PATIENTS BY PAYERS .....</b>	<b>54</b>
IHC-Oriented Network.....	55
Non-IHC-Oriented Network.....	56
Mixed Networks .....	56
<b>CONTRACTING AND OTHER CONDUCT OF PROVIDERS AND PAYERS.....</b>	<b>59</b>
Exclusivity/Bundled Discounts .....	59
<i>Washington County</i> .....	62
<i>Cache County</i> .....	64
<i>Utah County</i> .....	66
Hospital Contracting Models and Negotiations.....	68
Hospitals’ Position as Sole Community Providers.....	70
Investment in New Facilities and Equipment.....	73
<b>PHYSICIAN EMPLOYMENT AND CONTRACTING ISSUES .....</b>	<b>75</b>
Employment of Physicians .....	76
Physician Hospital Privileges and Health Plan Participation .....	78
Physician Payment Rates.....	79
Physician Ownership of Facilities.....	81
<b>COMPARISONS WITH BENCHMARK STATES .....</b>	<b>83</b>
<b>POLICY RECOMMENDATIONS .....</b>	<b>87</b>
Discussion of Policy Suggestions of Market Participants .....	88
Other Policy Recommendations .....	90
<b>GLOSSARY OF TERMS.....</b>	<b>92</b>

---

## LIST OF EXHIBITS

### Background Information

- 1 Utah Acute Care Hospitals
- 2 Utah Ambulatory Surgical Centers
- 3 Map of Utah Hospitals and Ambulatory Surgical Centers
- 4 Map of Salt Lake City and Provo-Orem Area Acute Care Hospitals and Ambulatory Surgical Centers
- 5 Map of Salt Lake City Area Acute Care Hospitals and Ambulatory Surgical Centers

### Trends in Patient Volume

- 6 Acute Care Discharges 2000-2004
- 7 Normal Newborn Discharges 2000-2004
- 8 Ambulatory Surgery Cases 2000-2003

### Service Areas Maps with Overlaps

- 9 Salt Lake County Hospitals 90% Service Area and Overlaps with other Selected Service Areas: Inpatient Acute Care Services
- 10 Weber and Davis County Hospitals 90% Service Area and Overlaps in Other Selected Service Areas: Inpatient Acute Care Services
- 11 Utah County Hospitals 90% Service Area and Overlaps in Other Selected Services Areas: Inpatient Acute Care Services
- 12 Cache County Hospitals 90% Service Area and Overlaps with Other Selected Service Areas: Inpatient Acute Care Services
- 13 Washington County Hospitals 90% Service Area: Inpatient Acute Care Services
- 14 Salt Lake County Hospitals 90% Service Area and Overlaps with Other Selected Service Areas: Normal Newborns
- 15 Weber and Davis County Hospitals 90% Service Area and Overlaps with Other Selected Service Areas: Normal Newborns
- 16 Utah County Hospitals 90% Service Area ad Overlaps with Other Selected Service Areas: Normal Newborns
- 17 Cache County Hospitals 90% Service Area: Normal Newborns
- 18 Washington County Hospitals 90% Service Area: Normal Newborns
- 19 Salt Lake, Weber and Davis County Hospitals 90% Service Area and Overlaps with Other Selected Service Areas: Ambulatory Surgery Services
- 20 Utah County Facilities 90% Service Area and Overlaps with Other Selected Service Areas: Ambulatory Surgery Services
- 21 Cache County Facilities 90% Service Area and Overlaps with Other Selected Service Areas: Ambulatory Surgery Services
- 22 Washington County Facilities 90% Service Area: Ambulatory Surgery Services

### Patient Origin Tables

- 23 Salt Lake County Hospitals' Acute Care Discharges, Acute Care DRGs, All Payers, 2004
- 24 Salt Lake County Hospitals' Acute Care Discharges, Acute Care DRGs, Commercial Payers, 2004
- 25 Weber/Davis Hospitals' Acute Care Discharges, Acute Care DRGs, All Payers, 2004
- 26 Weber/Davis Hospitals' Acute Care Discharges, Acute Care DRGs, Commercial Payers, 2004
- 27 Utah County Hospitals' Acute Care Discharges, Acute Care DRGs, All Payers, 2004
- 28 Utah County Hospitals' Acute Care Discharges, Acute Care DRGs, Commercial Payers, 2004

29	Cache County Hospitals' Acute Care Discharges, Acute Care DRGs, All Payers, 2004
30	Cache County Hospitals' Acute Care Discharges, Acute Care DRGs, Commercial Payers, 2004
31	Washington County Hospitals' Acute Care Discharges, Acute Care DRGs, All Payers, 2004
32	Washington County Hospitals' Acute Care Discharges, Acute Care DRGs, Commercial Payers, 2004
33	Salt Lake County Hospitals' Normal Newborn Discharges, All Payers, 2004
34	Salt Lake County Hospitals' Normal Discharges, Commercial Payers, 2004
35	Ogden-Layton Hospitals' Normal Newborn Discharges, All Payers, 2004
36	Ogden-Layton Hospitals' Normal Newborn Discharges, Commercial Payers, 2004
37	Utah County Hospitals' Normal Newborn Discharges, All Payers, 2004
38	Utah County Hospitals' Normal Newborn Discharges, Commercial Payers, 2004
39	Salt Lake County Facilities' Ambulatory Surgery Cases, All Payers, 2003
40	Salt Lake County Facilities' Ambulatory Surgery Cases, Commercial Payers, 2003
41	Davis and Weber Counties Facilities' Ambulatory Surgery Cases, All Payers, 2003
42	Davis and Weber Counties Facilities' Ambulatory Surgery Cases, Commercial Payers, 2003
43	Utah County Facilities' Ambulatory Surgery Cases, All Payers, 2003
44	Utah County Facilities' Ambulatory Surgery Cases, Commercial Payers, 2003

**Shares by Service, Market and System**

45	Inpatient Acute Care Services Shares by Market & System
46	Normal Newborn Hospital Services Shares by Market & System
47	Ambulatory Surgery Services Shares by Market & System

**Health Insurance Networks and Enrollment**

48	SelectHealth (IHC) Hospitals and Freestanding Ambulatory Surgical Centers Network
49	Physician Network by Health Plan and Product
50	Commercial Health Insurance Enrollment by Plan and Product, 2000 –2004
51	Commercial Health Plan Enrollment by County, 2004
52	Regence Blue Cross Blue Shield Hospitals and Freestanding Ambulatory Surgical Centers Network
53	Altius Health Plans Hospitals and Freestanding Ambulatory Surgical Centers Network
54	Public Employees Health Program (PEHP) Hospitals and Freestanding Ambulatory Surgical Centers Network
55	United Healthcare Hospitals and Freestanding Ambulatory Surgical Centers Network
56	Deseret Mutual Benefit Administrators Hospitals and Freestanding Ambulatory Surgical Centers Network
57	Educators Mutual Hospitals and Freestanding Ambulatory Surgical Centers Network
58	Aetna Hospitals and Freestanding Ambulatory Surgical Centers Network
59	Cigna Hospitals and Freestanding Ambulatory Surgical Centers Network
60	University Health Plans Hospitals and Freestanding Ambulatory Surgical Centers Network
61	Other Plans Hospitals and Freestanding Ambulatory Surgical Centers Network
62	Commercial Health Insurance Enrollment Shares by Plan and Product, 2000 – 2004

**Payer Mix by System**

63	Acute Care DRGs Payer Mix by Hospital System
64	Ambulatory Surgery Cases Payer Mix by Affiliation

**Financial Information by Hospital and System**

65	Utah Hospitals Financial Data (FY 00 – FY 04)
----	---

---

**Patient Volume by Individual Commercial Payer**

66	Inpatient Acute Care Discharges
67	Ambulatory Surgery Cases
68	SelectHealth (IHC) Inpatient Acute Care Discharges
69	SelectHealth (IHC) Ambulatory Surgery Case
70	Aetna Inpatient Acute Care Discharges
71	Aetna Ambulatory Surgery Cases
72	Educators Mutual Inpatient Acute Care Discharges
73	Educators Mutual Ambulatory Surgery Case
74	United Healthcare Inpatient Acute Care Discharges
75	United Healthcare Ambulatory Surgery Cases
76	Altius Health Plans Inpatient Acute Care Discharges
77	Altius Health Plans Ambulatory Surgery Cases
78	Cigna Inpatient Acute Care Discharges
79	Cigna Ambulatory Surgery Cases
80	University of Utah Health Plans Inpatient Acute Care Discharges
81	University of Utah Health Plans Ambulatory Surgery Cases
82	Public Employees Health Program Inpatient Acute Care Discharges
83	Public Employees Health Program Ambulatory Surgery Cases
84	Regence BCBS Inpatient Acute Care Discharges
85	Regence BCBS Ambulatory Surgery Cases
86	Deseret Mutual Benefit Administrators Inpatient Acute Care Discharges
87	Deseret Mutual Benefit Administrators Ambulatory Surgery Cases

**Expanded Payer-Specific Data for Selected Ambulatory Surgery Centers**

88	Coral Desert Surgery Center Ambulatory Surgery Cases, 2000 – 2005
89	St. George Surgical Center Ambulatory Surgery Cases, 2000 – 2005
90	Central Utah Surgical Center Ambulatory Surgery Cases, 2000 – 2005
91	HealthSouth Provo Surgical Center Ambulatory Surgery Cases, 2000 – 2003
92	Patient Volume of New and Incumbent Facilities

**Benchmark Comparisons**

93	Benchmark Analysis: Comparison of Contributing Factors 2004
94	Benchmark Analysis: Benchmark Comparison of Average Single-Enrollee Premiums
95	Benchmark Analysis: Comparison of Average Family Premiums

## EXECUTIVE SUMMARY

In September 2005, the Privately Owned Health Care Organization Task Force of the Utah Legislature requested a study of competition issues in health care markets in Utah. This report has been prepared in response to the Task Force's request. The focus of this competition analysis is on whether consumers have sufficient alternatives available in each of the markets to be assured of competitive price and quality. The focus is not on the success or failure of any particular hospital, ambulatory surgery center, physician, or managed care plan. Very little disagreement exists that consumers in Utah receive high quality health care services. Likewise, prices paid by consumers are considered to be reasonable. Acceptable price and quality on their own suggest that Utah's health care markets are performing competitively. Considerable evidence exists to support the conclusion that Utah's health care markets are performing competitively notwithstanding the size, geographic spread, vertical relationships, and contracting practices of some market participants.

As requested by the Task Force, this report focuses on markets for health care financing, hospital and ambulatory surgery facility services, and physician services. It considers the structure of markets in terms of the number and size of competitors. It examines relationships between the markets, including the vertical integration of Intermountain Health Care. It also assesses the competitive impact of various practices, such as managed care contracting, provider network formation, investment in facilities and equipment, physician employment and others.

The markets for health care provider services in Utah generally can be segregated into urban areas and rural areas. In the urban areas along the Wasatch Front, multiple independent providers of inpatient acute care services, ambulatory surgery services and physician services are available to and used by consumers. Intermountain Health Care operates several hospitals in the area, including the only children's specialty hospital in the state, and accounts for more hospital beds and patient cases than any other hospital system. MountainStar, IASIS and University Health Care also operate multiple hospitals including some that are uniquely positioned in the market.

Many managed care plans sell health insurance products to consumers throughout the Wasatch Front. Intermountain's newly renamed SelectHealth accounts for more enrollees along the Wasatch Front than any other plan, but it is trailed closely by Regence BlueCross BlueShield. Altius Health Plans has fewer enrollees, but is growing rapidly, while United Healthcare has experienced a significant decline in enrollment. Public Employees Health Program and Deseret Mutual Benefit Administrators plans have strong enrollment figures in several areas. An assortment of health insurance products are available from these and other insurers with different networks of facilities and physicians. Consumers choose among a variety of health insurance products, some of which feature restrictive networks of providers while others (often offered by the same insurance plan) feature broad networks of providers. Large numbers of enrollees have chosen restrictive networks oriented around Intermountain hospitals. Large numbers

have also chosen products featuring restrictive networks oriented around non-Intermountain hospitals. Other insurance products featuring networks with broad selections of providers also attract many enrollees. Employers and employees are free to switch health plans and networks, and they exercise that freedom. These patterns reflect significant competition among providers and health plans.

The payers and providers of the Wasatch Front engage in a variety of contracting and other practices as part of their competition with rivals. All of these practices are common in markets with significant managed care penetration. These practices include bundled-discount hospital pricing in which more favorable discounts are offered to payers that exclude competing facilities from the network of a particular product. Other practices include the employment of physicians, investment in new facilities and equipment, and establishment of reimbursement rates. None of these practices has resulted in harm to the competitive process in Utah. Consumers have benefited from the vigorous rivalry that has generated these practices even though, as is common in competitive markets, individual payers and providers may have been harmed by those same practices.

Other areas in Utah have much smaller populations than the Wasatch Front and naturally have fewer alternative providers available to consumers. In many rural areas of Utah, the only locally available health care facility is the community hospital. For the most part, managed care contracting in those areas neither favors nor disfavors any particular provider or payer. In some other areas of the state, most notably Cache and Washington counties, alternative facilities have opened in competition with the general acute care hospital. The choices among health insurance products available to consumers in Cache and Washington counties are similar to the types of alternatives available along the Wasatch Front, except that payers' networks feature only one full-service acute care hospital. In each county, health insurance products that include area ambulatory surgery centers and health insurance products that exclude these facilities have attracted significant numbers of consumers. Consumers' behavior in Cache and Washington counties reflects the liveliness of competition among health plans to offer attractive rates and provider networks.

Other types of conduct raised by market participants as potentially causing harm to competition are unlikely to meet the economic and market conditions necessary to affect adversely the price and quality of services offered to consumers. None of these practices appears to have actually harmed competition. Investment in new facilities and equipment has offered consumers more and higher quality choices. Employment of physicians remains small relative to the supply of independent physicians. Physician ownership of ambulatory surgery centers has provided additional alternatives for consumers. Rates established by payers for physician and ambulatory surgery center services are set in the context of competition among payers to purchase those services, thus making it unlikely that any competitive harm could arise.

In sum, health care markets in Utah are serving the interests of consumers by forcing suppliers of health insurance and health care provider services to offer the most attractive combinations of price and quality. This report recommends that the Utah legislature

refrain from intervention in Utah's health care markets. Regulatory actions ostensibly intended to benefit consumers are likely to benefit particular providers or insurers to the detriment of competition and to the detriment of consumer welfare.

## **TASK**

The Privately Owned Health Care Organization Task Force of the Utah Legislature (Task Force) has detailed its objective for this study of Utah health care markets in its September 2005 Request for Proposals. Economists Incorporated and Ober/Kaler delivered their proposal for conducting this analysis to the Task Force on October 18, 2005. In summary, it is the understanding of Economists Incorporated and Ober/Kaler that the Task Force seeks a thorough and comprehensive assessment of markets in Utah that involve health care financing, hospital services and physician services. That assessment includes consideration of market structure and performance as well as an evaluation of the competitive implications of the relationships between markets. The assessment also considers the significance of the size and vertically integrated corporate structure of Intermountain Health Care. The ultimate focus of the evaluation is to determine whether aspects of the structure or performance of the markets are detrimental to consumers in terms of price and quality, where quality includes factors like patient access to health care facilities and professionals. To the extent that the structure of health care markets in Utah or specific business and contracting practices have harmed competition and thus rendered services more costly, lower quality, or insufficiently accessible to consumers, specific legislative, regulatory, or enforcement actions are to be recommended to enhance market performance and improve consumer welfare.

This report is organized as follows: (1) a framework for a competitive analysis is presented, (2) product and geographic markets are discussed, first for health care provider services, then for health care financing services, (3) profiles of the major market participants are presented along with information on statistical trends in each market, (4) the structure of each market is presented with shares calculations, (5) several practices related to contracting, employment, and capital expenditures, among others, are analyzed, and (5) policy recommendations are considered.

## **FRAMEWORK FOR COMPETITIVE ANALYSIS**

Consistent with the task outlined above, this report focuses on the competitive impact of structure and conduct in health care services markets in Utah. To perform such an assessment, it is necessary to have a conceptual framework for the analysis of the factual circumstances. A framework for competitive analyses has evolved from the Horizontal Merger Guidelines of the U.S. Department of Justice and Federal Trade Commission (Merger Guidelines), various DOJ and FTC hearings, judicial decisions in many cases

litigated in federal and state courts, and published research in scholarly economic and legal journals.<sup>1</sup>

Competition is desirable because it produces an efficient supply of goods and services and enhances consumer welfare. This efficient supply results because the existence of alternative sources of supply forces each competitor to try to offer its good or service in a price/quality combination desirable to consumers. The perspective of consumers is an important aspect of a study of the competitive process. Thus to the extent that market structures or practices are harmful to competition, consumers are likely to be worse off than if the structure or practices did not exist. Enhancing consumer welfare is not, however, necessarily the same as enhancing supplier welfare. Competition among health insurers, for example, frequently results in individual health insurers losing sales to other insurers. If a insurer increases its sales because it offers a better price/quality combination than its rivals, consumers are made better off regardless of the rivals' loss of sales. Some practices may appear on the surface to harm competition, but do not necessarily do so. It is possible, for example, that contract limitations reflect harm to competition. Those restrictions may, however, result from competition among firms to enhance efficiency, create cost savings, and offer desirable services to consumers. Consequently, it is important to conduct a comprehensive study of each market's operation rather than relying on individual anecdotes.

Analyses of competition typically begin with delineation of markets. Markets defined for the purpose of analyzing competition are not necessarily the same as markets used by businesses in their daily operations. A commonly accepted methodology for market definition follows the paradigm established in the Merger Guidelines. In that paradigm, a market is the smallest group of providers of a product or service that could increase its joint profits by raising price (or lowering quality) from competitive levels. The profitability of such a price increase or quality decrease depends on the extent to which consumers will switch services or suppliers to avoid the price or quality change (i.e., it depends on consumers' elasticity of demand).<sup>2</sup> For example, if a product market is thought to be commercial health insurance products offered by insurers in Utah, one question to address is the extent to which employers would switch to self-funded plans if the premiums on commercial products increased by a small but significant amount, holding all else constant.

---

<sup>1</sup> See, for example, Horizontal Merger Guidelines of the U.S. Department of Justice and Federal Trade Commission, 1992; Statements of Antitrust Enforcement Policy in Health Care, Issued by the U.S. Department of Justice and Federal Trade Commission, August 1996; Improving Health Care: A Dose of Competition, Federal Trade Commission and U.S. Department of Justice, July 2004; Greg Werden, "The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm," June 2002, [www.doj.gov/atr/hmerger/11256.pdf](http://www.doj.gov/atr/hmerger/11256.pdf).

<sup>2</sup> The approach to market definition has been used in many merger and non-merger contexts. (See Greg Werden, "The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm," June 2002, [www.doj.gov/atr/hmerger/11256.pdf](http://www.doj.gov/atr/hmerger/11256.pdf).)

The Merger Guidelines paradigm also utilizes the concept of “market power” in assessing whether harm to competition may occur. Market power, which can lead to harm to competition, exists when a supplier (or group of suppliers acting in concert) in a properly defined market has the ability to increase its profits by raising price or lowering quality from the levels that would prevail under competition.<sup>3</sup> Harm to competition typically results from an action by competing suppliers that suppresses rivalry among them or possibly by the elimination of competing suppliers. When this rivalry is suppressed, there is no need for individual suppliers to lower prices in an effort to acquire or retain consumers; rather, each supplier can raise price or lower quality. Without this rivalry being suppressed, consumers can choose among alternative suppliers and thereby prevent antitrust injury. Under certain circumstances, harm to competition can result from the unilateral actions of a single firm without the cooperation of its competitors.<sup>4</sup>

## **HOSPITAL AND AMBULATORY SURGERY SERVICE MARKETS**

Utah is home to a variety of inpatient and outpatient facilities that provide health care services to patients. Of these facilities, 45 hospitals provide acute care inpatient services. Ambulatory surgery services are provided by all 45 acute care hospitals as well as at least 40 ambulatory surgery centers, some of which are hospital-affiliated and some of which are independent. Many other facilities exist as well to provide non-acute services such as long-term care and ancillary services like imaging services, laboratory services, home health services, and durable medical equipment sales and rentals. In terms of facility service providers, this report focuses primarily on hospitals and ambulatory surgery centers, both because of their general importance as health care providers and because of their significance in managed care network formation and contracting.

In addition to the overall importance of hospitals and ambulatory surgery centers, much more comprehensive patient volume data are publicly available for those facilities than for other types of facilities. The Utah Department of Health currently provides detailed inpatient discharge information through 2004 and ambulatory surgery information through 2003. For some specific discussions below, more updated information from ambulatory surgery centers is provided.

## **PRODUCT MARKETS FOR HOSPITAL AND AMBULATORY SURGERY SERVICES**

In principle, product markets for services provided by acute care hospitals and non-hospital health care facilities are defined by considering alternative services that would be viewed by patients as being interchangeable. If such services were interchangeable, patients and payers could avoid a price increase by a hypothetical monopolist of one service by switching to another service. In reality, individuals’ demand for hospital

---

<sup>3</sup> Market power can also exist for a purchaser or a group of purchasers acting in concert.

<sup>4</sup> See Merger Guidelines §2.2 for a discussion of unilateral effects analysis.

services is determined by medical requirements. Few circumstances exist in which one hospital service or ambulatory surgery service can be substituted for another. That reality suggests that markets should be defined for each individual health care service.

An alternative approach to product market definition in health care involves what is referred to as “cluster markets.” Cluster markets are often thought of as groups of health care services that managed care plans prefer a single hospital to provide. The use of cluster markets has a long history in antitrust merger analysis.<sup>5</sup> Despite this long history, there are clear problems and certain limitations associated with using such a market. The cluster market approach leaves open the issue of identifying the cluster of hospital services that health insurers require a single hospital to provide. If a specific cluster of services must be provided at a single hospital, then it is appropriate to consider only those hospitals that offer the set of services. If, as is much more likely, health insurers do not require these specific services be provided at a single hospital, then the analysis reverts to product markets determined by individual hospital services.

One distinction that is typically made in delineating health care product markets is between inpatient services and outpatient services. Over time with advances in medical and pharmacological technology, many services that were once provided only on an inpatient basis have become available on an outpatient basis. That type of technological shift, however, is not what distinguishes markets for competition analyses. It is commonly believed that for any given level of technology, patients and payers will not substitute between inpatient and outpatient settings as a result of small changes in price.<sup>6</sup> Ultimately, even if there is substitution for some services, there are many other services for which there is no substitution.

Another distinction that is commonly made in product market delineation is between inpatient acute care services and inpatient non-acute care services. Some hospitals provide inpatient psychiatric care, substance abuse treatment, rehabilitation services, skilled nursing services, and long-term acute care services. These services are typically excluded from a cluster market of inpatient acute care services because payers often contract separately for those services and many of the services are provided outside of a general acute care facility setting. Thus two of the primary reasons for inclusion of services in a cluster market are not present.

This report focuses on three major product markets for clusters of hospital and ambulatory surgery services:

---

<sup>5</sup> See Seth Sacher and Louis Silvia, “Antitrust Issues in Defining the Product Market for Hospital Services,” *Journal of the Economics of Business*, vol. 5, no. 2, July 1998, pp. 181-202.

<sup>6</sup> Improving Health Care: A Dose of Competition, Federal Trade Commission and Department of Justice, June 2004, p. 21; Seth Sacher and Louis Silvia, “Antitrust Issues in Defining the Product Market for Hospital Services,” *Journal of the Economics of Business*, vol. 5, no. 2, July 1998, pp. 181-202.

**PRODUCT MARKETS FOR HOSPITAL AND AMBULATORY SURGERY CENTER SERVICES<sup>7</sup>**

<b>Acute Care Inpatient Services*</b>	<b>Normal Newborn Services*</b> (proxy for uncomplicated inpatient hospitals services)	<b>Ambulatory Surgery Services*</b>
---------------------------------------	---	-------------------------------------

\* See footnote 7 for definitions of the specific services included in each cluster of services.

**PROFILES OF MAJOR PROVIDER SYSTEMS**

Exhibits 1 and 2 provide various statistical information about acute care hospitals and ambulatory surgery centers in Utah. A series of maps depicting these facilities as well as locations of cities, towns and roads are included at Exhibits 3-5. Exhibit 6-8 show trends in patient volume for each of the sets of services identified above. The most recent year for which inpatient discharge data are available is 2004.<sup>8</sup> For ambulatory surgery, the most recent year is 2003.<sup>9</sup>

**Intermountain Health Care**

Intermountain Health Care owns 18 acute care hospitals in Utah and manages one additional hospital. Nine of these hospitals are located in the four urban counties along the Wasatch Front (Weber, Davis, Salt Lake and Utah). The remaining 10 are distributed

<sup>7</sup> “Acute care” refers to inpatient services excluding psychiatric and substance abuse treatment (DRG 424-438, 521-523), separately classified rehabilitation services (DRG 462), and unclassified services (DRG 470). “Normal newborns” refer to babies that are delivered of sufficient birthweight and with no complicating medical conditions (DRG 391). “Ambulatory surgery” refers to cases with CPT codes from CPT 19120 to CPT 69979 (excluding a few ranges of codes) or CPT 93501 to CPT 93660. The data of inpatient discharges and outpatient surgical visits provided by the Utah Department of Health classify patients as inpatients if they have an overnight stay in a facility. Ambulatory surgery cases are included in the data if they are performed in an operating or procedure room of a licensed facility with at least two operating rooms. (See Public Use Data File User Manuals, January 2005, Office of Health Care Statistics, Utah Department of Health.)

<sup>8</sup> The 2000 inpatient acute care discharge data appear to include more discharges than expected for virtually all hospitals. The source of this apparent discrepancy has not been identified. The 2000 inpatient data are included in the exhibits to this report, but the discussion in the text focuses on the 2001-2004 data.

<sup>9</sup> The Utah Health Data Committee recommends that comparisons using the ambulatory surgery data “be limited to comparable ambulatory codes on this Procedure Code List.” (2003 Public Use Data File User Manual, p. 3). It is possible that inconsistencies exist in how ambulatory surgery cases are reported over time and between facilities. That caveat should be recognized in determining the significance of these data in reaching conclusions.

throughout the state, including one each in Cache and Washington counties, areas with comparatively large populations. IHC also owns a free-standing surgery center in Salt Lake City and another in Ogden.

#### *IHC Wasatch Front Area Facilities*

Exhibit 1 shows that Intermountain Health Care's nine acute care hospitals along the Wasatch Front had a total of 1,597 staffed acute care beds in 2005. The total number of staffed beds in the four-county area is 3,386 implying that IHC accounts for 47% of beds in the area. The largest IHC hospital is LDS Hospital, located in Salt Lake City with 449 staffed acute care beds. Three others have more than 200 beds each: Utah Valley Regional Medical Center in Provo (328 beds), McKay-Dee Hospital in Ogden (240 beds) and Primary Children's Medical Center in Salt Lake City (223 beds). Cottonwood Hospital in Murray has 169 beds and the other four have fewer than 100 beds each. IHC's two freestanding ambulatory surgery centers are both located on the Wasatch Front and have 10 operating rooms combined.

With regard to patient care services, Exhibit 6 shows that IHC's nine Wasatch Front area hospitals had a total of 84,860 acute care inpatient discharges in 2004. From 2000 to 2004, acute care inpatient discharges at the nine hospitals increased by 6,749 or 8.6%. These 84,860 acute care inpatient discharges in 2004 represents 54.3% of discharges of all acute care hospitals in the four-county urban area which is down slightly from IHC's 54.8% share in 2000.

Seven of IHC's nine hospitals in the four-county area also provided a significant amount of obstetrics services.<sup>10</sup> Exhibit 7 shows that the number of normal newborns delivered at those hospitals was 16,935 in 2004 which represents a 1.4% increase over the 16,703 normal newborns delivered in 2000. In 2004, another 6,156 newborns with some complications were delivered at these seven hospitals, bringing the total to 22,859. IHC accounted for 54.3% of the 31,202 normal newborns deliveries at hospitals in the four-county area in 2004 which is a decrease from its 57.9% share of normal newborns in 2000.

Ambulatory surgery cases at IHC's nine Wasatch Front hospital facilities increased significantly between 2000 and 2003 (Exhibit 8). IHC's total increased 23.5% from 71,711 in 2000 to 88,587 in 2003. Patients receive ambulatory surgery services at free-standing surgery centers as well as at hospitals. IHC's two free-standing ambulatory surgery centers had a combined total of 11,716 cases in 2003, an increase of 7.5% from the 10,901 cases in 2000. All of this overall growth occurred at McKay-Dee Surgery Center; Intermountain Surgery Center showed a decline of 7.7%. The total number of ambulatory surgery cases at hospitals and surgery centers in the four-county urban area in 2003 was 220,892, meaning that IHC's facilities accounted for 45.4% of ambulatory

---

<sup>10</sup> No obstetrics services are provided at TOSH. No babies are delivered at Primary Children's Medical Center, but some are transferred there after delivery. In 2004, more than 700 newborns were transferred to and later discharged from Primary Children's.

surgery cases performed in those counties that year, which is down from its 50% share in 2000.

*IHC Washington County and Cache County Area Facilities*

Intermountain Health Care owns nine hospitals and manages one other (Garfield Memorial Hospital) located outside of the Wasatch Front area. In 2005, these ten hospitals had 506 staffed beds among them. The two largest hospitals are Dixie Regional Medical Center in St. George, Washington County (236 beds) and Logan Regional Hospital in Logan, Cache County (113 beds).

Dixie Regional Medical Center had 12,500 acute care inpatient discharges in 2004 which makes it fourth-largest in the IHC system behind LDS Hospital, Utah Valley Regional Medical Center and McKay-Dee Hospital. Dixie Regional's acute care discharges increased by 2,848 or 29.5% between 2000 and 2004, reflecting in part the rapid population growth of southwestern Utah and surrounding areas of Nevada and Arizona. In 2004, 13.7% of Dixie Regional's acute care discharges were of Nevada or Arizona residents.

The number of newborns at Dixie Regional also increased between 2000 and 2004. In 2004, Dixie Regional accounted for 1,968 normal newborn deliveries. That total is 35.1% higher than the 1,457 it had in 2000, but still makes it only the sixth-largest in the IHC system for newborns.

Dixie Regional also provides a significant amount of ambulatory surgery services. In 2003, it had 7,360 ambulatory surgery cases, down 9.8% from its 8,174 cases in 2002, and only a slight increase over the 2000 level. This decline is reportedly attributable to a loss of endoscopy procedures, most of which likely went to Mountain West Endoscopy Center (also known as St. George Endoscopy Center). Six other IHC hospitals have more ambulatory surgery cases than Dixie Regional and two others, including Logan Regional Hospital, are similar in size.

In contrast to the inpatient growth at Dixie Regional, the number of acute care inpatient discharges at Logan Regional Hospital declined between 2000 and 2004. Logan Regional experienced a sharp decline in 2001 with moderate growth in the subsequent three years. Over the five-year period, its acute care inpatient discharges fell by 7.2% to 6,345 in 2004. It appears that the decline in Logan Regional's inpatient business is largely attributable to the 2001 opening of inpatient services at Cache Valley Specialty Hospital which is also located in Logan. Cache Valley Specialty Hospital's inpatient discharges grew from zero in 2000 to 718 in 2004. Logan Regional experienced a significant growth in the number of its normal newborns, rising from 1,979 in 2000 to 2,119 in 2004.

Logan Regional's ambulatory surgery cases declined even more significantly than its inpatient cases in 2001. Ambulatory surgery cases at Logan Regional declined by 30.4% from 2000 to 2001. As was the case with Dixie Regional, much of the decline in outpatient cases at Logan Regional reflects a loss of endoscopy procedures. Northern

Utah Endoscopy Center, which opened in 2001, had 3,269 procedures in 2001 with small increases in the following two years. Logan Regional's ambulatory surgery volume increased substantially after 2001 resulting in 2003 volume of 6,911 cases, though this was still 9.2% below the 2000 level.

#### *IHC Rural Areas Facilities*

All of IHC's other rural hospitals have fewer than 50 staffed acute care beds, and five of them have 15 or fewer beds. Six of the rural IHC hospitals had fewer than 620 acute care discharges each in 2004 and averaged only 397 inpatient acute care discharges each.<sup>11</sup> Although the number of discharges at these six hospitals has risen from an average of 337 in 2000, none of them has ever exceeded 620 acute care discharges. Of IHC's other rural hospitals, Sevier Valley Hospital in Richfield is slightly larger with 1,088 inpatient acute care cases in 2004, and Valley View Hospital in Cedar City is larger still with 2,370 inpatient acute care cases in 2004.

Valley View Hospital is also the largest of IHC's rural area hospitals in terms of normal newborns with 602 in 2004, a 36.8% increase since 2000. Heber Valley Medical Center and Sevier Valley Hospital each had more than 200 normal newborns, though Heber Valley's count rose 16.3% since 2000 while Sevier Valley's rose only 2.9%. All of IHC's five other rural hospitals had fewer than 100 normal newborns each in 2004.

Ambulatory surgery cases at most of IHC's smaller rural hospitals have declined between 2000 and 2003. In the case of Bear River Valley Hospital and Fillmore Community Medical Center, the declines have exceeded 30%. Heber Valley Medical Center, however, has experienced a 46.3% growth in its ambulatory surgery cases in that period, likely reflecting population growth in the area.

#### *IHC Facilities Planned or Under Construction*

In 2004, Intermountain Health Care began construction of a new \$400 million flagship facility in Murray in central Salt Lake County to be known as Intermountain Medical Center. The 376-bed facility is scheduled to open in late 2007. IHC has announced its intention to shift much of the tertiary services including Level I trauma, cardiac surgery and transplant services currently being provided at LDS Hospital to the new facility. LDS Hospital will remain open with 258 acute care beds to provide community-hospital levels of care. IHC also plans to shift all of the patient services currently at Cottonwood Hospital Medical Center to the new facility. The Orthopedic Specialty Hospital located on the Cottonwood campus would remain in its current location. The current Cottonwood Hospital building will be demolished. The total bed count among the three facilities after the opening of Intermountain Medical Center and the reconfiguration of services is expected to increase by 16.

---

<sup>11</sup> The six hospitals are: Bear River Valley Hospital, Delta Community Medical Center, Fillmore Community Medical Center, Garfield Memorial Hospital, Heber Valley Medical Center and Sanpete Valley Hospital.

IHC is also planning construction of a new hospital facility in the Riverton area of southern Salt Lake County. That facility will have 46 beds and is expected to open in late 2008 or early 2009. In addition, IHC is planning to construct a \$50 million hospital in Park City in Summit County. The hospital is currently planned to have 26 beds and 6 operating rooms. No other hospitals are located in Park City, though IHC's Heber Valley Medical Center is about 15 miles south of Park City.

### **MountainStar**

MountainStar is part of the Hospital Corporation of America (HCA), but operates under the MountainStar name in Utah. MountainStar has six hospitals in Utah, five of which are located in the four urban counties along the Wasatch Front. The sixth is located to the north of Ogden in Box Elder County.

Exhibit 1 shows that MountainStar's five urban-area hospitals accounted for 753, or 22%, of staffed beds in that area in 2005. MountainStar's largest facility is the 293-bed St. Mark's Hospital in Salt Lake City followed by the 227-bed Ogden Regional Medical Center in Ogden. MountainStar's two facilities in Utah County had a combined 165 staffed beds in 2005. The one rural-area facility, Brigham City Community Hospital, had 49 staffed beds in 2005.

Inpatient acute care discharges from MountainStar hospitals rose 5% from 31,401 to 32,976 between 2000 and 2004 (Exhibit 6). St. Mark's Hospital is the largest hospital in the MountainStar system with more than 15,000 inpatient acute care cases in 2005. Timpanogos Regional Medical Center's inpatient acute care patient discharges grew most rapidly (46% between 2000 and 2004), making it the third-largest system hospital. Brigham City Community Hospital and Lakeview Hospital both experienced an inpatient acute care discharge declines of 10-11% between 2001 and 2004.

Exhibit 7 shows that all of MountainStar's hospitals provide obstetrics services. The six facilities had a combined total of 7,019 normal newborns, an increase of 4.5% since 2000. St. Mark's continues to be the largest MountainStar facility in terms of normal newborns, and its normal newborn discharge count has risen by 11.3% since 2000. The second-largest in the MountainStar system is Ogden Regional Medical Center, followed by Timpanogos Regional which increased its normal newborn discharges by 35.7% in 2000-2004.

Exhibit 8 shows that MountainStar hospitals had about 37,300 ambulatory surgery cases in 2003, a 68.1% increase over the 22,198 cases in the system in 2000. St. Mark's Hospital had 11,242 ambulatory surgery cases in 2003 and Ogden Regional contributed another 8,026 cases, representing increases of 77% and 61.8%, respectively, over 2000 levels. A substantial portion of ambulatory growth at St. Mark's appears to be related to increases in patient volume at its pain clinic. Timpanogos Regional Medical Center had an even more rapid growth in ambulatory surgery cases with a 232.4% growth between

2000 and 2003. A significant portion of Timpanogos Regional's growth in ambulatory cases is attributable to the opening of its cardiac catheterization lab in 2001.<sup>12</sup>

MountainStar also operates a free-standing ambulatory surgery center and a free-standing endoscopy center on the campus of St. Mark's Hospital. Ambulatory surgery patient volume at St. Mark's Outpatient Surgery Center declined by 7.4% between 2000 and 2003. But volume at the Wasatch Endoscopy Center increased by 39.2% (or nearly 1,700 cases) in the same time period.

MountainStar is also planning to construct a new hospital in the southern part of Salt Lake County. The new facility, which will be known as St. Mark's Lone Mountain Hospital, is scheduled to open in the fall of 2007. It will have an initial capacity of 60 beds with the ability to be expanded to 108 beds.

## IASIS

IASIS Healthcare owns four hospitals in Utah, all located in the four urban counties of the Wasatch Front. Salt Lake Regional Medical Center in Salt Lake City had 168 staffed beds in 2005. Also located in Salt Lake County, Pioneer Valley Hospital and Jordan Valley Hospital had 139 and 92 staffed beds in 2005, respectively. IASIS's Davis Hospital and Medical Center in Layton had 136 beds. Each of these facilities has undergone expansions or upgrades as part of a \$78 million capital project over the past few years. Jordan Valley Hospital nearly doubled its bed capacity and upgraded and expanded its ICU capabilities to serve the rapidly growing population of southern Salt Lake County. In addition, it will open its cardiac catheterization services in mid-2006.

Exhibit 6 shows that the four IASIS hospitals had 20,117 acute care inpatient discharges in 2004 which represents an 11.2% increase between 2000 and 2004. Jordan Valley Hospital's inpatient count increased most rapidly, rising by 25.5% (or 941 patients) between 2000 and 2004. Pioneer Valley Hospital also experienced significant growth of 13.9% in inpatient volume. Davis Hospital, which had the greatest number of inpatients of the IASIS facilities in Utah, also grew the slowest at 3.2% over the five-year period.

Three of IASIS's four hospitals had more than 1,000 normal newborn deliveries in 2004. Combined, they accounted for more than 5,800 normal newborns for an increase of about 1,200 deliveries (or 25.9%) since 2000 (Exhibit 7). The number of normal newborn deliveries at Pioneer Valley both increased by 59.1% in 2000-2004 and by more than 25% at Davis Hospital and Jordan Valley Hospital. In contrast, Salt Lake Regional's normal newborn count increased by only 4.7%.

---

<sup>12</sup> Although the growth in patient volume of these specific service lines at St. Mark's and Timpanogos Regional was substantial, those services lines did not account for all (or even most) of the facilities' overall growth. In any event, the competitive importance of a facility that adds services and increases patient volume is not diminished relative to one that increases volume without adding new services.

Exhibit 8 shows that IASIS hospitals accounted for 19,063 ambulatory surgery cases in 2003 which is an increase of 26.1% over the 2000 level. As with newborns, Davis Hospital is the largest source of ambulatory surgery cases for IASIS, with the other three hospitals all comparable to each other. Ambulatory surgery is also performed at Davis Surgery Center, which is a joint venture between Davis Hospital and physicians in the Layton area. This free-standing, multi-specialty surgery center is located on the Davis Hospital campus. It has four operating rooms and had 5,328 surgical cases in 2003 or an increase of 36.3% since 2000. Davis Surgery Center's volume increased in subsequent years to reach 5,634 cases in 2005.

### **University Health Care**

The University of Utah's health care system includes three hospitals: the University Hospital, the Huntsman Cancer Hospital, and the University Neuropsychiatric Institute. The University Neuropsychiatric Institute is located separately from the other facilities, but close to the campus. As Exhibit 1 shows, University Health Care (UHC) has 417 staffed acute care beds, or 12.3% of total acute care hospital beds in the four-county Wasatch Front area. University Health Care also has an ambulatory surgery center, University Orthopaedic Center, 11 community health centers located along the Wasatch Front (three of which—Madsen Health Center, Redwood Health Center, and Moran Eye Center—have outpatient procedure and ambulatory surgery capabilities) and an 803-physician medical group. University Orthopaedic Center has recently begun serving inpatients and is included in some data sets as a hospital facility.

Inpatient acute care admissions at the UHC hospitals overall increased 16.1% from 15,359 in 2000 to 17,829 in 2004 according to the data in Exhibit 6. In tracking admissions data, the Utah Department of Health data do not distinguish fully among the three hospital facilities located on the University campus.<sup>13</sup> Exhibit 7 shows that the number of normal newborns at UHC was 1,759 in 2004, which is an increase of 47.2% over 2000.

Ambulatory surgery cases at the UHC facilities increased by 5% from 9,834 cases in 2000 to 10,328 in 2003. Both the Madsen Surgery Center and the Moran Eye Center experienced increases of more than 7% in numbers of cases.

### **Other Acute Care Hospital Providers**

Outside of the four large hospital systems, Utah has 12 other acute care hospitals. Most of these other hospitals are located in rural areas of the state and most are independent of any hospital system. As Exhibit 1 shows, two rural hospitals are part of the LifePoint Hospitals system. These two facilities are the 49-bed Castleview Hospital in Carbon County and the 31-bed Ashley Valley Medical Center in Uintah County. Castleview

---

<sup>13</sup> The Department of Health began to segregate inpatient discharge data for the Huntsman Cancer Center and the University Orthopaedic Center beginning in 2004, but no data are available in previous years from which to determine trends.

Hospital had 1,962 inpatient acute care discharges in 2004 and 2,521 ambulatory surgical cases in 2003. Ashley Valley Medical Center had 1,184 acute care discharges in 2004 and 1,974 ambulatory surgical cases in 2003. The two hospitals together accounted for 489 newborn deliveries in 2004.

Four rural hospitals are affiliated through Rural Health Management. Exhibit 1 shows that these four facilities are: Milford Valley Memorial Hospital in Beaver County (57 beds, 14 inpatient acute care discharges in 2004), Allen Memorial Hospital in Grand County (25 beds, 500 acute care discharges in 2004, and 216 ambulatory surgery cases in 2003), Central Valley Medical Center in Juab County (19 beds, 677 acute care discharges in 2004, and 746 ambulatory surgery cases in 2003), and Gunnison Valley Hospital in Sanpete County (29 beds, 888 acute care discharges in 2004, and 323 ambulatory surgery cases in 2003). Each of these hospitals also provided obstetrics services.

Exhibit 1 also shows that the other five rural acute care hospitals in Utah have between 20 and 40 staffed beds each, an average of about 1,000 inpatient acute care discharges and 195 normal newborns in 2004 and an average of about 800 ambulatory surgery cases each in 2003.<sup>14</sup>

### **Non-hospital Facilities**

In addition to the 9 free-standing ambulatory surgery centers owned by hospitals in Utah, another 31 are independent of any area acute care hospitals. Most, if not all, of these independent ambulatory surgery centers include Utah physicians among their investors. In some cases, outside management firms or investors may have a financial stake in the facilities as well.

Exhibit 2 shows that 17 of the free-standing ambulatory surgery centers in Utah are multi-specialty facilities.<sup>15</sup> Among those facilities that do specialize, nine provide endoscopy or other gastroenterological services, five provide eye surgery, five provide orthopedic surgery services, and three provide plastic surgery services. Most of these facilities are located along the Wasatch Front with a small number of others in Cache County or in southwestern Utah in Iron and Washington counties.

One of the largest owners of ambulatory surgery centers in Utah is HealthSouth. Each of HealthSouth's three ambulatory surgery centers provides a variety of surgical services including general surgery, ENT surgery, orthopedic surgery, plastic surgery and urological surgery. Some of the centers also provide other surgical specialty services. Its largest facility is the HealthSouth Salt Lake Surgical Center, which has seven operating rooms. Exhibit 2 shows that this facility had more than 5,200 cases in 2003. HealthSouth's Provo Surgical Center in Utah County has five operating rooms and had

---

<sup>14</sup> For both discharges and ambulatory surgery cases, Mountain West Medical Center and Uintah Basin Medical Center had significantly higher counts than the other three hospitals.

<sup>15</sup> Several ambulatory surgery centers do not appear in these exhibits because of lack of sufficient information. All of the missing ambulatory surgery centers are believed to be small.

more than 2,200 cases in 2003. Its Park City Surgical Center has two operating rooms with 935 cases in 2003.

Three general ambulatory surgery centers and one endoscopy center in Utah are jointly owned and operated by Nueterra Healthcare and area physicians. Nueterra Healthcare is a Kansas-based company that provides surgery center management expertise and helps physicians open ambulatory surgery centers and specialty hospitals. Exhibit 2 shows that the four Utah facilities associated with Nueterra are the Mount Ogden Surgical Center in Ogden (two operating rooms and 4,336 cases in 2003), Utah Surgical Center in West Valley City (four operating rooms and 4,226 cases in 2005), Coral Desert Surgical Center in St. George (five operating rooms and 3,292 cases in 2005, and Northern Utah Endoscopy Center in Logan (two procedure rooms and 3,314 cases in 2003).

Mountain West Group owns four endoscopy or gastroenterology centers in Utah. One of its centers in Salt Lake City has two procedure rooms. It also has a second center in Salt Lake County and centers in Bountiful and St. George.

Exhibit 2 shows that in 2003, Central Utah Surgical Center in Provo had nearly 10,300 cases, making it the largest independent free-standing ambulatory surgery center in the state. Ridgeline Endoscopy Center performed more than 7,300 procedures in 2003. Three other independent ambulatory surgery centers, including Davis Surgical Center in Layton, Mount Ogden Surgery Center in Ogden, and South Towne Surgery Center in Sandy, had between 4,000 and 6,000 cases in 2003.

### **GEOGRAPHIC MARKETS FOR HOSPITAL AND AMBULATORY SURGERY SERVICES**

As discussed previously, geographic markets are determined by the ability of consumers to switch to alternative providers of the same service that are located in a different geographic location. In a strict antitrust sense, a geographic market consists of the smallest group of suppliers which, if they were acting in unison, could profitably raise price above (or lower quality below) competitive levels. Such an attempt would be profitable only if a sufficiently large portion of consumers were unwilling to switch suppliers and thus were compelled to pay the higher prices (or accept the reduced quality).

Geographic markets for overall hospital or ambulatory surgery center services, or for specific individual services, are typically assessed by considering a number of factors. These include factors like the proximity of hospitals and ambulatory surgery centers to residential areas; road networks; commuting patterns for employment; service areas of hospitals and ambulatory surgery centers; zip-code-level patient origin data; information from market participants including interviews, testimony at Task Force hearings, documents provided to the Task Force; and publicly available materials. This information provides a basic underpinning for conclusions regarding geographic markets. These data are neither definitive, nor without inconsistencies, but nevertheless provide useful information regarding the availability of alternative hospital and ambulatory surgery service providers for patients and payers.

From a strict antitrust perspective, geographic market definition typically involves answering the hypothetical question of which alternatives consumers would use if their current suppliers attempted to increase price or decrease quality from competitive levels.<sup>16</sup> This report adopts an approach to market definition that leans toward defining markets that are geographically narrower than might otherwise be justified. Such an approach is most beneficial for meeting the Task Force’s objectives because it errs on the side of identifying market structures as being problematic that may ultimately turn out not to be problematic and avoids failing to identify market structures that ultimately turn out to pose competitive problems.

With the caveats stated, the analyses detailed below support the providers located in the following areas as being geographic markets for each of the product markets discussed previously:

**MARKETS TO BE EVALUATED**

<b>Acute Care Inpatient Services*</b>	<b>Normal Newborn Services*</b> (proxy for uncomplicated inpatient hospital services)	<b>Ambulatory Surgery Services*</b>
Salt Lake/Weber/Davis counties	Salt Lake County/southern Davis County	Salt Lake/Weber/Davis counties
Utah County	Ogden/Layton area	Utah County
Cache County	Utah County	Cache County
Washington County	Cache County	Washington County
	Washington County	

\* See footnote 7 for definitions of the specific services included in each cluster of services.

<sup>16</sup> Market definition is often complicated by price discrimination. Price discrimination refers to sellers’ ability to charge different prices to different consumers for the same product or service. Generally, hospitals and ambulatory surgery centers do not have the ability to price discriminate by the residential location of their patients. In other words, hospitals do not charge different rates for individuals who live in different locations if the individuals are covered under the same health insurance product. The inability to engage in geographic price discrimination means that a hospital cannot, for example, charge higher rates to patients who live close to the hospital and lower rates to patients who live close to an alternative hospital. Providers often price discriminate between commercial health insurers as a result of their negotiation process, but this does not have a significant impact for market definition in Utah.

## **Hospital and Ambulatory Surgery Center Proximity**

The map in Exhibit 3 illustrates the locations of hospitals throughout Utah. Exhibit 4 depicts the more narrowly drawn four-county, urban, Wasatch Front area (Weber, Davis, Salt Lake and Utah counties). Exhibit 5 focuses on the immediate Salt Lake City area and its close-in suburbs. Each map shows the locations of acute care hospitals and ambulatory surgery centers with different colors to distinguish the major hospital systems.

Exhibit 4 shows the large number of hospitals and surgery centers located in the urban area along the Wasatch Front. The Wasatch Front is home to 21 acute care hospitals and 28 ambulatory surgery centers. Travel by road throughout the Wasatch Front area is facilitated by an extensive road network. A significant number of employees commute from home to work among the counties of the Wasatch Front and from homes in counties outside of the Wasatch Front to work locations within the urban areas.

Two other counties in the state—Cache County in the north and Washington County in the south—both have comparatively large populations, but are widely separated from the Wasatch Front. One general acute care hospital is located in Cache County along with a specialty surgical hospital. Two smaller hospitals are located in Box Elder County to the west of Cache County. The next-closest hospitals are located in Ogden (45 miles south of Logan) and in Oneida County, Idaho (45 miles north of Logan). Little commuting for work takes place into or out of Cache County.

Washington County has one general acute care hospital, the 236-bed Dixie Regional Medical Center located in St. George. Two smaller hospitals (Valley View Medical Center in Cedar City and Kane County Hospital in Kanab) are 50 miles and 85 miles, respectively, from St. George. Washington County is also home to several free-standing surgical centers, and two others are located in Cedar City. Again, little commuting for work takes place into or out of Washington County.

The rest of the state is generally characterized by widely dispersed hospitals, most of which have fewer than 50 beds.

## **Service Area Overlaps**

A hospital's or ambulatory surgery center's service area is the collection of communities from which it draws most (often specified to be 90%) of its patients for a particular service. A service area is a valuable device for hospital business planning, but it does not fully incorporate the concepts that define a geographic market. A geographic market refers to the alternative providers available to patients and payers.

### *Service Areas for Acute Care Inpatient Services*

Identifying hospital service areas provides useful information to identify alternatives available to consumers. To the extent that service areas of two hospitals substantially

overlap, at least some portion of the patients of one hospital could readily access the other hospital. Typically, hospital service areas are identified by the number of cases for each hospital for the relevant set of services by the residential zip code of the patient. Information on the number of cases at each Utah hospital is available from the Utah Department of Health.<sup>17</sup> Exhibits 9-22 map the service areas of groups of Utah hospitals.

To assess the extent of overlap among service areas along the Wasatch Front, it is helpful initially to consider the hospitals in three groups: Salt Lake County hospitals, Weber/Davis County hospitals, and Utah County hospitals. The hospitals in these areas are perceived by many market participants to serve distinct geographic populations. Subsequent consideration of overlap between the groups' service areas and individual zip code level data will refine the analysis.

*Salt Lake County Hospitals:* The service areas of all of the general acute care hospitals located in Salt Lake County overlap with each other for inpatient acute care services. The inpatient acute care patient origin data show that nine general acute care hospitals and two specialty acute care hospitals (TOSH and University Health System Huntsman Cancer Center) serve large portions of Salt Lake County.<sup>18</sup> Exhibit 9 shows that some of the Salt Lake County hospitals' service areas extend well beyond Salt Lake County, though the patient discharge data indicate that the number of patients drawn from most of those outer areas is small.

*Weber/Davis County Hospitals:* Exhibit 10 shows that to a large degree, the four inpatient acute care hospitals located in Weber County and Davis County serve patients who reside throughout the two-county area and they serve few patients who reside outside of the area. The patient origin data show that residents of the two-county area are, however, also served by hospitals located in other areas. Four other general acute care hospitals—LDS Hospital, Primary Children's Medical Center, University of Utah Hospital, and Salt Lake Regional Medical Center—all account for significant number of patients who reside in Weber and Davis counties. The patient origin data show that patients using the four Salt Lake County hospitals travel there for services that are generally available in the Weber/Davis County area. These patients could choose to use the non-Salt Lake County hospitals. The overlap among the service areas of the four-hospital group of Weber/Davis county hospitals and four hospitals serving large parts of Salt Lake County is consistent with the Weber/Davis county hospitals being in the same geographic market as the Salt Lake County hospitals for inpatient acute care services.

---

<sup>17</sup> Tabulations of the case counts by hospitals and zip code for the most recent year available for each of the product markets (referred to as "patient origin data") are included in electronic files submitted to the Task Force. Because of the volume of the data, hard copies are not included with this report. All of the service area maps (Exhibits 9-22) and patient discharge or visits tables (Exhibits 23-44) are based on these tabulations.

<sup>18</sup> For purposes of this discussion, Primary Children's Medical Center is considered to be a general acute care hospital because it provides a full spectrum of services. It could, of course, reasonably be classified as a specialty acute care hospital because of its focus on a particular patient population.

*Utah County hospitals:* Exhibit 11 shows that the inpatient acute care service area of each of the five hospitals located in Utah County overlaps with the service areas of some or all of the other county hospitals. The patient origin data show that within the overlapping service areas, American Fork Hospital draws more from the northern portion of the county and Mountain View Hospital draws more from the southern portion of the county. Three Salt Lake County hospitals—LDS Hospital, Primary Children’s Medical Center, and University Health Center—also serve patients who live in various parts of Utah County. The patient origin data indicate that the services for which Utah County residents are using these three non-county hospitals are generally available in Utah County. This finding does not necessarily affirm that the hospitals in Utah County constitute a relevant geographic market in an antitrust sense. Nevertheless, as is discussed in greater detail below, this report will consider the Utah County hospitals separately from hospitals in other parts of the Wasatch Front. In doing so, it ignores the potential importance of the willingness of patients from the northern zip codes in Utah County to use Cottonwood Hospital Medical Center or other Salt Lake County hospitals and the significance of Utah Valley Regional Medical Center (and to a lesser extent Mountain View Hospital) having service areas that extends into the more rural areas well to the south and east of Utah County.

*Cache County Hospitals:* The service areas of Logan Regional Hospital and Cache Valley Specialty Hospital for acute care inpatient services overlap substantially (Exhibit 12). The Cache County hospitals also draw patients from some of the same zip codes as are served by Brigham City Community Hospital. Both the Weber/Davis County-area hospitals and the Salt Lake County hospitals also draw from parts of the Cache County hospitals’ service area. Much of the overlap with the Salt Lake County hospitals is for LDS Hospital, Primary Children’s Medical Center and University Health Center. Some of the patients who travel to Salt Lake City receive services like cardiac surgery that are not available in Cache County, but many of those patients could receive the same services locally as they receive in Salt Lake County.

*Washington County Hospitals:* Exhibit 13 shows that most Washington County patients use Dixie Regional Medical Center, with few patients using the other urban-area hospitals in Utah. Some of the nearby rural hospitals, such as Valley View Medical Center and Kane County Hospital, serve the same areas as Dixie Regional, however. The patient origin data reveal that significant numbers of acute care inpatients travel to Dixie Regional from Nevada and Arizona zip codes.

*Other Utah hospitals:* Throughout the rest of the state, the service areas of many inpatient acute care providers do not overlap substantially with the service areas of hospitals other than the one or two closest alternatives. Some residents of virtually every community in the state travel to the tertiary facilities along the Wasatch Front, presumably for specialty services. This report will consider competition in the individual rural areas without regard to those patient flows. Residents of some rural areas, such as the communities south and east of Utah County travel to urban-area hospitals for services that are available locally. In addition, the service areas of some rural hospitals like

Gunnison Valley Hospital overlaps with that of neighboring hospitals like Sanpete Valley Hospital to the north and Sevier Valley Hospital to the south.

*Service Areas for Normal Newborn Services*

Analyses of patient origin data often includes separate consideration of newborns who have no complications (referred to as “normal newborns” based on their DRG terminology) and consequently constitute a broadly homogenous set of patients. Normal newborns often serve as a proxy for uncomplicated hospital services because of the general reluctance of expectant parents to travel long distances for an uncomplicated delivery of a baby with no expected health issues. The electronic patient origin data can be used to identify service areas of each hospital for normal newborn services. These service areas for hospitals along the Wasatch Front are shown in Exhibits 14-18. The overlap of service areas is analyzed in the same way for normal newborns as for acute care patients.

*Salt Lake County Hospitals:* The overlap of service areas of normal newborns in Salt Lake County is similar to that of acute care patients in that all of the Salt Lake County hospitals serve many of the same areas within the county (Exhibit 14).

*Weber/Davis County Hospitals:* The overlap of service areas for normal newborns in Weber/Davis counties is shown in Exhibit 15. For normal newborn services, much of Davis County is served by the four Weber/Davis County hospitals plus LDS Hospital and Salt Lake Regional Medical Center. Weber County, in contrast, is served by just the three Ogden-Layton area hospitals (Davis Hospital and Medical Center, McKay-Dee Hospital Center, and Ogden Regional Medical Center). This observation alone does not mean that the Ogden-Layton hospitals are in a separate geographic market from the Salt Lake County hospitals, but it does motivate a closer examination of patient flows for normal newborns in this area. That closer examination is discussed below.

*Utah County Hospitals:* The service areas of each of the Utah County hospitals for normal newborns largely overlaps the service area of the others in the county (Exhibit 16). With the exception of patients from the Lehi area in northern Utah County, few normal newborns of Utah County residents are delivered at non-county hospitals. Unlike general acute care inpatient services, few non-county residents travel to Utah County hospitals for delivery of normal newborns. The lack of an overlap in service areas between Utah County hospitals and other hospitals is consistent with the Utah County hospitals constituting a separate geographic market.

*Cache County Hospitals and Washington County Hospitals:* The Cache County and Washington County hospitals’ service areas for normal newborns are somewhat more compact than their service areas for acute care inpatient services (Exhibits 17 and 18). None of the hospitals in the other urban areas draw significant numbers of normal newborns from either Cache County or Washington County. Dixie Regional’s service area, however, overlaps that of some of the smaller area hospitals.

*Other Utah Hospitals:* In some of the rural areas of Utah, local hospitals face competition from larger urban hospitals in the provision of normal newborn services. For example, the rural hospitals located in the counties surrounding Salt Lake County likely compete with the Salt Lake County hospitals as is evidenced by the overlap of their service areas. Similarly, Valley View Medical Center's service area in Iron County is overlapped by Dixie Regional Medical Center's service area for normal newborns. Logan Regional Hospital's service area for normal newborns includes Cache County as well as parts of Box Elder County that are served by Brigham City Community Hospital and Bear River Valley Hospital. Some of the other rural hospitals' service areas overlap with those of other nearby rural hospitals (e.g., Gunnison Valley Hospital overlapping with Sanpete Valley Hospital and Sevier Valley Hospital or Ashley Valley Medical Center and Uintah Basin Medical Center) while others have little or no overlap among their service areas.

*Service Areas for Ambulatory Surgery Services*

Service area overlaps among ambulatory surgery providers, as shown in Exhibits 19-22, also offer information into the alternatives available to patients and payers. Like inpatient acute care services, ambulatory surgery services are highly heterogeneous, but unlike inpatient acute care services, virtually all ambulatory surgery care can be performed at non-tertiary care facilities. By definition, ambulatory surgery is sufficiently uncomplicated that the patient need not be admitted to the hospital. Thus as a general matter, ambulatory surgery patients do not need to travel to distant hospitals when local hospitals or surgery centers are available.

*Salt Lake County Hospitals and Ambulatory Surgery Centers:* The Salt Lake County providers of ambulatory surgery services comprise nine hospital outpatient departments and ten free-standing ambulatory surgery centers for which data are available. These providers serve patients throughout Salt Lake County. A great deal of overlap exists among the service areas of these nineteen providers. In addition, several of these providers serve significant numbers of patients who reside outside of the county, especially in the adjacent rural counties.

*Weber/Davis County Hospitals and Ambulatory Surgery Centers:* The Weber/Davis County area is home to four hospital outpatient departments and four free-standing ambulatory surgery centers for which data are available. With the exception of Lakeview Hospital, each of these facilities serves patients throughout the two-county area. Lakeview Hospital's ambulatory surgery service area extends into Weber County, but the bulk of its patients come from Davis County. Ambulatory surgery patients who reside in Davis County and, to a lesser extent Weber County, are served by at least ten hospital outpatient departments and eight free-standing ambulatory surgery centers. Several of these alternative hospital outpatient departments and ambulatory surgery centers are among the nineteen providers located in and serving large parts of Salt Lake County. The significant overlap among the service areas of Salt Lake County ambulatory surgery providers and Weber/Davis County ambulatory surgery providers illustrates the availability of alternatives to patients who reside in these areas. Based on this

information, it is unlikely that the Weber/Davis County providers of ambulatory surgery services could be considered to be in a geographic market that is separate from the Salt Lake County providers. These service areas are depicted in Exhibit 19.

*Utah County Hospitals and Ambulatory Surgery Centers:* Utah County includes five hospital outpatient departments as well as two free-standing ambulatory surgery centers for which data are available. Each of these facilities serves patients who reside throughout Utah County. Exhibit 20 shows that in addition, the service areas of each of the Utah County facilities extends to communities in the counties south and east of Utah County. As was the case with normal newborns, the northerly portions of Utah County are also served by some of the Salt Lake County facilities. Regardless of the Utah County facilities' draw from areas to the south and east and the Salt Lake County facilities' draw from northern Utah County, this report will analyze the Utah County ambulatory surgery providers as a separate geographic market.

*Cache County and Washington County Hospitals and Ambulatory Surgery Centers:* The other two urban areas of Utah—Cache and Washington counties—have similar service area patterns (Exhibits 21 and 22). In each case, the service areas of the ambulatory surgery facilities located within the counties overlap among themselves. No providers located outside of those counties account for a significant share of ambulatory surgery cases of residents of those counties. Many residents from outside of Cache County and Washington County can and do use the outpatient departments of nearby rural hospitals for ambulatory surgery services. Despite the availability of alternative ambulatory surgery facilities for some patients who use the Cache County or Washington County facilities, this report considers the county providers to be in distinct markets.

*Other Utah Hospitals and Ambulatory Surgery Centers:* For the rural hospitals that are located closest to urban areas, typically some overlap exists with urban hospitals' service areas. The patient origin data show, for example, that Summit County and Wasatch County portions of Heber Valley Medical Center's ambulatory surgery service area are also served by Utah Valley Regional Medical Center, Central Utah Surgical Center, and several hospitals and surgery centers in Salt Lake County. Brigham City Community Hospital's ambulatory surgery service area is overlapped by the service areas of the two hospitals to the north in Logan as well as the two Ogden hospitals to the south. In other rural areas of the state, service areas often overlap among facilities that are located nearest to each other, but seldom with more distant rural providers. For example, the service area of Uintah Basin Medical Center overlaps the service area of Ashley Valley Medical Center. Likewise, the ambulatory surgery service areas of Allen Memorial Hospital and San Juan Hospital overlap, though each receives most of its patients from the zip codes in its home county.

Some of the larger rural hospitals have relatively large service areas that overlap the service areas of multiple other rural facilities. Valley View Medical Center's ambulatory surgery service area, for example, overlaps the service areas of Garfield Memorial Hospital, Milford Valley Memorial Hospital, Beaver Valley Hospital and Sevier Valley Hospital. Similarly, the ambulatory surgery service area of Central Valley Medical

---

Center overlaps that of the smaller neighboring facilities of Sanpete Valley Hospital and Delta Community Medical Center.

An examination of overlap of service areas is informative regarding the alternatives available to patients. One shortcoming of such an analysis, however, is that the entire service area is treated as a single unit. A second is that the magnitude of patient flows are not captured in detail. It is often helpful to consider patient migration patterns in greater detail to assess the likely substitutability of inpatient and ambulatory service providers from the patients' and payers' perspectives.

### **Patient Origin Analyses**

An analysis of patient migration patterns at the zip code level is often conducted in competition analyses for inpatient and outpatient services. A zip code analysis has the advantage over a service area analysis because it focuses on patients who are much more similarly situated in their area of residence.<sup>19</sup> In urban areas in particular, zip codes tend to be small in size, meaning that residents' proximity to area hospitals will be more similar than in an overall service area. Of course, patients are heterogeneous in many other ways (e.g., services required, preferences for hospitals, health insurance coverage), but even some of those differences can be addressed to a certain extent with patient origin data. For example, patients receiving services requiring similar levels of care, such as normal newborns, can be examined separately. Likewise, commercially insured patients can be considered independently of uninsured patients or patients covered under government health insurance programs.<sup>20</sup>

Exhibits 23-44 show patient counts at the zip code level for the same sets of services as were examined previously at the service area level. A zip-code-level analysis typically involves an evaluation of each zip code from which a facility or group of facilities receives patients. Exhibits 23-44 display for each zip code the number of patients using each Utah facility that receives patients from the zip code. The facilities are organized to group those that are likely to be the closest competitors to each other (e.g., the facilities located in Utah County) on the left-hand side of the table. The zip codes are organized to show the cluster of zip codes from which that group of facilities receives 90% of its combined patient volume for the service at issue. Each exhibit also presents calculations of the contribution each zip code makes to the group's total patient count and the share of each zip code's total patient count that is accounted for by the facility group.

---

<sup>19</sup> Zip codes are typically the smallest geographic area into which patients can be segregated.

<sup>20</sup> In patient origin analyses, a distinction is commonly made between patients covered by commercial insurance and patients covered by government insurance or no insurance at all. From the perspective of a competition analysis of hospital services, the most important distinction is that providers cannot negotiate payment rates with government insurance plans. In contrast, providers often are able to negotiate rates with commercial plans. Consequently, it is helpful to consider patient flow data and other information related to commercial insured patients

In the first step of a zip-code-level analysis, each zip code is examined to determine whether a large enough share of patients from that zip code uses hospitals or ambulatory surgery centers other than the one (or the group) under consideration.<sup>21</sup> If so, then the alternative facilities are considered to be acceptable alternatives for the remaining residents of the zip code. In the second step, the share of patients who reside in zip codes with sufficient alternative facilities is aggregated. If enough of the facility's (or group's) patients reside in these zip codes, then the market is considered to include the alternative facilities.

#### *Patient Origin for Acute Care Inpatient Services*

Exhibits 23 and 24 show that acute care patients who reside throughout Salt Lake County use many alternative hospitals in Salt Lake County. The same pattern is evident for commercially insured patients and all patients regardless of payer. The patient migration data support the inclusion of all of the hospitals in a single market for acute care services. The next step is to determine whether non-Salt Lake County hospitals belong in the market as well.

Patient origin data for the hospitals in Weber/Davis County and Utah County are also analyzed in detail. Exhibit 25 affirms that nearly all of the top 90% of inpatient acute care patients discharged from the four Weber/Davis County hospitals reside in zip codes in Weber and Davis counties. Nearly 30% of the four hospitals' patients reside in zip codes in which at least 1 in 4 patients uses a hospital outside of the two-county area.<sup>22</sup> Exhibit 26 shows that for commercially insured patients, the share using alternative hospitals is similar. Among the alternative hospitals most often used by residents of Weber and Davis counties are LDS Hospital, University of Utah Hospital, St. Mark's Hospital, and Primary Children's Medical Center. An outflow of patients of this magnitude to hospitals in Salt Lake County suggests that these alternative hospitals are reasonable alternatives for patients in the Weber/Davis County hospitals' service area. Consequently, the Salt Lake County and Weber/Davis County hospitals should be included in the same geographic market.

Exhibits 27 and 28 show zip-code-level patient origin data for inpatient acute care services of the five hospitals located in Utah County. For both all payers and commercial insurance payers, about 25-26% of patients in the five-hospital service area live in zip codes in which a significant portion of patients use alternative hospitals.<sup>23</sup> In addition to the large tertiary facilities in Salt Lake County, alternative hospitals used by residents of these zip codes include Alta View Hospital, Cottonwood Hospital Medical Center, Jordan

---

<sup>21</sup> What constitutes "a large enough share" is obviously important to this analysis. Often, if 1 in 5 or 1 in 4 patients from a zip code uses alternative hospitals, then those hospitals are considered to be acceptable alternatives.

<sup>22</sup> More than 36% of patients reside in zip codes in which at least 1 in 5 patients uses alternative hospitals.

<sup>23</sup> There is no difference in shares whether a 1-in-4 or 1-in-5 threshold is used.

Valley Hospital and, in the zip codes to the south of Utah County, hospitals such as Castleview Hospital, Heber Valley Medical Center and Sevier Valley Hospital. Although the share of patients using the Utah County hospitals who are at risk of switching facilities could be sufficient to warrant inclusion of alternative hospitals in the geographic market, this report will consider the Utah County providers to be in a separate geographic market.

The patient origin data for acute care discharges from the Cache County hospitals' service area indicate little use of outside hospitals and little inflow of non-county residents (Exhibits 29 and 30). A similar pattern exists in Washington County. In both cases, the data suggest single-county markets (Exhibits 31 and 32).

#### *Patient Origin for Normal Newborn Services*

The patient origin data for normal newborn services show that a large number of alternatives are available for and already used by patients throughout Salt Lake County (Exhibits 33 and 34). Additional review of the discharge patterns provides information about the significance of the Salt Lake County hospitals as alternatives for patients in the Weber/Davis County area and in the Utah County area.

Exhibits 35 and 36 show normal newborn services patient origin data for the service area of McKay-Dee Hospital, Ogden Regional Medical Center, and Davis Hospital, for all payers and commercial payers, respectively. Lakeview Hospital is not included in the determination of the joint service area because it draws comparatively few patients from the zip codes that provide the greatest numbers of patients to the other three Weber/Davis County hospitals. The three hospitals receive 18-22% of their normal newborn cases from zip codes in which at least 1 in 4 patients uses alternative hospitals. Because of the homogeneity of normal newborn services, this use of alternative hospitals may be sufficient to include the other hospitals in the geographic market. Nevertheless, it indicates that patients seeking these services in particular, or perhaps simple primary services in general, are not highly likely to travel to hospitals in Salt Lake County for the services. Consequently, the three Ogden-Layton area hospitals are not characterized here as being in the same market as the Salt Lake County hospitals for normal newborn services.

Exhibits 37 and 38 show patient origin data for normal newborn services for the service area of the five Utah County hospitals. In each zip code in the five-hospital service area (with one exception), less than 10% of normal newborn services are provided at hospitals other than five Utah County hospitals. The one zip code that is the exception is Lehi in the northernmost portion of Utah County. About 24-25% of expectant parents from the Lehi area travel to hospitals in Salt Lake County (Cottonwood Hospital Medical Center, Jordan Valley Hospital and Alta View Hospital, among others) for normal newborn services. The Lehi zip code accounts for 10-12% of normal newborns from the five-hospital service area. While the loss of these patients to Salt Lake County hospitals would be important to the Utah County hospitals, this report will nevertheless exclude all

of the Salt Lake County hospitals from the geographic market for the Utah County hospitals for normal newborn services.

*Patient Origin for Ambulatory Surgery Services*

Exhibits 39-44 show patient origin analyses for ambulatory surgery services data. These data include cases performed at hospital outpatient departments as well as those performed at hospital-owned and independent free-standing surgery centers. As with inpatient services, patients who reside in virtually all of the zip codes in Salt Lake County choose from many alternatives for ambulatory surgery services (Exhibits 39 and 40). This pattern is maintained for all patients regardless of payer and for commercially insured patients only. Consequently, it is appropriate to include all Salt Lake County ambulatory surgery providers in the same geographic market.

Exhibits 41 and 42 focus on patient flows of ambulatory surgery cases to Ogden/Layton-area providers for all payers and commercial insurance payers, respectively. Lakeview Hospital is excluded from this group because it draws substantially fewer patients from the zip codes that provide the greatest patients to the Ogden/Layton facilities. The seven ambulatory surgery service facilities located in the Ogden/Layton area are important providers for area residents. Other facilities located outside of the area provide services to area residents as well. The seven Ogden/Layton facilities receive 25-27% of their ambulatory surgery cases from zip codes in which at least one patient in four uses other facilities.<sup>24</sup> Among the other facilities used by residents of these areas are LDS Hospital, Salt Lake Regional Medical Center, Brigham City Community Hospital and University of Utah Hospitals.

As was true for inpatient acute care services, few Utah County residents travel to facilities other than the seven Utah County ambulatory surgery facilities. Exhibits 43 and 44 show patient origin data for ambulatory surgery cases for the service area of the seven Utah County facilities (five hospitals and two ambulatory surgery centers) for all payers and commercial insurance payers. In only two zip codes in Utah County do more than 1 in 5 patients use non-county facilities. These two zip codes are Lehi (84043) and Alpine (84004), both located in the northern-most part of Utah County. Exhibits 43 and 44 also show, however, that the Utah County ambulatory surgery providers also receive about 16-17% of their cases from outside of the county. Virtually all of these cases are from communities to the south and east of Utah County. In each of those non-Utah County areas, a large percentage of patients use facilities other than the seven Utah County facilities. As much as 27% of ambulatory surgery patients using Utah County hospitals reside in zip codes in which at least one in four patients uses non-Utah County hospitals. This patient pattern suggests that non-Utah County facilities may serve as competitive constraints on the Utah County facilities. Nevertheless, to be conservative, this report considers the Utah County ambulatory surgery facilities to be a relevant geographic market.

---

<sup>24</sup> At the 1-in-5 threshold, the portion of patients in at-risk zip codes decreases to 18-19%.

---

## HOSPITAL AND AMBULATORY SURGERY SERVICES MARKET STRUCTURE

Market structure refers to the number and relative size of the independent suppliers in a market. It is often assessed with measures of concentration such as the Herfindahl-Hirschman Index (HHI).<sup>25</sup> Briefly, the basis for measuring concentration is the belief that as the number of firms in a market gets smaller or the size of individual firms gets larger, the ability of firms in the market to harm competition increases. As the number of firms falls or the relative size of firms increases, the HHI increases. Presumably, it is easier for a small number of firms in a market to coordinate their actions (either explicitly or tacitly) than it is for a large number of firms. Likewise, insofar as the size distribution of firm is highly unequal, the larger firms presumably have more influence on market performance.

Although the importance of concentration in general and the HHI in particular are embedded in the Merger Guidelines, little, if any, theoretical or empirical support exists for any particular level of concentration in a market to signal harm to competition.<sup>26</sup> Some realistic economic models of firm behavior produce competitive outcomes with very small numbers of firms. In short, market structure is a starting point for assessing market performance, but the evaluation of factors other than concentration is critical to a proper analysis.<sup>27</sup>

The measurement of concentration with the HHI relies on proper market definition and on choice of appropriate market share statistics. Shares are often calculated in antitrust analysis on the basis of the capacity of the producers in the market. The rationale for choosing capacity as the basis for shares is that capacity is a binding constraint on the producer to alter its production. Insofar as price increases in the market, a producer can increase output to take advantage of that price increase up to the point that its capacity is fully utilized. Shares may be based on shipments in some instances as a measure of a firm's competitive significance. In hospital markets, shares are typically based on staffed beds (i.e., capacity to serve inpatients) or on inpatient discharges or some measure of outpatient activity such as surgeries (i.e., "shipments" of patients). Shares of patients are often measured by the total number of cases regardless of whether the patient lives in the geographic area containing the hospitals.<sup>28</sup>

Based on the analyses performed of the available information, the geographic markets identified for purposes of this report for each product market and shares in those markets are shown in Exhibits 45-47 and are described as follows:

---

<sup>25</sup> See *Horizontal Merger Guidelines of the U.S. Department of Justice and Federal Trade Commission*, §1.5. The HHI is calculated as the sum of the squares of each supplier's percentage share of the market.

<sup>26</sup> See, for example, Barry C. Harris and David D. Smith, "The Merger Guidelines v. Economics: A Survey of Economic Studies," *Antitrust Report*, September 1999, pp. 23-51.

<sup>27</sup> See *United States v. Baker Hughes*, 908 F.2d 981, at 984 (D.C. Cir. 1990).

<sup>28</sup> Shares might also be based on hospital charges associated with patients' hospital use.

## **Inpatient Acute Care Services**

### *Salt Lake/Weber/Davis Counties*

Exhibit 45 shows shares of staffed acute care beds and shares of acute care inpatient discharges of the hospitals in the three-county urban area along the northern section of the Wasatch Front. In that area, Intermountain Health Care's six hospitals have a 41.8% share of staffed acute care beds. The next-largest system is MountainStar with three hospitals and a 21.1% share of staffed acute care beds followed by IASIS's four hospitals with a 19.2% share and University Health Care with a 14.9% share. Exhibit 45 also shows the shares of inpatient acute care discharges at the 17 acute care hospitals located within the three-county area. These hospitals had a combined total of 126,068 inpatient acute care discharges. Intermountain Health Care accounted for 49.1% of these discharges. MountainStar was next-largest with 19.4%, followed by IASIS with 16% and University Health Care with 14.1% of discharges.

### *Utah County*

As discussed previously, it is not clear that the providers in Utah County represent a properly defined geographic market, in large part because of the significant amount of inflow of patients from areas to the south and east. Nevertheless, if the Utah County providers are considered to be a geographic market, then Intermountain Health Care's share of staffed acute care hospital beds is 72.2% (Exhibit 45). The only other inpatient acute care hospitals located in Utah County are owned by MountainStar, and they account for the remaining 27.8% of staffed beds. Exhibit 45 also shows that IHC hospitals had 75.5% of the inpatient acute care discharges at facilities in Utah County in 2004. Of the 22,906 acute care discharges from IHC hospitals in Utah County, nearly 16,000 (or about 70%) were from Utah Valley Regional Medical Center. MountainStar's two acute care facilities in Utah County had a combined 24.5% of the inpatient acute care discharges.

### *Cache County*

Exhibit 45 shows that IHC's Logan Regional Hospital's 113 staffed acute care beds comprise 77.4% of beds at hospitals in the county. Cache Valley Specialty Hospital accounts for the remaining 22.6%. To the extent that Brigham City Community Hospital might also be considered to be in the same market, the shares would be 57.9% for Logan Regional, 25.1% for Brigham City and 16.9% for Cache Valley Specialty Hospital. Exhibit 45 also shows that Logan Regional has an 89.8% share of acute care discharges at hospitals in Cache County. If Brigham City Community Hospital is included, Logan Regional's share of acute care discharges would be 77.9%, Brigham City's would be 13.2% and Cache Valley Specialty Hospital's would be 8.8%.

### *Washington County*

IHC's Dixie Regional Medical Center is the only acute care hospital located in Washington County, thus giving it 100% share of hospital beds. It also has a 100% share of acute care discharges at facilities in the county.

### **Normal Newborn Services**

#### *Salt Lake County/Southern Davis County*

Exhibit 46 shows each hospital system's share of staffed acute care beds as well as discharges of normal newborns (which provide a proxy for simple, uncomplicated hospital services) in a market that includes the 10 acute care hospitals in Salt Lake County plus Lakeview Hospital in southern Davis County (excluding Primary Children's and TOSH which do not offer obstetrics services). The largest sources of beds are Intermountain Health Care (44% of beds), MountainStar (20%), University Health Care (17.1%), and IASIS (17.7%). In terms of patient flows, Exhibit 46 shows that IHC's hospitals in Salt Lake County, accounted for 48.5% of discharges of normal newborns. IASIS's hospitals accounted for another 22.9%, followed by MountainStar with 17.6% and University Health Care with 11%.

#### *Ogden/Layton Area*

The patient origin data suggest that the three hospitals in the Ogden-Layton area comprises a geographic market for simple, uncomplicated hospital services as proxied by deliveries of normal newborns. Each of the three hospitals is owned by a separate hospital system. Exhibit 46 shows that Intermountain Health Care's McKay-Dee Hospital has 44.2% of the area's staffed acute care hospital beds, followed by MountainStar's Ogden Regional Medical Center (30.8%) and IASIS's Davis Hospital and Medical Center (25%). The normal newborns discharge data reflect similar shares as the bed counts shares. IHC accounts for 39.4% of normal newborn discharges, and IASIS accounts for 32.9% MountainStar accounts for 27.7%.

#### *Utah County*

Exhibit 46 shows that in terms of overall capacity for simple, uncomplicated hospital services in Utah County, the three IHC hospitals account for 72.2% of staffed acute care beds with MountainStar's two facilities providing the other 27.8%. All five of the hospitals in Utah County provide basic obstetrics services and deliver normal newborns which serve as a proxy for uncomplicated hospital services. IHC hospitals account for 76.5% of normal newborn deliveries at hospitals in Utah County, and MountainStar accounts for the remaining 23.5%.

*Cache County*

IHC's Logan Regional Hospital had a 100% share of normal newborn discharges at Cache County hospitals since Cache Valley Specialty Hospital does not provide obstetrics services. The addition of Brigham City Community Hospital would decrease Logan Regional's share of normal newborns to 85.9%.

*Washington County*

Dixie Regional Medical Center is the only facility located in Washington County that provides obstetrics services. Consequently, it accounts for 100% of normal newborns delivered in the county.

**Ambulatory Surgery Services**

*Salt Lake/Weber/Davis Counties*

Exhibit 47 shows the shares of ambulatory surgery cases at the 15 acute care hospitals and 24 free-standing ambulatory surgery centers in the three-county area. Ten of the ambulatory surgery centers shown in Exhibit 2 did not report their case counts to the Utah Department of Health. The absence of data from these facilities means that the shares shown in Exhibit 47 are overstated. The eight IHC facilities account for 43.6% of ambulatory surgery cases, followed by MountainStar facilities (20.1%), IASIS facilities (11.6%) and University Health Care (6.2%). The patient volume for Davis Surgical Center, which is jointly owned by IASIS and local physicians, is attributed entirely to the independent physician owners rather than to IASIS.

*Utah County*

The five acute care hospitals in Utah County offer ambulatory surgery services as do four other facilities located in Utah County. The two largest free-standing ambulatory surgery centers in Utah County are HealthSouth Provo Surgical Center and Central Utah Surgical Center, both of which have five operating rooms. Exhibit 47 shows that IHC had a 50.5% share of ambulatory surgery cases in 2003 followed by Central Utah Surgery Center with 22.7%. MountainStar, at 21.8%, was nearly as large as Central Utah Surgery Center. HealthSouth's patient count resulted in a share of 5%. Case counts for two remaining ambulatory surgery facilities (Riverwoods Cardiovascular Center and Cataract Center of Utah) are unavailable and not included in the share calculations.

*Cache County*

Non-IHC hospitals are more significant providers of ambulatory surgery services. Exhibit 47 shows that Logan Regional's share of ambulatory surgery cases was 50.5% in 2003. Cache Valley Specialty Hospital and Northern Utah Endoscopy Center each accounted for about 25% of cases. The addition of Brigham City Community Hospital results in Logan Regional's having a 43.8% share, about 21% each for Cache Valley

Specialty Hospital and Northern Utah Endoscopy Center, and 13.3% for Brigham City Community Hospital.

### *Washington County*

Several ambulatory surgery providers in addition to Dixie Regional Medical Center are located in Washington County. Patient volume data are not available for all of the free-standing ambulatory surgery centers, so the shares figures in Exhibit 47 are overstated. Exhibit 47 shows that Dixie Regional accounted for no more than 60.7% of ambulatory surgery cases at Washington County providers. Coral Desert Surgery Center, which opened in late 2003 and had only about 200 cases in that year, accounted for 2,972 in its first full year of operations in 2004. If Coral Desert's case count total for 2004 is used to estimate its actual share, Dixie Regional's share of ambulatory surgery cases falls to a maximum of 49.3%.

### **Other Areas: Inpatient Acute Care/Normal Newborns/Ambulatory Surgery Services**

Geographic markets have not been defined in this report for other parts of the state. Nevertheless, patient origin data can be used to determine shares for other groups of hospitals that might be perceived as being close competitors. For example, if Ashley Valley Medical Center and Uintah Basin Medical Center in northeastern Utah are considered to be each other's primary competitors for particular services, a comparison of beds would show that Ashley Valley accounts for 45% and Uintah Basin for 55%. The division of inpatient acute care discharges is comparable at 42.5% for Ashley Valley and 57.5% for Uintah Basin. A similar split of share occurs between Allen Memorial Hospital and San Juan Hospital in southeastern Utah. To the extent that patients residing in Sanpete and Sevier counties consider their only options for certain hospital services to be the three hospitals located in those two counties, IHC would have a 58.6% share of beds and Gunnison Valley Hospital would account for the remaining 41.4%. The share of inpatient cases is about 2/3 for the IHC hospitals and 1/3 for Gunnison Valley Hospital, but the share of ambulatory surgery cases is 84% for IHC and 16% for Gunnison Valley.

### **Unique Facilities and Services**

Some of the hospital facilities in Utah offer services that are not available anywhere else in the state. For example, IHC's Primary Children's Medical Center is the only specialty children's hospital. Similarly, University Health System's hospital complex at the University of Utah is the only academic medical center in the state. Both institutions also have a large number of specialist physicians on their staffs with reputations for outstanding excellence and, in some cases, preeminence in their fields.

Both Primary Children's and University Health System are viewed by many patients and payers as being uniquely qualified despite the availability of many of the same services at other facilities. Every managed care plan includes Primary Children's in its networks.

The University's Huntsman Cancer Center and its Neuropsychiatric Institute are also included in many networks, including some of Intermountain Health Plans' networks.

As is discussed in greater detail below, several other hospitals are viewed by patients and payers as locally unique. For example, Davis Hospital and Medical Center is viewed by SelectHealth as being unique in meeting enrollees' general hospital needs in a particular geographic area. Likewise, Utah Valley Regional Medical Center is the only provider of certain sophisticated tertiary services in Utah County, although these services are readily available in Salt Lake County. Finally, several of the rural hospitals are the only provider of primary/secondary hospital services used by patients in a community.

## **HEALTH CARE FINANCING MARKETS**

Health insurance plans offer insurance products that pay for enrollees' use of the services of hospitals, physicians, ancillary service providers and others. Often, health insurance is purchased for employees and their dependants by employers. Consumers (i.e., employers and employees) benefit most by competition among plans to offer products with attractive levels of quality (including provider network composition, access of enrollees to providers, and customer service among other things) at acceptable price (including employers' premiums and employees' out-of-pocket costs).

A large number of entities provide health care financing to residents of Utah. The largest single entity is likely the federal government with its extensive Medicare program. The Utah state government is also involved through Medicaid and Utah's Children's Health Insurance Program. Commercial insurers include both large and small firms, national and local firms, firms with broad provider networks and firms with narrow provider networks, firms that offer fully insured products and firms that offer self-funded products. All of these health care financing entities purchase services from hospitals, ambulatory surgery centers, ancillary service providers, physicians and other health care professionals. Employers and employees choose among the commercial plans to provide their health care financing services.

## **PRODUCT MARKETS FOR HEALTH CARE FINANCING SERVICES**

Product markets for health care financing services are defined using the same economic principles as are used to define other product markets. In other words, health insurance products would be considered to be in the same product market if consumers viewed the products as sufficiently interchangeable. Using the Merger Guidelines framework, if a hypothetical monopolist insurer who provided one type of insurance attempted to increase its premiums above competitive levels (or attempted to decrease the quality of its services below competitive levels), and that attempt would cause enough of its enrollees to switch to alternative health insurance products so as to make the attempt unprofitable, then the other health insurance products should be included in the product market.

An initial distinction between health insurance products that leads to separate product markets is between private (or commercial) health insurance and government health insurance.<sup>29</sup> Enrollees in commercial health insurance products cannot switch to government health insurance products such as Medicare and Medicaid to avoid a price increase. Consequently, the government products are unable to constrain the prices of commercial products. Commercial health insurance products are available to most employers as fully insured products and to larger employers as self-insured products. Full insurance refers to products in which the insurance carrier assumes the insurance risk (i.e., the carrier pays the claim for medical care). With self-funded products, the employer or other group assumes the insurance risk and thus pays providers directly for medical care. Self-funded products may include a stop-loss provision that switches the insurance risk to the carrier when claims exceed a certain level.

From a product market definition perspective, self-funded products belong in the same product market as fully insured products if enough purchasers of fully insured products could substitute to self-funded products to avoid a price increase of the fully insured products. It makes intuitive sense that such switching could readily occur, at least for employers that are sufficiently large.<sup>30</sup> Providers of self-funded products typically offer services that are also provided with a fully insured product. Conversely, many purchasers of fully insured products could switch to self-funded products to avoid above-competitive prices of fully insured products. The significant amount of employers that have switched from fully insured products to self-funded products is consistent with the two types of products being in the same geographic market. For purposes of this report, all commercial insurance products, including fully insured and self-funded products, are considered to be in the same product market.

## PROFILES OF MAJOR PAYERS

Exhibits 48-62 provide detailed information about enrollment and provider networks of the major commercial health insurance plans in Utah. The data in these exhibits are drawn from sources that do not always agree. An effort is made to maintain consistency in sources within any individual exhibit. When necessary, however, data provided directly by the health plans are used in place of information provided in secondary sources. Nevertheless, there are some discrepancies among the exhibits, especially

---

<sup>29</sup> Some government employees are covered by private health insurance. The term “government health insurance” refers mainly to Medicare, Medicaid and CHAMPUS products.

<sup>30</sup> Small-group purchasers of fully insured products may not be able to switch to self-funded products as readily as large-group purchasers because it may be too costly for a small-group purchaser to carry the insurance risk. In some instances, small groups may coalesce in a purchasing entity that collects enough enrollees to spread the risk sufficiently. The U.S. Department of Justice has recently asserted a product market for large-group purchasers that included self-funded options and a product market for small-group purchasers that did not include self-funded options. See *U.S. v. United Healthcare/PacifiCare*, Civil Action No. 1:05CV02436, December 20, 2005.

regarding enrollment figures, but none of the differences materially affects the analysis or conclusions of this report.

### **SelectHealth (IHC)<sup>31</sup>**

SelectHealth offers fully insured and self-funded health insurance products with four basic network choices. With one exception, each of SelectHealth's insurance products uses the IHC-oriented hospital network. The network for the recently introduced PPO option Choice Premiere is open to all providers who are willing to accept its fee schedule and thus includes more facilities. The physician panels associated with each network varies in size.

Exhibit 48 displays SelectHealth's hospital and ambulatory surgery center network by type of product. The Select Value panel, SelectHealth's most limited network, includes the 19 IHC hospitals and 2 ambulatory surgery centers. It also includes a small number of other hospitals. Exhibit 49 shows that the SelectValue physician panel offers 1,170 physicians, including all IHC-employed physicians along the Wasatch Front. The Select Value panel is available only through an HMO product option. The SelectMed panel is broader than the Select Value panel, but it retains some restrictions on provider participation. The SelectMed panel includes a total of 2,741 physicians (1,008 primary care physicians and 1,733 specialists) as well as 26 acute care hospitals and three ambulatory surgery centers. It is available through HMO or POS options to employers located along the Wasatch Front and in some selected rural areas. The Select Choice and Select Care panels have fewer restrictions on providers. Each includes 1,200-1,300 primary care physicians and about 2,000 specialists. Both panels include 30 acute care hospitals and 6 ambulatory surgery centers. The Choice Premiere panel includes an additional 15 ambulatory surgery centers. The Care panel is available through HMO or POS options while the Select Choice panel is available only through the PPO product option.

As Exhibit 50 shows, statewide enrollment in SelectHealth products has grown by about 19,000 members from about 433,000 in 2000 to about 452,000 in 2004. All of SelectHealth's products currently are available for group and individual commercial insurance. SelectHealth terminated its Medicare product in 2002 and has converted its Medicaid product (Access) to an administrative-services-only product for the state. The commercial business has comprised about 80% fully insured accounts since 2002 with the balance being in self-funded accounts. The self-funded portion of total enrollment doubled in 2002 when IHC's own employees were shifted to self-funded products.

Exhibit 51 provides some enrollment detail at sub-state levels. SelectHealth's enrollment in the four urban counties along the Wasatch Front accounts for about 80% of its total covered lives. The commercially insured enrollment in these counties has risen from about 350,000 in 2001 to 382,000 in 2005, an increase of 9.1% over the four years. The

---

<sup>31</sup> IHC Health Plans was recently renamed SelectHealth.

split between fully insured and self-funded in these urban counties is similar to the statewide split.

In Washington County, SelectHealth's commercial enrollment increased from 14,133 to 19,356 between 2001 and 2005. Its enrollment in Cache County increased from 17,636 in 2001 to 22,330 in 2005. IHC's Cache County self-funded enrollment of 15-20% of total commercial enrollment is similar to its statewide figure. In Washington County, however, self-funded enrollment reached 28% of total commercial enrollment in 2004 and 2005.

Enrollment in SelectHealth's commercial products in the rural counties of Utah increased by about 1,300 covered lives between 2001 and 2005 to a total of 56,576. Again, the self-funded portion is comparable to IHC's share in the rest of the state at about 20%.

### **Regence BlueCross BlueShield of Utah**

Generally, Regence BlueCross BlueShield of Utah ("Regence BC/BS") offers employers combinations of three types of products and three networks. The three products included under the BlueChoices brand are the Essential product, the Preferred product, and the Classic product, ranging from the least generous benefits to the most generous benefits. Similarly, premiums are lowest for the Essential product and highest for the Classic product. Regence BC/BS also offers health insurance products under the BlueCross, ValueCare and HealthWise names.<sup>32</sup>

Each of the three products can be combined with any of the three network options. Exhibits 49 and 52 shows that the Healthwise network is the narrowest, with 25 acute care hospitals, 17 ambulatory surgery centers and 3,632 physicians. The ValueCare network is broader than Healthwise, with 36 hospitals, 25 ambulatory surgery centers and 4,239 physicians. Two additional ambulatory surgery centers will be added to the ValueCare network in mid-2006. Neither the Healthwise network nor the ValueCare network includes several of IHC's urban-area hospitals. The Traditional network includes all 43 acute care hospitals in Utah, 28 ambulatory surgery centers and 4,434 of Utah's physicians.

Although the products offered by Regence BC/BS are broadly similar to those offered by the other major insurers in Utah, the licensing of the major insurers is different. All but one of Regence BC/BS's plans are licensed as PPOs whereas all of SelectHealth's and Altius's plans are licensed as HMOs. The licensing differences have some significant implications for out-of-network reimbursement, the applicability of Utah's Rural Access law, and data reporting to the Department of Insurance. Plans sold with the Healthwise

---

<sup>32</sup> The similarity of the names of Regence BC/BS's insurance products and provider networks stems from its change from its previous products (an indemnity product named BlueCross, a PPO product named ValueCare and an HMO product named HealthWise) that were offered under the names now used for its networks.

network are considered to be HMOs whereas plans sold with the ValueCare network are considered to be PPOs.

Exhibit 50 shows that statewide enrollment in Regence BC/BS's plans totaled more than 348,000 covered lives in 2004. Since 2000, Regence BC/BS's statewide enrollment has varied between 340,000 and 360,000. Regence BC/BS's HMO plans enrollment was about 30,500 in 2004, or less than 10% of Regence BC/BS's total. Its ValueCare PPO product (135,477 enrollees) and its Traditional product (126,550 enrollees) each accounts for 36-38% of Regence BC/BS's total enrollment. Another 56,039 enrollees were included in the Federal Employees' Health Plan.

About 71% of Regence BC/BS's total enrollment is located in the four urban counties of the Wasatch Front (Exhibit 51). Another 11% is in Washington and Cache counties. The remaining 18% (or nearly 62,000 covered lives) is spread throughout the rural areas of the state.

### **Altius Health Plans**

Altius Health Plans offers employers HMO, POS and PPO products as well as a new consumer-driven product. Altius has three HMO products. Its Mountain Plan is a "gatekeeper" HMO product requiring enrollees to choose a primary care provider to get a referral before seeing a specialist. Altius also has an open-access HMO product (meaning that no referral is required to see a specialist) known as Peak Plan. In addition, its Peak Advantage HMO product is open access, but has three tiers of physicians. In this latter plan, physicians choose a tier and are paid at the rate designated for that tier. Enrollees may use physicians in any tier, but have higher co-pay and co-insurance obligations for physicians in the higher-cost tiers.

Altius also offers two POS products. The Peak Plus Plan is similar to the Peak Plan HMO except that enrollees have the point-of-service option to use an out-of-network provider. The Peak Advantage POS product has the same physician tier structure for the in-network component as the Peak Advantage HMO product, but it also allows for out-of-network coverage.

Exhibits 49 and 53 show that all of Altius Health Plans' products use the same network of 35 hospitals, 18 free-standing ambulatory surgery centers and 3,653 physicians (1,568 primary care physicians and 2,085 specialists). The hospital networks comprise non-IHC facilities in urban areas of the Wasatch Front with two exceptions. IHC's Primary Children's Medical Center is included in its networks for all services and Utah Valley Regional Medical Center is included for certain specialty services. In Cache County, Altius Health Plans' network includes both Logan Regional Hospital and Cache Valley Specialty Hospital.

Enrollment in the Altius products has grown significantly since 2000, as Exhibit 50 shows, rising from 87,000 in 2000 to 144,000 in 2004. Altius's enrollment is concentrated in the urban counties of the Wasatch Front (Exhibit 51). About 85% of its

enrollment in 2005 was in the four-county Wasatch Front area. Coventry Healthcare, which owns Altius Health Plans, also recently acquired First Health and CCN Network, both of which have enrollees in Utah. Both First Health and CCN Network are national companies that offer third-party administrator services to self-funded insurance arrangements. These services include network use, claims administration, utilization review and other administrative services.

### **Public Employees Health Program**

Public Employees Health Program (PEHP) products are sold only to public employers such as state and local governments, school districts, police and fire departments, colleges and universities, etc. Employees of the State of Utah government are required to get their health insurance through PEHP, but other public entities may choose PEHP or some other insurer. No non-public entities may purchase health insurance through PEHP.

PEHP enrollment includes all State of Utah employees, about 70% of local government employees, 1/3 of school districts, and most colleges (but not the universities). PEHP essentially functions as an administrator of self-funded plans. It does not assume insurance risk, but “manages” it to keep costs down including negotiation of prices with providers.

PEHP offers employers a choice of four or five products with its two larger network alternatives. The products are denoted as Platinum, Gold, Silver and Bronze. With its narrower network, only one product is offered. In addition, PEHP is one of the two administrators of the Utah Child Health Insurance Program (CHIP). The CHIP program has two network alternatives through PEHP.

Exhibits 49 and 54 provide information on PEHP provider networks. PEHP’s three primary networks are known as Summit Care, Advantage, and Preferred. The Summit Care network is essentially the same panel of providers that Altius uses, and it does not include any IHC facilities. It has 1,568 primary care physicians and 2,085 specialists. About 20% of the Utah state government enrollment chooses a product with the Summit Care panel.

The Advantage network is an IHC-oriented network of 25 hospitals and 8 surgery centers, including a small number of non-IHC facilities. The physician panel is made up of 1,279 primary care physicians and 2,735 specialist physicians. Products with the Advantage panel account for about 30% of State of Utah enrollment. Currently, the Advantage network is available only to State of Utah employees though at times in the past it has been available to non-state employees as well.

The Preferred network includes all 43 acute care hospitals in Utah and about 90% of physicians. The physician panel has 1,729 primary care physicians and 3,881 specialists,

making it substantially larger than any other physician network.<sup>33</sup> About half of the state government enrollees are in products that use the Preferred panel.

The portion of the insurance cost that is borne by employees vary by employer. Some employers have premium costs for employees using the IHC-oriented network that are higher than for the Altius Summit Care network, but others charge the same amount. The premium cost to enrollees is higher for products with the Preferred network than for the other two networks.

Exhibit 50 shows that PEHP's statewide enrollment has risen from 139,800 in 2000 to 172,692 in 2004. The four urban counties along the Wasatch Front accounted for two-thirds of PEHP's enrollment in 2004, up from about 60% in 2001 and 2002 (Exhibit 51). PEHP's enrollment in Washington County changed little between 2001 and 2004, but increased by more than 1,600 covered lives (or more than 50%) from 2004 to 2005. In Cache County, PEHP's enrollment has remained steady at about 3,900 covered lives since 2002.

### **Other Commercial Payers**

As Exhibit 50 shows, several other health insurance plans sell products in Utah. Among the largest of these other plans are United Health Care, Deseret Mutual Benefit Administration and Educators Mutual. Others not included in Exhibits 50 are Aetna, Beech Street and several other PPOs. United Health Care is the largest of these other commercial health insurance plans with about 135,000 enrollees in 2004, as indicated in Exhibit 50. United's 2004 enrollment is lower than its 2001 level by about 77,500 covered lives or 36.4%. Much of United's loss in enrollment coincided with its switch to an IHC-oriented hospital network in 2003 and was likely picked up by Altius and PEHP products as well as those of other insurers. Exhibits 49 and 55 show that currently, United's facility network includes 31 hospitals and three surgicenters. Its physician network has 1,254 primary care physicians and 1,786 specialists.

Exhibit 50 shows that Deseret Mutual Benefit Administration (DMBA) had about 63,000 covered lives in 2004. Its enrollment, which is entirely in self-funded accounts, has not changed significantly in the 2000-2004 period. Exhibit 56 shows that DMBA's hospital networks for its NetworkCare, BasicCare and Student Health Plan include all 19 IHC hospitals plus the 6 MountainStar hospitals and the 4 IASIS hospitals. They also include other hospitals throughout the state. These products also have 11 ambulatory surgery centers in their networks. DMBA's ManagedCare hospital network, which accounts for more than half of its enrollees, is slightly narrower, not having three of the MountainStar hospitals and several rural hospitals. Exhibit 49 shows that the physician panels used by DMBA include 700-800 primary care physicians and 2,900-3,000 specialists.

---

<sup>33</sup> PEHP reports that its Preferred network has 5,610 physicians which is greater than the total number of active physicians in the state as reported by other sources. It is possible that the PEHP count of specialists for this panel (3,881) is about 800 too high.

DMBA is planning a significant restructuring of its managed care product offerings in Utah in January 2007. It will have three health insurance products that are designed to appeal to enrollees' differing preferences in hospital networks. The ManagedCare product will be expanded to include all IHC, MountainStar, IASIS and University hospitals. An IHC Exclusive Provider Organization product will use an IHC-oriented network exclusively. A third product will use the Altius Health Plans' network of non-IHC-oriented hospitals. Each of these hospital networks will have appropriately constructed physician networks. The inclusion of ambulatory surgery centers in the products has not yet been determined.

Historically, Educators Mutual has offered three insurance products to its enrollees, all of which are in self-funded accounts. Exhibit 50 shows that currently, almost all of its 52,598 enrollees are in the Care Plus product. Its enrollment increased by 68% between 2000 and 2001, but declined by nearly 30% between 2001 and 2004. Both Altius and PEHP appear to have gained enrollment at the expense of Educators Mutual. Exhibit 57 shows that the facilities network used by Educators Mutual is made up of all 19 IHC hospitals and the two IHC surgicenters plus IASIS's Davis Hospital and MountainStar's Mountain View Hospital. In addition, several rural hospitals and some additional ambulatory surgery centers are offered. As is displayed in Exhibit 49, Educators Mutual physician networks include one comparatively narrow network (1,098 primary care physicians and 1,977 specialists) and two broader networks (1,400-1,500 primary care physicians and 3,000 specialists).

Other payers' hospital and ambulatory surgery center networks are shown in Exhibits 58-61.

#### **GEOGRAPHIC MARKETS FOR HEALTH CARE FINANCING SERVICES**

Geographic market definition follows the same approach for health care financing services as for any other service. The market definition focus is on the extent to which customers view alternative sellers of health care financing services as acceptable substitutes. None of the services provided by health insurance plans is necessarily constrained by geography other than state regulatory requirements. An insurer need not be located in Utah, for example, to assume insurance risk or to process claims of Utah residents who use Utah health care providers. The geographic constraint typically comes from the ability of a health insurer to establish a network of providers. Some health insurance plans offer provider networks that are limited geographically to areas such as the Wasatch Front. Others sell health insurance products throughout the state. An employer in Salt Lake City has many alternative health insurance plans from which to choose, including some that sell products statewide and others that sell products only to Wasatch Front area employers. An employer in St. George, by contrast, does not have as many health insurance options, but still can choose among insurance products with statewide networks. If the employer were large enough, it would also have the option to self-insure or, perhaps, to solicit an alternative insurer to enter the area.

The ability of statewide insurers to charge different rates based on the area of the state in which an employer is located (and hence based on alternatives available to consumers) indicates that sub-state geographic markets may be appropriate. The major health insurers in Utah nevertheless tend to have uniform premium levels for all employers statewide that have the same basic claims history and choice of plan options. In addition, easy expansion of plans to areas of the state not previously served indicates competitive discipline that is felt statewide. This fact pattern indicates that it is most appropriate to consider health care financing markets at the statewide level. As was the case with hospital and ambulatory surgery geographic markets, however, this report examines health insurance at sub-state levels as well. Such an approach is most likely to serve the Task Force's needs. Consideration of potential geographic markets that are narrower than might otherwise be justified errs on the side of identifying market structure and practices as problematic when actually they are not likely to pose competitive problems. Conversely, this approach helps ensure that potentially problematic markets are not overlooked.

#### **HEALTH PLAN PROVIDER NETWORKS**

An important dimension of competition in the sale of health insurance products to consumers is the assembly of networks of physicians, hospitals, ambulatory surgery centers and other facilities by health plans. Indeed, it is this dimension that is at the core of much of the concern of the Task Force and market participants in Utah.

From the enrollees' perspective, health insurance plans must offer an attractive combination of premiums and provider networks.<sup>34</sup> Typically a trade-off exists between the premium and the inclusiveness of the network. All else equal, more narrow networks are sold at lower premiums and broader networks command higher premiums. From the providers' perspective, network agreements with health plans are based in part on the patient volume that the provider expects to receive from the plan. Providers generally are willing to offer payers lower prices (i.e., higher discounts) in exchange for greater patient volume. Frequently, providers will offer lower rates to payers only if the network is restricted to a limited number of similar providers, thereby ensuring the increased patient volume.

Historically, these types of arrangements have been at the heart of managed care. Successful products combine attractive networks and acceptable premium levels. Such products will be desirable to consumers and to providers. Consumers' preferences may change over time, increasing the demand for products with lower premiums and more restrictive networks or for products with higher premiums and more inclusive networks. During much of the 1990s, consumers tended to prefer more restrictive networks in exchange for lower premiums. In the late-1990s and early 2000s, consumer preferences

---

<sup>34</sup> See generally, "Health Care Access and Delivery," presentation by Tal Land to the Privately Owned Health Care Organization Task Force, August 25, 2005.

shifted toward broader networks.<sup>35</sup> There are some indications that the pendulum is swinging back again. In Utah, demand evidently exists for both more restrictive and less restrictive networks. Health insurance products that use SelectHealth’s comparatively narrow SelectMed network are among the most popular in the state. Yet Regence BC/BS’s traditional plan, with virtually no network restrictions, is also widely chosen.

A question that is often asked is whether networks “must have” certain facilities or groups of facilities, even if they are more costly, to be attractive to enrollees. The economic decision faced by a health plan in deciding to exclude a “must-have” facility from its network involves a trade-off for the plan between (1) lost profits that would result from enrollees choosing another insurer that includes the facility and (2) saved cost of having enrollees who remain in the plan use less costly facilities.<sup>36</sup> The actual network choices made by health insurers and the popularity of products using those networks provides some important insights for Utah. Few individual facilities within the urban areas of the Wasatch Front appear to be sufficiently unique or well situated as to be included in virtually all managed care networks. Among those facilities that are included in most networks are IHC’s Primary Children’s Medical Center in Salt Lake City and IASIS’s Davis Hospital and Medical Center in Layton. Primary Children’s is the only specialty children’s hospital in Utah, leading to its inclusion in many networks. The importance of Davis Hospital in network formation derives from its unique location roughly midway between Ogden and Salt Lake City. Outside of the Wasatch Front, most areas are served by small numbers of hospitals. Consequently, most rural hospitals are included in the networks of products marketed in those areas.

For the most part, two large hospital networks serve residents of the Wasatch Front. One of these networks comprises all of the Intermountain Health Care hospitals plus Davis Hospital and Medical Center (“IHC-oriented” hospital network).<sup>37</sup> The other is made up of MountainStar’s six hospitals, IASIS’s four hospitals, and University Health Care’s four hospitals plus Primary Children’s Medical Center (“non-IHC-oriented” hospital network).<sup>38</sup>

---

<sup>35</sup> See “Health Care Access and Delivery,” presentation by Tal Land to the Privately Owned Health Care Organization Task Force, August 25, 2005.

<sup>36</sup> See Barry C. Harris and David A. Argue, “FTC v. Evanston Northwestern: A Change from Traditional Hospital Merger Analysis?,” *Antitrust*, Spring 2006, pp. 34-40.

<sup>37</sup> The term “IHC-oriented hospital network” refers to the hospitals offered by IHC Health Plans in its products. The IHC-oriented hospital networks include IASIS’s Davis Hospital and Medical Center and University Health Care’s Huntsman Cancer Center as well as several non-IHC rural hospitals. Conversely, the “non-IHC-oriented hospital networks” refers to hospital networks offered by plans that are not considered to be affiliated with IHC. These networks typically include IHC’s Primary Children’s Hospital, Dixie Regional Medical Center and several IHC rural hospitals.

<sup>38</sup> UHC’s four hospitals are University Hospital, University Neuropsychiatric Hospital, Hunstman Cancer Center and University Orthopaedic Center. UHC is sometimes characterized as having only the first two entities as separate hospitals.

Neither of these networks nor the hospitals or ambulatory surgery centers within the networks provides its services exclusively to any single payer. Consequently, as will be discussed in more detail below, payers are able to choose either network and compete with other payers offering the same network. Likewise, to some degree, payers can add or subtract facilities from the basic network. The primary limitation that providers place on network participation is that some hospital systems require that in order to get the highest discount, certain competing facilities not be included in the same network as the hospital system's facilities. This exchange of exclusivity for greater discounts is part of hospitals' competition to be included in payers' networks. The general availability of hospitals and ambulatory surgery centers to be included in payers' networks means that there is little likelihood of network construction creating harm to competition.

Important in understanding the significance of the two major networks to consumers on the Wasatch Front, in particular, is an individual evaluation of each product of each health plan. Plans do not necessarily restrict all of their products to one network or the other. Many plans sell products that have more restrictive hospital networks and products that have less restrictive hospital networks. Likewise, plans have products with different levels of restrictiveness of their physician networks. Exhibits 48 and 52-61 show the hospital and ambulatory surgery networks of the major plans in Utah as well as some of the other plans with lower enrollment. The health insurance products of SelectHealth, Educators Mutual, Aetna, United Healthcare, Beech Street, and HealthSmart Preferred Care are, for all intents and purposes, limited to the IHC-oriented hospital network.<sup>39</sup> In addition, PEHP's Advantage product uses an IHC-oriented network plus four non-IHC ambulatory surgery centers in the southwestern part of the state. For a five-year period beginning in 1997, Regence BC/BS also offered a product with an IHC-oriented network. This product, known as BlueCare, ultimately did not achieve significant enrollment and the contract was terminated by IHC.<sup>40</sup>

Some of the other health plans use hospital networks that are non-IHC-oriented, though there is variation among those networks. Exhibit 53 shows that the hospital network used by Altius Health Plans' products in the Wasatch Front area comprises MountainStar, IASIS and University facilities, but it also includes Primary Children's and, for certain services that are not available at other Utah County hospitals, Utah Valley Regional Medical Center. Altius's networks also include many, but not all, non-IHC ambulatory surgery centers in Utah. PEHP's Summit Care product uses a non-IHC-oriented hospital network along with 7 of the 27 non-IHC ambulatory surgery centers on the Wasatch Front plus HealthSouth Park City Surgery Center (Exhibit 54). Cigna Healthcare's products all use a non-IHC-oriented hospital network and 12 of the 27 non-IHC free-

---

<sup>39</sup> Aetna product networks in the Wasatch Front area include one non-IHC facility (HealthSouth Provo Surgery Center) in addition to Davis Hospital and Medical Center. Educators Mutual's Care Plus and Network Select products include MountainStar's Mountain View Hospital in their networks. United Healthcare's products include Mountain West Endoscopy Center in Salt Lake City.

<sup>40</sup> Regence BC/BS and IHC disagree as to why the BlueCare product failed to gather significant enrollment.

standing ambulatory surgery centers on the Wasatch Front plus HealthSouth Park City Surgery Center(Exhibit 59). Likewise, Regence BC/BS's ValueCare and Healthwise products use non-IHC-oriented hospital networks (Exhibit 52).<sup>41</sup> These Regence BC/BS products also include 15 of the 27 non-IHC ambulatory surgery centers in the Wasatch Front area plus several others in different parts of the state. Other health insurance plans that use non-IHC-oriented hospitals networks are University of Utah Health Plan (Exhibit 60), Great Western Healthcare, and Health Utah (Exhibit 61). These health plans offer some, but not all of the non-IHC ambulatory surgery centers statewide. For example, University Health Plan's network includes Mount Ogden Surgical Center in Ogden, South Towne Surgical Center in Sandy and Central Utah Surgical Center in Provo, but not St. George Surgical Center in St. George. Great Western Healthcare, in contrast, does not offer Mount Ogden, but it does offer the other three.

Some of the products of other health plans include both IHC and non-IHC facilities. Exhibit 52 shows that Regence BC/BS's Traditional products include all acute care hospitals statewide as well as both IHC ambulatory surgery centers and 26 non-IHC ambulatory surgery centers statewide. As Exhibit 54 shows, the hospital network used by PEHP's Preferred products includes all acute care hospitals and 25 of the 42 ambulatory surgery centers in the state (including the two IHC ambulatory surgery centers). Three of the networks offered by Deseret Mutual Benefit Administrators includes all IHC, MountainStar and IASIS hospitals as well as several others throughout the state. DMBA's ambulatory surgery center network currently includes the two IHC facilities and nine non-IHC facilities (Exhibit 56).

The other primary component of provider networks is physicians. Health plans typically offer products with physician networks that distinguish between primary care physicians and specialists. Primary care physicians include internists and general practitioners and may include pediatricians and OB/GYNs. All other specialties, including pediatric and OB/GYN subspecialties, are typically included among specialists.

The physician networks offered by health plans in Utah are non-exclusive in the sense that physicians included in one plan's networks are not precluded from participating in another plan's network. Consequently, physician networks are not readily segregated into IHC-oriented and non-IHC oriented categories. Many of IHC's employed physicians participate in networks of other managed care plans. In addition, many non-IHC physicians are included in the networks of IHC's SelectHealth products. In some situations, non-IHC plans contract with individual IHC physician practices without contracting with all IHC physician practices. More often, however, all IHC physicians are included in a network. University of Utah Medical Group contracts only in its entirety though it, too, is non-exclusive among plans. The ability of competing plans to contract with the same physicians means that it is unlikely that physician network formation could harm competition.

---

<sup>41</sup> The ValueCare and Healthwise products both include IHC's The Orthopedic Specialty Hospital as well as IHC's Primary Children's Medical Center.

Exhibit 49 shows that as is the case with hospital networks, many plans offer products with restrictive physician networks and products with more inclusive physician networks. As previously discussed, plans offer products with different physician networks at different premium levels as a means of appealing to different preferences among employers and employees. Differences in consumers' preferences for network size and premium levels explains why substantially different types of products co-exist in a market.

Intermountain Health Care's SelectHealth offers products with a broad network of physicians (Select Care and Select Choice panels) and products with a more narrow physician network (SelectMed and Select Value panels). Exhibit 49 shows that SelectHealth's broadest networks have about 3,200 physicians (1,200 primary care and 2,000 specialists). The more narrow SelectMed network has about 2,700 physicians divided into 1,000 primary care physicians and 1,700 specialists. Each of these networks includes many more physicians than the 575 IHC-employed physicians. SelectHealth has also introduced an additional physician network (Select Value) that is even more restrictive than the SelectMed panel, but is still broader than the IHC-employed physicians. Select Value's panel has 1,200 physicians comprising almost 500 in primary care specialties and 700 in other specialties.

Exhibit 49 also shows that Regence BC/BS has both comparatively narrow and comparatively broad physician networks. The Healthwise panel, which is its narrowest with 3,632 physicians, is divided into 1,225 primary care physicians and 2,407 specialists. Regence BC/BS's ValueCare panel has 1,442 primary care physicians and 2,797 specialists for a total of 4,239 physicians. Its Traditional product has 1,533 primary care physicians and 2,901 specialists, for a total of 4,434 physicians.

In contrast to SelectHealth and Regence BC/BS, Altius Health Plans uses the same physician network for each of its Altius-brand products. It has 1,568 primary care physicians and 2,085 specialists on its panel for a total of 3,653 physicians.

Until recently, SelectHealth has leased its physician provider networks to other managed care plans. Among the lessees were Aetna, Beech Street, PPO USA, Educators Mutual, PEHP and some federal employees plans. These plans have been referred to as "IHC affiliated plans." As part of the lease agreements, these managed care plans received the same contract terms that SelectHealth had negotiated with the network physicians. Recently, SelectHealth has announced that it will no longer lease its physician panels. Several managed care entities, including Aetna, PPO USA and Government Employees Health Association, have reportedly begun to establish their own networks of physicians for lease.

## **HEALTH CARE FINANCING SERVICES MARKET STRUCTURE**

As was discussed previously, commercial health care financing services provided in the state of Utah are considered to constitute a properly defined market, although this report considers health care financing in sub-state areas as well. Competition in health care

financing markets is beneficial to consumers because it compels health insurers to offer the most attractive products to consumers. If an insurer fails to do so in a competitive market, consumers are able to switch to alternative insurers. Competition among health insurers is also beneficial from providers' perspectives. Health insurers purchase providers' services on behalf of their enrollees. Providers are ensured of receiving competitive prices for their services if they have enough alternative health plans competing to purchase their services.<sup>42</sup>

The structure of a market in health care financing is often assessed by each insurer's share of total enrollment. An important conceptual issue, however, concerns the extent to which enrollment shares are relevant to an evaluation of the competitiveness of health insurance markets. Shares are likely to be most relevant in an assessment of competition when sellers in a properly-defined market are characterized by well-defined capacity limitations. In many health insurance markets, however, capacity is often large relative to the overall market or could be easily expanded. In such cases, an analysis may properly use the so-called bidding model.<sup>43</sup> Nevertheless, health insurance shares are examined in this report to the extent possible as requested by the Task Force.

Exhibit 50 shows statewide enrollment for all of the large health insurance plans in Utah for which data are available.<sup>44</sup> These enrollment figures include fully insured products as well as self-funded products administered by each plan. Some PPOs, such as Beech Street and MultiPlan, are not included in Exhibit 50. The enrollment in the unaccounted plans is believed to be fully captured in the "Other Commercially Insured" category, which accounts for about 15-20% of covered lives in 2000-2004. The total of all persons covered by private insurance is provided by the U.S. Census Bureau.

In 2004, IHC's SelectHealth had 452,000 enrollees which, as Exhibit 62 shows, accounted for 24.9% of statewide enrollment. The second-largest commercial health insurer in 2004 was Regence BC/BS with 348,500 enrollees or 19.2% of statewide commercial enrollment.<sup>45</sup> Enrollment shares of both SelectHealth and Regence BC/BS have varied little between 2000 and 2004. The health insurer with the most rapid growth

---

<sup>42</sup> In *U.S. v. United Healthcare and PacifiCare*, the Department of Justice filed suit on matters related to allegations of a health insurer possessing market power as a seller of health care financing services and as a purchaser of health care provider services.

<sup>43</sup> See, for example, Gregory J. Werden, "Assigning Market Shares," *Antitrust Law Journal*, vol. 70, 2002 at 85-86. See also, Horizontal Merger Guidelines of the U.S. Department of Justice and Federal Trade Commission at §1.41 fn. 15.

<sup>44</sup> Much of the data in Exhibit 50 are from annual surveys of health insurance plans conducted by the Utah Hospital Association (UHA). The UHA data have the advantage of being collected by the same source over several years. As a general matter, the UHA data are consistent with enrollment figures provided directly by the plans. To the extent that enrollment data provided by health insurance plans differ significantly from that collected by the UHA, the insurance plans' data are used.

<sup>45</sup> If the "Other Commercial Insurance" category is excluded, SelectHealth's enrollment share in 2004 would be 29.3% and Regence BC/BS's would be 22.6%.

in statewide enrollment is Altius Health Plans. Altius's commercial enrollment increased from 88,000 in 2000 to 144,000 in 2004 thus increasing its share from 5% to 8%.<sup>46</sup> PEHP has also increased its statewide enrollment share, rising from 8% in 2000 to 9.5% in 2004. Several other plans, such as Educators Mutual, Cigna Health Care and, especially, United Healthcare have experienced significant declines in enrollment and shares in the past several years.

Of the plans that use IHC-oriented hospital networks, United Healthcare is among the most exclusive to the IHC-oriented network since its switch from the non-IHC-oriented network in 2003. United had a 7.4% share of statewide enrollment in 2004, which reflects an enrollment decline of more than 72,000 (or 34.9%) between 2000 and 2004. Educators Mutual, with 2.9% of commercial enrollment statewide, relies to a significant degree on the IHC-oriented hospital network. SelectHealth plus United and Educators use the IHC-oriented network most heavily accounted for 35.2% of commercially insured enrollment in Utah in 2004. Some of the insurance plans not included in Exhibit 50, such as Aetna and Beech Street, also use IHC-oriented networks. Likewise, part of PEHP's enrollment is in products that use IHC-oriented networks. A reasonable estimate of these other enrollment figures might yield a total of 40% of statewide enrollment that is directed in some fashion to the IHC-oriented network.

It is also helpful to assess enrollment at sub-state levels. Exhibit 51 shows commercial health insurance enrollment for nine Utah health plans in 2004 disaggregated to the level of counties or groups of counties.<sup>47</sup> These data reveal some differences in the popularity of health insurance products between urban areas and rural areas of the state. In the four-county urban area of the Wasatch Front, SelectHealth accounted for 1½ times as many commercially insured enrollees as Regence BC/BS.<sup>48</sup> In the rural parts of the state, Regence BC/BS's enrollment is about ¼ that of SelectHealth's enrollment. In Cache County, SelectHealth's enrollment is only about 2.5% greater than Regence BC/BS's and in Washington County, SelectHealth enrollment is about 11% greater than Regence BC/BS's. Exhibit 51 shows that in Weber and Davis counties, Altius Health Plans'

<sup>46</sup> Coventry Healthcare, which owns Altius Health Plans, recently acquired First Health and CCN Network, but these entities are run separately from Altius. The First Health and CCN enrollments are not included with the figures noted. Inclusion of First Health and CCN enrollment would increase Coventry's share to 18.5% in 2004.

<sup>47</sup> Both the Utah Insurance Department and the Utah Hospital Association provide commercial health insurance enrollment data at some sub-state levels. With the exception of Regence BC/BS, the Insurance Department's enrollment counts generally match those of the Utah Hospital Association's surveys of health plans and those provided by the health plans. Exhibit 50 uses the Insurance Department figures for SelectHealth, Altius Health Plans, and PEHP. Enrollment data for United Healthcare, Cigna, DMBA, Educators Mutual, and University Health Plans are taken from the Utah Hospital Association surveys. Regence BC/BS data are supplemented with information provided by the company.

<sup>48</sup> Share figures cannot be calculated accurately for sub-state areas because no enrollment data are available at that level for health insurers not included in Exhibit 51. These unlisted plans contribute 15-18% of enrollment throughout the state, but it is not known how that enrollment is distributed across counties or other sub-state areas.

enrollment is third-largest after SelectHealth and Regence BC/BS. Deseret Mutual Benefit Administrators and Regence BC/BS have nearly equal enrollment in Utah County. In Salt Lake County, PEHP and United Healthcare have nearly equal enrollment, followed by Altius. In the rural areas of the state, PEHP's enrollment is third-largest, trailing SelectHealth's enrollment by about 10%.

As discussed briefly above, enrollment shares for some health insurers have fluctuated significantly over time. Shifting enrollment shares are consistent with a competitive market in which purchasers switch readily among sellers thus rendering shares of little predictive value. Employees' ability to switch health insurance plans is enhanced by the practice of large employers offering more than one health insurance plan to their employees. Altius, for example, reports that its products are offered to employees along with national plans like Aetna and United Healthcare as well as local plans like SelectHealth. Large employers who have operations in several states often offer a national plan for all employees and an optional local plan that differs for employees in different states. Offering multiple plans to employees makes it easy for them to alter their choice of plan.

Many employers have demonstrated their willingness to switch health insurance plans. The sharp decline in United Healthcare enrollment that accompanied its switch from a non-IHC-oriented hospital network to an IHC-oriented hospital network reflects this willingness. This shift in enrollment may have been attributable to employers and employees wishing to continue to access non-IHC hospitals, further questioning the necessity of a plan to have IHC hospitals in its network. Employers switching away from United Healthcare apparently contributed to the rapid growth of Altius's enrollment. Altius has been effective in winning accounts of large private and public employers, including Washington County School District and Park City School District. In addition, some large employers have recently switched from SelectHealth or Altius to Regence BC/BS to get a broader network of providers. Several large employers also offer employees the products of more than one health plan. Some of these employers have also recently switched one or both of the plans that they offer.

Not all plans serve all parts of the state, but it is likely that any plan currently licensed to sell health insurance in Utah could expand its service area. Among the most significant obstacles to expansion is construction of a network of providers. Existing plans have already constructed networks throughout the state, but none of the networks is exclusive to a particular payer. That is, few, if any, providers are prohibited from joining the networks of additional health insurance plans. Some providers, like University Health Care's hospitals and physicians, contract only as a group. Nevertheless, health plans that meet UHC's standards are not precluded from having UHC providers join their networks. Another component of entry or expansion in the commercial health insurance market is the ability to sell the products. It is likely that sales can be readily accomplished through brokers which are commonly used in Utah. Other components, such as product licensing and claims administration, are already accomplished by plans with enrollment in Utah.

These needs do not bar expansions of Utah plans' service areas and are not likely to impose difficulties for non-Utah plans wishing to enter the market.

The structure of the commercial health care financing market in Utah is not consistent with any particular insurer being able to harm competition. Enrollees of the insurer with the largest number of covered lives—SelectHealth with or without the “affiliated” plans—have alternatives to which they can switch if their chosen plan fails to provide competitive prices and competitive levels of quality. If, for example, an employer wishes to switch away from SelectHealth to get lower premiums or a broader network, it can choose among Regence BC/BS, Altius or other plans. The popularity of Regence BC/BS throughout the state, the growth of Altius over the past several years, and evidence of employers switching insurers indicate that consumers recognize their choices and are willing to exercise that choice.

Related to the structure of the health care financing services market in Utah is the significance of the Medicare and Medicaid programs as well as the amount of charitable, self-pay and indigent care provided. Exhibits 63 and 64 show the share of each hospital system's patient volume attributable to various classes of payers for acute care discharges and ambulatory surgery discharges, respectively.<sup>49</sup> In the most recent year, the share of cases attributable to Medicare and Medicaid varied from 42% to 56% across hospital systems for inpatient acute care services and from 25% to 42% for ambulatory surgery. The share of cases accounted for by commercial insurance payers varied from 37% to 52% for inpatient acute care services and from 50% to 68% for ambulatory surgery cases. Clearly Medicare and Medicaid are important purchasers of hospital and ambulatory surgery center services. Their size is especially significant for University Health Care as well as the independent rural hospitals and for ambulatory surgery centers.

## **VERTICAL INTEGRATION**

An important feature of the health care markets in Utah is vertical integration, most notably on the part of Intermountain Health Care. Vertical integration refers to the circumstance in which a supplier at one level of production is also a supplier at another level of production. Thus the supplier can use the output of its “upstream” production in its “downstream” production without having to purchase that upstream production on the open market. In the health care context, vertical integration typically refers to circumstances in which an entity supplies hospitals or physician services (i.e., “upstream” output) to its health insurance payer division (i.e., “downstream” production) which then sells an insurance product with the entity's provider network to employers and enrollees.

---

<sup>49</sup> The payer classifications in Exhibits 63 and 64 are established by the Utah Department of Health. This classification system may result in an underestimate of the share of patient volume attributable to charity care. For example, a patient may be classified as “commercial” if a commercial payer made a partial payment, even if a large portion of the bill was never paid.

A health care system that owns hospitals and employs physicians but has no health insurance products might also be considered to be vertically integrated in some contexts.

### Perspectives on Vertical Integration in Health Care

A common business justification for vertical integration is that it is an economically efficient corporate structure. Insofar as vertical integration lowers costs or enhances quality, consumers benefit. Vertical integration in health care generally focuses on capturing clinical and economic efficiencies. The tendency of health care markets to yield inefficient outcomes results from several unique institutional features of the health care industry. Among the obstacles to the production of high-quality, efficient health care services are information asymmetries, moral hazard, principal-agent problems, free-ridership, opportunistic behavior, significant government regulation, and, more generally, the predominance of third-party payment mechanisms.<sup>50</sup>

From a clinical perspective, vertical integration between hospitals and physicians may enhance the flow of clinical information and the creation of more seamless delivery of care. It may also facilitate the implementation of quality-enhancing, evidence-based treatment standards in part by accounting for the potential payment reductions attributable to more efficient medical treatment.<sup>51</sup> A recent study of the efficiency of different types of providers in related episodes of care notes that “success in the ‘longitudinal’ management of populations with chronic illnesses will depend on the integration of care across various sectors: acute care hospitals, primary care, nursing home care, home health care, and hospice care. It will also depend on a financing strategy that promotes the rational allocation of resources among the sectors of care.”<sup>52</sup>

From an economic perspective (which is actually closely tied to a clinical perspective) other benefits of vertical integration are evident. Some of the benefits identified in the economic literature address health care’s inherent market failures and distortions. Two authors, in particular, suggest that competition among vertically integrated systems “is the best way to encourage high quality and efficiency.” They state that “health care markets should be based largely on risk-adjusted prepayment and consumer choice of IDS [integrated delivery systems].”<sup>53</sup> An underlying economic rationale for creation of

<sup>50</sup> See *Improving Health Care: A Dose of Competition*, Federal Trade Commission and Department of Justice, June 2004, pp. 4-7.

<sup>51</sup> See Institute of Medicine, *CROSSING THE QUALITY CHASM: A NEW HEALTH SYSTEM FOR THE 21<sup>ST</sup> CENTURY*, 2001, p. 19 for a discussion of the inadvertent disincentives to enhance quality created by certain health care payment mechanisms.

<sup>52</sup> John E. Wennberg et al., “Use of Medicare Claims Data to Monitor Provider-Specific Performance Among Patients with Severe Chronic Illness,” *Health Affairs Web Exclusive*, October 7, 2004, p. VAR-16.

<sup>53</sup> Alain C. Enthoven and Laura A. Tollen, “Competition in Health Care: It Takes Systems to Pursue Quality and Efficiency,” *Health Affairs Web Exclusive*, September 7, 2005 at 420-433. See also, John D. Simpson and Malcolm B. Coate, “Efficiencies of Anticompetitive Effects: Vertical

integrated systems is to align the financial incentives of providers and payers, thus eliminating certain inefficient behavior. For example, vertical integration can induce physicians to take into account the financial benefits that high-quality care confers on a patient's payer or the reputational benefits it confers on a patient's hospital as well as the health benefits such care confers on the patient himself or herself.<sup>54</sup> A system that is commonly cited as an example of how to capture these benefits is Kaiser Permanente. Kaiser's common ownership of hospitals, physicians, ancillary service providers and a health plan in a closed model aligns financial incentives and eliminates certain economic distortions.

Vertical integration has been criticized, however, from both a public policy perspective and in terms of competition issues. One version of the public policy perspective argues that competition among individual providers rather than among integrated delivery systems leads to the best outcome. The advocates of this view maintain that promoting vertical integration and system-level competition accentuates "the power of a few full-line systems to completely avoid competing at this [provider] level [of treating diseases]." This position leads to criticism of network restrictions which ostensibly thwart competition among individual providers.<sup>55</sup>

The arguments opposing vertical integration on competitive grounds often depend on the existence of specific limited conditions under which harm to competition might occur. One articulation of this view suggests that vertical integration may raise the costs of non-integrated rivals or foreclose their access to necessary markets.<sup>56</sup> The complete set of necessary conditions under which such harm might occur, however, (e.g., the vertically integrated provider must have the highest quality or lowest cost in the market, the vertically integrated provider must be "worth more" to the vertically-related payer than to other payers, rival insurers must be unable to market their products effectively without the vertically integrated payer, competitively significant entry barriers must be prevalent in the health insurance market) does not appear to exist in the Utah markets.<sup>57</sup> Another argument that has been made is that vertical integration can make entry by other firms

---

Integration of Hospitals Into Medical Practices," *The Antitrust Bulletin*, Summer 1998, pp. 377-382.

<sup>54</sup> See Deborah Haas-Wilson, *MANAGED CARE AND MONOPOLY POWER: THE ANTITRUST CHALLENGE*, 2003, p. 167-168.

<sup>55</sup> Michael E. Porter and Elizabeth Olmsted Teisberg, "Redefining Competition in Health Care," *Harvard Business Review*, June 1, 2004.

<sup>56</sup> See John D. Simpson and Malcolm B. Coate, "Efficiencies of Anticompetitive Effects: Vertical Integration of Hospitals Into Medical Practices," *The Antitrust Bulletin*, Summer 1998, pp. 386-392; and Deborah Haas-Wilson, *MANAGED CARE AND MONOPOLY POWER: THE ANTITRUST CHALLENGE*, 2003, p. 177-180.

<sup>57</sup> It is not even evident that only one vertically integrated system exists in Utah. As discussed below, significant contractual vertical integration exists between some payers and the non-IHC-oriented network of hospitals.

more difficult.<sup>58</sup> If, however, vertical integration enhances efficiency, then consumers benefit by having entry limited to equally efficient firms. Moreover, if no competitive problems exist in the market, entry is not necessary for consumers to receive competitive price and quality. Other arguments that are not directly critical of vertically integrated firms, suggest that providers have increased their size and the scope of their services primarily to enhance their bargaining power with payers.<sup>59</sup> Bargaining power, however, ultimately reduces to the ability to shift patients toward or away from payers or providers, which is a horizontal competition issue. Given the substantial financial impact of small shifts of patients, it is not clear why providers or payers must necessarily be large to have negotiating leverage. The viability of providers and insurers of different sizes and growth rates with a variety of network configurations is not consistent with vertical integration harming competition.

### Vertical Integration in Utah's Health Care Markets

Intermountain Health Care's vertical integration comes from its ownership or operation of 19 hospitals and 575 employed physicians in Utah as well as the enrollment of 452,000 Utah residents in its health plans in 2004. Another entity with a significant degree of vertical integration is University Health Care, which has four hospitals, 803 employed physicians, and a self-funded health plan with 7,900 enrollees in 2004.

In addition to the vertically integrated systems established by Intermountain Health Care and University Health Care, a *de facto* contractual vertical integration has begun to emerge in Utah outside of IHC.<sup>60</sup> Some of the important non-IHC health plans in Utah have effectively allied with non-IHC hospitals to offer products to consumers. The emergence of this alternative to IHC appears to have been a direct competitive response to IHC's vertical integration. Both providers and payers that were not part of the IHC system recognized the value in aligning to form and enhance the services of a provider network that could then be offered to consumers. Thus customers who preferred not to use an IHC-oriented network or who were offered better rates by payers featuring a non-IHC-oriented network had a geographically broad, multi-hospital network alternative.

The alternative network came into existence in recent years in part because payers such as Altius Health Plans and Regence BC/BS wanted to offer a broad network of hospital services throughout the Wasatch Front area. Providers such as MountainStar and Cache Valley Specialty Hospital expanded their services to meet that need. In 2005, MountainStar completed a significant expansion of services at Timpanogos Regional Hospital, including the addition of cardiovascular services, which provided a competitive

<sup>58</sup> Debra L. Scammon and Dan A. Fuller, "Vertical Relationships Among Health Care Organizations: Strategic Options and Antitrust Issues," *Advances in Nonprofit Marketing*, vol. 4, 1993, p. 51.

<sup>59</sup> Michael E. Porter and Elizabeth Olmsted Teisberg, "Redefining Competition in Health Care," *Harvard Business Review*, June 1, 2004.

<sup>60</sup> See Deborah Haas-Wilson, *MANAGED CARE AND MONOPOLY POWER: THE ANTITRUST CHALLENGE*, 2003, pp. 163-166 for a discussion of "integration through contract."

alternative to IHC for those services in Utah County. Timpanogos Regional also had an expansion of its labor and delivery capacity. Likewise, payers committed to including Cache Valley Specialty Hospital in their networks if the hospital would expand its services. In both cases, coordination between payers and providers created a virtual vertically integrated system.

Health care market participants in Utah have characterized IHC's vertical integration both positively and negatively. Some individuals unrelated to IHC have indicated that vertical integration brings benefits and that fully integrated systems like Kaiser Permanente are good models. Market participants widely believe that IHC hospitals and physicians provide high quality care. Survey results show high levels of consumer satisfaction with SelectHealth and the health care provided by IHC hospitals and physicians.<sup>61</sup> To the extent that vertical integration enhances the quality of IHC's services and the level of consumer satisfaction, that vertical integration should not be undermined. Likewise, the contractual vertical integration that includes MountainStar, IASIS and University of Utah facilities and several health plans should also be expected to improve quality and consumer satisfaction.

The concerns regarding Intermountain Health Care's vertical integration are not related to its clinical quality of care or customer service of its health plan. Rather, concerns have been raised about IHC manipulating its vertical structure to compete unfairly in some markets. For example, is IHC engaged in competitively harmful cross-subsidization among its health plan, its physicians and its hospitals? Does IHC use its vertical integration to acquire or maintain market power in some or all of the markets in which it participates? Does IHC's vertical integration thwart entry of competitors into various markets?

A common element to these concerns is whether IHC prices its hospital services in a way that facilitates the growth of its health plan. Two theories of IHC's pricing behavior underlie the argument. The first concern is that IHC might under-price its hospital services to SelectHealth in order to provide its health insurance products with a cost advantage that is used to keep premiums low.<sup>62</sup> The other concern is that IHC might earn above-competitive profits from its facilities that have no close competitors (e.g., Primary Children's or various rural hospitals) and from its facilities that are the only provider of specific services in a community (e.g., obstetrics at Logan Regional Hospital or certain specialty services at Utah Valley Regional Medical Center) and then use those profits to subsidize its health insurance products and physicians to direct patients to IHC hospitals.

Before discussing these topics as they relate to Utah markets specifically, it is important to recognize that there are significant conceptual limitations on the plausibility of these and related theories. A claim that a firm cross-subsidizes below-competitive prices in

---

<sup>61</sup> "The Performance Quality of Utah's Health Plans," Utah Department of Health, various years.

<sup>62</sup> One non-IHC market participant believes that IHC engaged in subsidizing the growth of its health insurance products with low hospital rates in the 1990s, but that it no longer does so.

one product with above-competitive profits from another effectively amounts to a claim of predatory conduct. Predatory conduct is conceptually possible, but the likelihood of it being economically rational is generally considered by economists to be unlikely.<sup>63</sup> Claims of monopoly leveraging or tying involve a firm threatening to withhold the product over which it has market power as a means of extracting a higher price for the product over which it faces competition. Again, tying would be economically rational only in limited circumstances. It is likely in many situations that to the extent competitive problems exist in vertically integrated markets, the problems are not produced by vertical integration itself but rather by the existence of market power at one level of production.<sup>64</sup>

The arguments regarding cross-subsidization are not intrinsically tied to the vertical structure of IHC. Any multi-product firm, regardless of whether those products are vertically related, horizontally related, or unrelated, has the ability to cross-subsidize. Whether it has the ability to earn above-competitive profits in one service line depends on the availability of substitutes, or horizontal competitors, for that service. Intra-firm transfers of capital are common in multi-plant firms as owners attempt to manage operating deficits, capital needs, and temporal changes in demand or cost conditions, among other things. Intermountain Health Care reports that its corporate entity periodically issues bonds to finance various projects, but each project is expected to generate a sufficient return to be financially viable on its own. Between 2000 and 2004, IHC's hospitals had overall margins of 6.4-7.9%, calculated as net operating income as a percentage of net patient revenue (Exhibit 65).<sup>65</sup> The margins on IHC's margins at Primary Children's is comparable to University Health Care's hospital margin and IHC's margins at its rural facilities are generally comparable to those of other rural hospitals in the state. With regard to health insurance services, IHC reports that SelectHealth had small negative margins during its first ten years of operation followed by profit margins of 1-1.5% in the second ten years. Its medical loss ratio is consistent with that of other plans in the area.

The margins discussed for IHC do not appear to indicate that IHC is cross-subsidizing some its services with favorable discounts or with high profits from other services. In the short-run, it is not likely to be economically rational for IHC to price any of its services at below-market rates. In the long-run, the economic rationality of such a strategy requires that IHC eliminates its competitors (or reduces them to inefficient levels of output) such that IHC could price at above-competitive rates at some point in the future. Below-market

---

<sup>63</sup> See Kenneth G. Elzinga and David E. Mills, "Trumping the Areeda-Turner Test: The Recoupment Standard in *Brooke Group*," *Antitrust Law Journal*, Spring 1994 at 559-584; *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986).

<sup>64</sup> See Kathryn M. Fenton and Barry C. Harris, "Vertical Integration and Antitrust in Health Care Markets," *The Antitrust Bulletin*, vol. 39, no. 2, Summer 1994, pp. 333-362.

<sup>65</sup> Another commonly referenced measure of hospital profitability is net operating income as a percentage of gross patient revenue. By that measure, IHC hospitals margins were 4-5.2% in 2000-2004.

pricing would be costly to IHC (though beneficial for consumers) and would require persistent above-competitive pricing by IHC in the future to recover the forgone profits. The number and size of IHC's hospital and physician competitors indicate that any attempt by IHC to engage in a predation strategy—and no evidence has been observed to suggest that IHC actually engaged in such a strategy—has not succeeded and is unlikely to be successful in the future. It is logically possible that some individual competitors may lose sales as a result of the actions of IHC, which is common in normal, vigorous, and non-predatory competition, but it is improbable that competition overall would be harmed.

With regard to concerns that IHC's vertical integration thwarts entry of competitors, the available evidence suggests the opposite. The creation of a non-IHC-oriented facilities network was in direct response to IHC's vertical integration. Many of the providers already existed in the Utah markets, but several of them expanded their services (which is a form of entry) to increase the viability of the network. Rather than precluding entry, IHC's vertical integration stimulated a competitive response that is motivated to match the quality, access and price of IHC's system.

## **STEERING OF PATIENTS BY PAYERS**

Managed care penetration in Utah is among the highest in the United States. An estimated 38% of Utah's population is covered by a managed care product.<sup>66</sup> Discussions of managed care often refer to health plans' practice of "steering" patients to particular providers. This so-called steering is a result of features of managed care health insurance products like the exclusion of certain providers from networks, tiering of providers within networks, or differential co-pays or deductibles, among others. The most common of these features in Utah appears to be network exclusions. Focusing on the health insurance plan as "steering" patients can be misleading. Rather, insofar as consumers choose among health plans and the networks offered by the plans, consumers effectively steer themselves to particular providers. With that caveat in mind, this report uses the conventional terminology of payers steering patients to specific providers.

All of the major health plans operating in Utah offer products with at least some limitations on the providers included in their networks. As discussed previously, the two primary restrictive hospital networks are the IHC-oriented network and the non-IHC-oriented network. Most network restrictions occur in the urban areas of Utah where there is some choice among facilities. To a large degree, hospital networks include non-urban facilities regardless of the facilities' ownership. Restrictions occur for physician services

---

<sup>66</sup> Aventis, Managed Care Digest Series, HMO-PPO/Medicare-Medicaid Digest 2005. This managed care penetration figure refers to HMO enrollment. In Utah, Regence BC/BS is the only major health insurer that is not classified as an HMO although most insurers offer products that have features that might classify the products as PPOs.

as well, but less information is available to assess the extent of steering related to those restrictions.

Exhibits 66 and 67 show inpatient discharges and ambulatory surgery cases by hospital or system for each of ten major commercial payers in Utah. The exhibits also show the percentage change in acute care inpatient discharges from 2000 to 2004 and ambulatory surgery cases from 2000 to 2003 as well as the percentage contribution of each facility to the payer's overall total case count.<sup>67</sup> This information can be used in conjunction with the hospital network information provided in Exhibits 52-61 to assess payer steering to hospitals. One limitation on the interpretation of this information is that the payer breakdown is by plan but not by product. As discussed previously, many major payers sell both broad-network products and narrow-network products.

### **IHC-Oriented Network**

Exhibits 68 and 69 show that 93-96% of IHC's SelectHealth inpatient and ambulatory surgery cases use IHC facilities. An additional 1-2% use Davis Hospital and Medical Center, the one non-IHC hospital located in an urban area that is included in SelectHealth's networks. This degree of steering is unsurpassed among the Utah health plans for which data are available. The comprehensiveness of IHC's hospital network contributes significantly to SelectHealth's success at steering patients. This can be illustrated by considering the importance of Primary Children's Medical Center. Were Primary Children's not IHC-owned, the portion of SelectHealth's patients who use IHC facilities would decline to 86-87%.

Exhibits 70-75 show that the health plans that primarily use IHC-oriented hospital networks, such as Aetna, Educators Mutual and United Healthcare (by 2004), have substantially lower percentages of total ambulatory surgery cases occurring at IHC hospitals.<sup>68</sup> The portion of Aetna and Educators Mutual ambulatory surgery cases that

---

<sup>67</sup> As the note to Exhibits 66-87 indicates, the payer-specific data are provided by the Utah Department of Health, Office of Health Care Statistics (OHCS). The original source of the payer identity is text information included in each hospital discharge record. OHCS has not previously released this payer-specific information and thus has not verified it with the hospitals that provided the information. Economists Incorporated provided summaries of the data to each hospital for verification. Information returned by some hospitals have identified some discrepancies in the data. A significant discrepancy appeared in the inclusion of some Medicaid patients among the commercially insured patients, but that was corrected using the payer classification information in each record. Nevertheless, other discrepancies exist between the OHCS data and hospitals' data. Most notably, the large decline in commercially insured acute care inpatient discharges of IHC hospitals between 2000 and 2001 appears to be erroneous. This discrepancy cannot be corrected without potentially creating a bias in the share of IHC discharges attributable to each payer. Consequently, the 2000 inpatient acute care data are included in the exhibits, but the discussion in the text focuses on the 2001-2004 data.

<sup>68</sup> An additional important limitation to the data in Exhibits 66-86 is that the ambulatory surgery data are not available from the Utah Department of Health beyond 2003. During 2003, IHC hospitals tightened the restrictions in some of their bundled discount contracts resulting in several independent ambulatory surgery centers that had previously been available to SelectHealth

were performed at IHC facilities was about 10-15 percentage points lower than the portion of their inpatient acute care cases. For Deseret Mutual and United Healthcare, the portion of ambulatory surgery cases at IHC facilities was 20-25 percentage points lower than the portion of inpatient acute care cases.

### **Non-IHC-Oriented Network**

One of the plans whose products rely almost entirely on non-IHC-oriented hospital networks is Altius Health Plans. Exhibit 76 shows that 5-6% of Altius's acute care inpatient discharges are from IHC hospitals other than Primary Children's (and another 5-6% are from Primary Children's). Exhibit 77 shows that 4-5% of Altius's ambulatory surgery cases were from IHC facilities. About half of Altius's acute care inpatient discharges were from MountainStar hospitals, 22-23% were from IASIS hospitals and 11-12% were from University Health Care hospitals. Among Altius's ambulatory surgery cases, 50-55% were at MountainStar facilities, 14-16% were at IASIS facilities, 5-9% were at University Health Care facilities and 20-22% were at independent facilities. Chief among the independent facilities are Davis Surgical Center, Central Utah Surgical Center, and South Towne Surgical Center. Exhibits 78-81 show similar patterns for Cigna Healthcare and University of Utah Health Plan except that a much higher percentage (55-80%) of University Health Plan's patients uses University Health Care facilities.

### **Mixed Networks**

Exhibits 82 and 83 show that 65-75% of Public Employees Health Program acute care inpatients used IHC hospitals in 2000-2004. About 47-53% of PEHP ambulatory surgery cases were from IHC hospitals in 2000-2003. MountainStar facilities accounted for another 4-6% of PEHP's acute care inpatient cases and 10-12% of its ambulatory surgery cases. IASIS had about 7-10% of PEHP's acute care inpatients and 5-7% of its ambulatory surgery cases. A large portion of PEHP's ambulatory surgery cases (17-20%) were accounted for by independent facilities. The availability of both IHC-oriented and non-IHC-oriented networks among PEHP's products is consistent with the more mixed pattern of patient steering.

Regence BC/BS data are shown in Exhibits 84 and 85. Regence BC/BS's hospital and surgicenter utilization has increased significantly since 2000, but its reliance on IHC facilities has become proportionately smaller. Regence BC/BS's acute care inpatient discharge count increased by 15.6% in 2001-2004 and its overall ambulatory surgery case count increased by 80.6% in 2000-2003. The growth in Regence BC/BS acute care inpatients using IHC facilities decreased by 1.9% in 2001-2004. As a consequence, the share of Regence BC/BS's acute care inpatient discharges that were from IHC hospitals declined by 12 percentage points to 38.9% in 2004. The share of its ambulatory surgery

---

members no longer being available. Consequently, it is likely that the share of SelectHealth members who used IHC facilities for ambulatory surgery increased substantially in 2004 and 2005.

cases being performed at IHC facilities declined by 17.5 percentage points to 23.6% in 2003. As Exhibits 83 and 84 also show, the more rapid growth in Regence BC/BS's overall patient volume compared to its IHC patient volume also is reflected in the faster growth of its patient volume at MountainStar, IASIS, University Health Care and independent facilities.

For some IHC facilities, such as Primary Children's and Dixie Regional, Regence BC/BS's inpatient discharges have increased significantly. The increase at Dixie Regional is attributable to the increase in the area's population plus the addition of cardiac and other specialty services at Dixie Regional. Prior to the addition of those services, patients were often admitted at LDS Hospital to receive that specialty care. It is possible that some of the increases at Primary Children's and Dixie Regional would have been attenuated had closer alternative facilities been available. Exhibit 84 shows that in the Ogden/Layton area, where non-IHC hospital alternatives are readily available, acute care inpatient utilization by Regence BC/BS enrollees at IHC's McKay-Dee Hospital was smaller than at MountainStar's Ogden Regional.<sup>69</sup> In Utah County, Regence BC/BS acute care inpatient count for the three IHC facilities declined by 759 patients in 2000-2004, but that decrease was more than fully offset by an increase of 943 inpatients at MountainStar's facilities in Utah County. The shift in ambulatory surgery cases was even more dramatic with a decline of about 425 cases at the IHC facilities and an increase of 1,800 cases at Timpanogos Regional. Thus it appears that Regence BC/BS patients have shifted to non-IHC hospitals when the alternatives were available.

Exhibit 86 shows that a large portion of DMBA's inpatient acute care cases use IHC hospitals despite the availability of other hospitals in their network. More than 43% of DMBA's discharges from IHC hospitals are from IHC's Utah County facilities. A substantial portion also uses LDS Hospital and Primary Children's. Exhibit 87 shows that a much smaller portion of DMBA ambulatory surgery patients use IHC facilities. A large part of the difference is related to the use of Central Utah Surgery Center by DMBA enrollees. Unlike with some other plans, DMBA enrollees have continued to have in-network access to CUSC even after the 2003 period shown in Exhibit 87.

Thus it is evident that 95 out of every 100 acute care inpatients who chose a SelectHealth product uses IHC facilities (though this is reduced to 85 out of every 100 inpatients if Primary Children's is excluded because of its unique role as the state's only specialty facility for children). Conversely, 80 to 85 out of every 100 Altius Health Plan, Cigna Healthcare and University Health Plan inpatients use non-IHC facilities for inpatient

---

<sup>69</sup> Data provided by Regence BC/BS reflecting discharges of Regence acute care inpatients from the Ogden/Layton area hospitals is substantially different from that included in the Department of Health data. These data show an 11.6% decline in discharges of Regence patients from McKay-Dee Hospital in 2002-2005 and increases of 21.8% and 25.7% at Ogden Regional and Davis Hospital, respectively. The Regence BC/BS data affirm the shift of their patients from IHC to non-IHC hospitals when alternatives are available. The discrepancy in the data has not been resolved.

services. The other plans, including Regence BC/BS and PEHP, have significant shares of their enrollees using both IHC and non-IHC facilities.

It does not appear that the degree of steering by a plan has much bearing on its attractiveness to consumers. The total number of inpatient acute care discharges of SelectHealth-insured enrollees declined 1.8% between 2001 and 2004. The acute care inpatient discharges of two other plans using the IHC-oriented network (Aetna and Educators Mutual) declined by 8.7% between 2001 and 2004. United Healthcare, which switched networks but continued to steer patients, saw its acute care inpatient count decline by 17.3% in 2001-2004. Cigna Healthcare, which uses a non-IHC network, also experienced a decline in acute care inpatient discharges of 29.6% between 2001 and 2004. In contrast, two other health plans that steer patients to particular networks (Altius Health Plans and University Health Plan) increased their acute care inpatient discharges between 2001 and 2004 by 64.6% and 89.3%, respectively (though both increases were from much smaller base levels than SelectHealth). Regence BC/BS, which has significant enrollment in products that steer patients and in products that do not steer patients, increased its inpatient acute care discharges by 15.6% between 2001 and 2004, slightly less than PEHP's 20.3% increase. By way of comparison, the total number of commercially insured acute care discharges increased by 1.4% in 2001-2004.

Similar evidence appears in the ambulatory surgery data. Across all of the large commercial insurance plans, ambulatory surgery cases increased by 35.7% between 2000 and 2003. Some of the plans with significant degrees of steering either had a decline in ambulatory surgery cases (Cigna, United) or increased more slowly than the overall increase (Educators). Others with significant degrees of steering increased faster than the overall rate (Aetna, Altius and University Health Plan). Likewise, Regence BC/BS, with a mixture of steering and non-steering products, increased substantially faster than the overall rate. PEHP's ambulatory surgery case count increased more slowly than the overall rate.

In summary, it appears that managed care plans have effectively used network exclusions to steer patients to the plans' preferred hospitals. Such steering is common in many markets with high managed care penetration. It is important to note, however, that this competitive process begins with employers and employees choosing health plans and the networks they offer. If enrollees prefer health insurance products with unrestrictive networks, then those products will become most popular. Insurers will respond to consumers' preferences by offering more of those products. If, on the other hand, enrollees prefer products with more restrictive networks, possibly because they have lower premiums, insurers will offer more of these products.

The evidence in Utah points to viable competition among health insurers in Utah to attract enrollees. Steering has been accomplished by IHC's SelectHealth, other plans that use the IHC-oriented network, and by plans that use the non-IHC-oriented network. The size and growth of enrollment of managed care plans that engage in patient steering suggests that many enrollees accept the steering, probably in exchange for lower premiums. Nevertheless, health plans that offer products with broad networks also find

willing buyers, indicating the preferences of other enrollees for those options as well. The ability of consumers to choose among health plans with different networks illustrates the competitiveness of the market. The exclusion of certain providers, such as ambulatory surgery centers, from those networks undoubtedly harms the excluded providers. The competitive process in Utah, however, is not harmed and thus consumers should be receiving competitive price, access and quality.

## **CONTRACTING AND OTHER CONDUCT OF PROVIDERS AND PAYERS**

Among the greatest concerns expressed by the Task Force and market participants are contracting practices and other types of conduct occurring in Utah health care markets. As with the structure of the markets, Intermountain Health Care is a central focus of the analysis. IHC's size and geographic spread make it an important participant in many provider markets. Similarly, the statewide and local area enrollment of IHC's health plan, SelectHealth, makes it an important source of health care financing services. Of course, the vertical integration of Intermountain Health Care has implications for any analysis of contracting practices and other conduct. Other market participants, including both providers and payers, are important to an analysis of contracting practices as well. Among the other provider systems, MountainStar engages in some of the same contracting practices as IHC that have raised concerns. Insofar as physician employment and contracting practices are of concern, University Health Care has the largest physician group and other non-IHC groups have significant presences in local areas. With regard to contracting practices, some payers like Altius Health Plans and Regence BC/BS engage in practices that are similar to SelectHealth's practices. Among the types of conduct discussed below are exclusive and bundled-discount managed care contracts, hospital contracting models and negotiating teams, hospitals' position as sole community providers, construction of new facilities, employment of physicians, physician credentialing processes, physician payment rate setting, and physician ownership of facilities.

### **Exclusivity/Bundled Discounts**

An exclusive contract between a provider and a managed care plan is one that prohibits the managed care plan from contracting with competing providers in the same market. A bundled-discount contract between a provider and managed care plan differs in the sense that the provider offers lower prices (i.e., higher discounts) for its services if the plan does not contract with a competing provider. Bundled discounting does not prohibit a payer from contracting with a competitor, but gives payers that agree to use the bundle lower prices than payers who do not agree to the exclusivity. From the payer's perspective, limiting its network of providers makes its products less attractive to consumers. Consequently, the payer requires a greater discount to offset the disadvantage of offering a more restrictive network. A bundled discount may be especially significant to a payer if, for example, the payer receives the larger discount on all services rather than just for the services offered by the competing facility.

An growing economic literature exists regarding the competitive significance of bundling.<sup>70</sup> This literature reveals a divergence of opinion among economists as to whether bundled-discounts are likely to harm competition. Bundled discounting is very common in the U.S. economy and can offer consumers significant benefits.<sup>71</sup> Nevertheless, arguments are made that bundled discounts can foreclose sales and deter entry, thereby harming competition.<sup>72</sup> In the health care context, an exclusive or bundled-discount managed care contract might be considered harmful to competition if it were to direct enough patients away from competing facilities such that the competitors exit the market *and* the incumbent ultimately is able to raise prices above competitive levels for a significant period of time as a result of the exit. If the contract compels the competing facility to operate at an inefficient scale, thereby enabling the incumbent to price above levels that it otherwise could achieve, that might also be considered anticompetitive. In both instances, it would be important to establish that the incumbent was able to increase price above competitive levels after eliminating or hobbling its rivals and to recover the forgone profits incurred as a result of the discounting.<sup>73</sup>

For exclusive or bundled-discount contracts between hospitals and payers to constitute successful anticompetitive conduct, several conditions must hold. It is necessary that the competing facility provides a binding competitive constraint on the hospital (i.e., but for the presence of the alternative facility, the hospital could profitably raise prices or lower quality from competitive levels). This condition implies that discipline from other competitors, if any, is insufficient to constrain the hospital. It is also necessary that the contract foreclose enough patient volume from the competing facility that it must shut down or operate at a sufficiently inefficient scale. In addition, it is necessary that no other facility would enter the market to take advantage of the higher prices charged (or lower quality offered) by the hospital. Insofar as the competing facility is able to remain in the market on the patient volume it receives through Medicare, indemnity contracts or out-of-network payments, it remains a competitive threat because expansion is easy or excess capacity already exists.

These conditions suggest the types of evidence that can be evaluated to assess whether harm to competition is likely to occur as a result of exclusive or bundled-discount

---

<sup>70</sup> See Bruce H. Kobayashi, "Bundling: A Survey of the Economic Literature," George Mason University Law School Working Paper (2005); Keith N. Hylton and Michael Salinger, "Tying Law and Policy: A Decision-Theoretic Approach," *Antitrust Law Journal*, vol. 29, no. 2, 2001, pp. 469-526.

<sup>71</sup> See David S. Evans and Michael Salinger, "Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law," *Yale Journal on Regulation*, vol. 37, 2005.

<sup>72</sup> See Barry Nalebuff, "Bundling as a Barrier to Entry," *Quarterly Journal of Economics*, vol. 119, 2004; Patrick Greenlee, David Reitman and David Sibley, "An Antitrust Analysis of Bundled Loyalty Discounts," U.S. Department of Justice, Antitrust Division, Economic Analysis Group Discussion Paper, EAG 04-13, October 2004.

<sup>73</sup> Some economists argue that bundled discounting is properly analyzed as a tying strategy rather than as a predation strategy. (See Barry Nalebuff, "Exclusionary Bundling," Yale School of Management working paper, 2005.)

contracts. Fundamentally, the criteria reduce to a question of influence on patient volume. If exclusive or bundled-discount contracting steers enough patient volume (for a long enough time period) that none of the existing competitors can provide a competitive constraint or a necessary new competitor cannot enter, then the possibility of harm to competition exists. Evaluating the importance of directed patient volume is made more complicated, however, because not all patient volume is equally valuable to providers (i.e., prices differ among plans) and not all facilities have the same cost structure.

Bundled discounting occurs in several areas of Utah in which payers receive larger discounts from IHC hospitals if competing facilities are not included in the payers' networks. Bundled-discount contracting is not unique to Intermountain Health Care facilities. Health plans are offered bundled discount contracts from MountainStar hospitals as well. MountainStar often joins with IASIS and University Health Care to create a hospital network for payers. Consequently, these hospitals are not considered to be competing facilities for purposes of exclusive or bundled-discount contracts. MountainStar's bundled discount contracts take the form of smaller discounts for payers that contract with competing ambulatory surgery centers. Neither IHC nor MountainStar refuses to contract with health plans on a non-exclusive basis, but plans receive smaller discounts for non-exclusive contracts from both systems. In rural areas in which IHC has the only hospital in the community, IHC offers all plans, including SelectHealth, the same discount. Potentially problematic issues arise in communities in which the only hospital is IHC-owned, but competition for some services exists from ambulatory surgery centers or specialty hospitals.<sup>74</sup> Some market participants have also identified areas in which IHC competes with multiple hospitals and free-standing ambulatory surgery as potentially experiencing competitive harm from bundled discounting practices.

In sum, bundled discounting is a means by which hospitals compete with each other to attract patients, and consumers benefit from bundled discounts as long as it does not cause long-term competitive harm. The economic literature provides some guidance regarding factors to examine to test for potential harm to competition but no undisputed theoretical basis for asserting harm or lack thereof. As is discussed for three Utah markets below, the viability of the major competing hospital systems does not appear to be threatened by bundled discounting. Likewise, many of the independent providers remain in networks of health insurance products that do not involve bundling yet continue to have high enrollment. While some facilities may be harmed by contracting that involves bundled discounts, the overall competitive process does not appear likely to be harmed.

---

<sup>74</sup> Typically, the overall cost advantage that payers in Utah receive through bundled discounting is significant in part because the discount covers all services rather than just ambulatory surgery services. The lower costs claimed by competing free-standing ambulatory surgery centers are insufficient to offset fully the greater discount offered by the hospital through the bundled discount contract.

*Washington County*

Market participants as well as Task Force members have identified several areas in Utah in which contracting policies by hospitals and managed care plans are of particular concern. Chief among these areas is Washington County. As described previously, IHC's Dixie Regional Medical Center is the only acute care hospital in Washington County. Several free-standing ambulatory surgery facilities are also located in the county. Health plans are offered a bundled discount by Dixie Regional in which the plans receive a greater discount if they contract with Dixie Regional to the exclusion of the multi-specialty free-standing ambulatory surgery centers.<sup>75</sup> These exclusive contracts include the larger discount on all of the services offered by Dixie Regional rather than just the outpatient services provided by the competing entities.

The contracting and networks picture in Washington County is complicated by a number of factors. Dixie Regional Medical Center provides minimal ophthalmic surgical services. Consequently, inclusion of free-standing ophthalmic surgery centers in payers' networks does not trigger the discount reduction from Dixie Regional. At least one ambulatory surgery center (St. George Surgery Center) provides both eye surgery and other types of ambulatory surgery. Another multi-specialty surgery center (Coral Desert Surgery Center) opened across from Dixie Regional in late 2003. Exhibits 52-61 show that some payers, like United Healthcare and Educators Mutual, do not include any of the Washington County ambulatory surgery facilities. These choices result in more patients being directed to Dixie Regional for services that they might have received at a competing ambulatory surgery center. Other payers, like Regence BC/BS and Altius, include some of the Washington County ambulatory surgery centers in their networks. PEHP offers the broadest selection of those surgery centers in its Preferred products network.

At least one ambulatory surgery center in Washington County, Nueterra's Coral Desert Surgery Center, reports that it does not have a contract with any of the payers in the area. Payers using IHC-oriented networks might be expected not to contract with Coral Desert, but Regence BC/BS also has not contracted with Coral Desert for its Traditional product or any of the products with generally more restrictive networks. Regence BC/BS's decision is based on a policy of not contracting with any additional ambulatory surgery centers in areas that it perceives do not need additional access for Regence enrollees. This policy applies throughout Utah and has resulted in other free-standing ambulatory surgery centers such as Nueterra's Utah Surgical Center and Northern Utah Endoscopy Center not being included in any Regence BC/BS panels.

The bundled-discount contract offered by Dixie Regional may direct business from the hospital's ambulatory surgery competitors, but the question remains as to whether bundled discounting harms competition, thus making consumers worse off, either now or in the future. Since harm to competition cannot be ruled out on conceptual or theoretical

---

<sup>75</sup> Dixie Regional Medical Center's bundled discount contracts allow all plans to include providers of ophthalmic surgery services because Dixie Regional does not offer that service.

grounds alone, it becomes important to assess the facts particular to the Washington County area market. An important fact to take into consideration is the extent to which managed care plans that do not have the larger discount are able to market their product successfully in the area. In essence, these payers offer a broader facility network that is based on higher underlying costs and may have higher premiums. Regence BC/BS offers a broad-network product—its Traditional Plan—in Washington County. As Exhibit 51 shows, Regence BC/BS has 25,363 covered lives in Washington and Iron counties, slightly more than SelectHealth’s 22,151 covered lives in the two counties. It appears that a significant number of enrollees prefer the broader network even if it requires higher premiums.<sup>76</sup>

A related consideration is whether the bundled discount steers enough patients away from ambulatory surgery centers serving the market that those centers are unable to survive or are unable to compete at efficient levels. Coral Desert Surgery Center evidently reasoned that entry in the face of bundled-discount contracts made economic sense when it opened in 2003. It has no comprehensive managed care contracts, although it has some agreements to provide specific services (ophthalmic surgery and open MRI services). Exhibit 88 shows that Coral Desert’s patient volume reached nearly 3,300 cases in 2005. Only one-quarter of these cases are of commercially insured patients, however, and most of them are out-of-network cases. Although Coral Desert Surgery Center’s long-term survival is not guaranteed, it has been sufficiently attractive to area residents that its opening coincided with a large drop in patient volume at St. George Surgery Center (Exhibit 89). Combined patient volume at Coral Desert Surgery Center and St. George Surgery Center nearly doubled between 2000 and 2005.

An important source of patient volume for Washington County ambulatory surgery centers is Medicare. The surgery centers maintain that Medicare patients do not generate a sufficient revenue stream for the facilities to survive on that business alone. Nevertheless, the ambulatory surgery centers are able to compete for the large volume of those patients which contribute to covering the surgery centers’ fixed costs. By maintaining marginal profitability, to which the addition of even a small amount of commercial volume would contribute significant profits, the likelihood of a successful predatory strategy being carried out by any competitor is remote.

Addressing the question of the competitive impact of Dixie Regional’s bundled-discounts is complicated by the contracting practices of Regence BC/BS in the area. Exhibit 52 shows that Regence BC/BS’s Traditional and ValueCare networks include St. George Surgery Center, South Main Surgery Center, Dixie Eye Surgicenter and Mountain West

---

<sup>76</sup> In principle, higher hospital prices tend to increase premiums for products offering those hospitals. As a practical matter, the connection between hospitals prices for Regence BC/BS in Washington County and insurance premiums for Washington County residents is more ambiguous. Premiums levels are more substantially affected by trends in claims costs. Claims costs are affected by hospital prices, but the impact of utilization levels is likely to be much more significant. In addition, choices made by enrollees regarding co-pays, co-insurance, deductibles, and out-of-pocket maximums also affect total claims costs.

Gastroenterology and Endoscopy Surgery Center (also known as St. George Endoscopy Center). But Regence BC/BS does not include Coral Desert Surgery Center or Chase Plastic Surgery Center in its network for either product or Zion Eye Institute/Red Cliffs in its ValueCare network.<sup>77</sup> In addition, Regence BC/BS has recently changed its compensation to ambulatory surgery centers from a percentage of charges to a percentage of the Medicare payment rate. For some facilities that had relatively high charge structures, this change effectively reduced payments to ambulatory surgery centers by a significant amount.<sup>78</sup> For others, the change reportedly increased payment rates. Dixie Regional's bundled-discount contracts alone do not appear able to steer enough business to eliminate competition for ambulatory surgery services. Nevertheless, it is possible that there is insufficient commercial patient volume available (and that what exists has too low a margin) for two general ambulatory surgery centers to survive in St. George with current contracting practices. The contracting practices of SelectHealth and Regence BC/BS together might undermine the long-term survivability of one ambulatory surgery center, but a significant commercial and non-commercial volume appears to remain available for the other. Patients are likely to continue to have at least one alternative to Dixie Regional for ambulatory surgery services.

### *Cache County*

Another area in which Task Force members and market participants have raised concerns about bundled-discount contracts is Cache County. As discussed previously, the only full-service acute care hospital in Cache County is IHC's Logan Regional Hospital. Alternatives to Logan Regional located in Cache County include Cache Valley Specialty Hospital (CVSH) as well as Northern Utah Endoscopy Center. Alternatives outside of Cache County include Brigham City Community Hospital and Bear River Valley Hospital as well as hospitals to the south in Weber County. Logan Regional does not have exclusive contracts with any payers, but its bundled-discount contracts give greater discounts to payers that are willing to contract for facility services exclusively with Logan Regional.

The analysis of the impact of bundled-discount contracts on competition in the facility services business in Cache County can be analyzed in much the same way as it is for Washington County. Again, the factual circumstances in Cache County must be assessed since harm to competition cannot be ruled out on conceptual grounds. An important consideration is the ability of health insurance plans to market their products to employers and employees in the Cache County area. Similar to the Washington County area, Regence BC/BS's enrollment in Cache County is only slightly smaller than SelectHealth's enrollment. Evidently, a significant number of enrollees prefer the

<sup>77</sup> Zion Eye Institute is to be added to the ValueCare network in mid-2006.

<sup>78</sup> Regence BC/BS's change in payment methodology is not uncommon. It has been noted that many payers "turn to external benchmarks such as the Medicare fee schedule because '[m]any providers have marked up their list prices [in recent years] so that the discounted prices do not represent much of a reduction at all.'" (Improving Health Care: A Dose of Competition, Federal Trade Commission and Department of Justice, June 2004, Chapter 5, fn. 161 (reference omitted)).

broader facility network offered by the Regence BC/BS plan even if the smaller discount from Logan Regional requires Regence BC/BS to sell its products at a higher premium.

Of the other managed care plans that sell products in Cache County, the largest is Public Employees Health Program (PEHP). Cache Valley Specialty Hospital is included for some of the PEHP products but not others. Altius Health Plans and United Healthcare have nearly identical enrollment and both include CVSH. Educators Mutual, however, offers Logan Regional exclusively.

Insofar as Regence BC/BS products account for a substantial portion of the covered lives in the area, the extent of potential foreclosure attributable to Logan Regional's bundled discounting is limited. The patient volume at CVSH and Northern Utah Endoscopy Center reflect that as well. Exhibit 92 shows that the patient volume at Cache Valley Specialty Hospital and Northern Utah Endoscopy have increased significantly since 2000. CVSH's inpatient volume has grown by 63.2% (from a very small base) since it opened for inpatient services in 2001. Its ambulatory surgery volume increased nearly five-fold between 2000 and 2001, although it changed little in 2002 and 2003. In comparison, Logan Regional's ambulatory surgery volume declined sharply in 2001 to 5,303 cases, though it increased substantially in 2002-2003 from the reduced 2001 level. Northern Utah Endoscopy Center's patient volume has also grown significantly since 2000.

The historical trends in patient volume at the Cache County facilities also indicate the extent to which patients in the area use the non-IHC facilities. Corresponding to CVSH's opening for inpatient services in 2001, the acute care inpatient volume at Logan Regional decreased by 7.8%. Its inpatient volume recovered nearly to its 2000 level by 2004. Logan Regional's ambulatory surgery volume fluctuated even more rapidly than its inpatient volume. The opening of Northern Utah Endoscopy Center coincided with a 30.4% decline in Logan Regional's ambulatory surgery volume, and Logan Regional's volume remained well below its 2000 level in 2003.

Again it is helpful to consider steering of patients. As was the case in Washington County, the amount of patient volume that is affected by bundled-discount contracts is determined by the contracting practices of more payers than just SelectHealth. SelectHealth's networks include Logan Regional Hospital, but neither CVSH or Northern Utah Endoscopy Center. Regence BC/BS's networks include Logan Regional and CVSH, but not Northern Utah Endoscopy Center. Altius Health Plans' networks include all three providers. Regardless of the contracts, Northern Utah Endoscopy Center's two largest commercial payers are Regence BC/BS and SelectHealth, though Altius is growing rapidly. United Healthcare's networks include both Logan Regional and CVSH. United's patients do not appear to be directed away from CVSH, but its overall patient volume in the area has declined.

In summary, it is unlikely that IHC's contracting practices in Cache County are harmful to competition. A significant portion of commercially insured covered lives remain accessible to non-IHC facilities in the area. The data show that opening of the non-IHC

facilities resulted in substantial patient losses at Logan Regional. Those patients do not appear to have left the Cache County area, but switched to the non-IHC facilities and continue to use those facilities in growing numbers.

### *Utah County*

A third area in which bundled discounting has been identified by some market participants as potentially creating harm to competition is Utah County. The market realities in Utah County are significantly different from the Washington County or Cache County areas because of the presence of MountainStar hospitals along with Intermountain Health Care hospitals. IHC and MountainStar both provide inpatient and outpatient hospital services in Utah County and both engage in bundled-discount contracting with their facilities in Utah County. Each system offers greater discounts for managed care plans that are willing to limit their facility services networks. Consequently, the two large ambulatory surgery centers in Utah County, Central Utah Surgery Center (CUSC) and HealthSouth Provo Surgery Center, as well as other independent facilities are excluded from some payer contracts.

Exhibit 51 shows that the managed care plan with the largest enrollment of Utah County residents is SelectHealth with nearly 102,000 covered lives. Other plans that contract exclusively with IHC for facility services in Utah County account for another 48,000 county residents. The enrollment in health insurance products that include only MountainStar facilities in Utah County is about 37,400 (24,300 Altius Health Plans enrollees and 13,100 Regence BC/BS ValueCare and Healthwise enrollees). Another 71,000 covered lives are accounted for by products that include both IHC and MountainStar facilities as well as others in their networks (19,000 Regence BC/BS Traditional enrollees, 11,000 PEHP Preferred enrollees, 6,000 Cigna enrollees, and 35,000 DMBA enrollees). These 71,000 covered lives are available for facilities like Central Utah Surgery Center, HealthSouth Provo Surgery Center and others, as well as IHC and MountainStar.

As Exhibits 43-44 illustrate, patients using Utah County facilities who reside outside of Utah County, primarily residents of six counties to the south and east, account for a significant portion of the services provided by the Utah County facilities. Regence BC/BS and other non-IHC health insurance plans account for a much larger share of enrollment in these six counties than they do in Utah County. Of course, the numbers of potential patients from those counties is much smaller due to their smaller populations, but these enrollees are potentially available for MountainStar and independent facilities nevertheless.

MountainStar provides an increasingly important hospital alternative to Intermountain Health Care hospitals in Utah County. Until 1998, MountainStar's only hospital in Utah County was Mountain View Hospital in Payson. MountainStar opened Timpanogos Regional Hospital in Orem in 1998, but as Exhibit 65 shows, the hospital continued to lose money through 2002 (negative net income in excess of \$20 million in 2000-2002). Its total patient volume and net income increased appreciably in 2003. In 2005,

MountainStar added cardiovascular services and expanded the obstetrics services at Timpanogos, increasing its size to 51 staffed beds. An important impetus to MountainStar adding these services were requests by Regence BC/BS and Altius Health Plans for MountainStar to offer additional services that would make a MountainStar hospital network more attractive to Utah County residents. Insofar as a MountainStar hospital network is more attractive to enrollees, plans such as Regence BC/BS and Altius that feature that network will be able to increase their enrollment and ultimately direct more patient volume to MountainStar. The full impact of the expansion of services at Timpanogos is not yet evident, but the growth of patient volume at Timpanogos suggests that it is having an effect.

The competitive importance of a MountainStar hospital network for residents of Utah County is significant. IHC is unlikely to possess or exercise unilateral market power if a sufficient number of enrollees perceive that they have a viable alternative to an IHC-oriented network. The competitive responses to IHC that MountainStar has made through the opening and expansion of Timpanogos Regional Hospital has enhanced access of area residents to almost all hospital services.<sup>79</sup> Likewise, less sophisticated services are also available at MountainStar facilities, giving residents of Utah County (and areas to the south and east of the county) access to alternatives to IHC hospitals.

The independent ambulatory surgery centers and other facilities located in Utah County also provide alternatives to IHC. Patients benefit from having Central Utah Surgery Center and Provo Surgery Center available. These non-IHC, non-MountainStar facilities in Utah County provide services to many commercially insured patients in competition with facilities offering bundled-discount contracts. Exhibit 90 shows that a significant portion of CUSC's overall patient volume is commercially insured patients. Between 2000 and 2005, its commercial patient volume has increased by 1,141 cases (or 29.5%), keeping the commercially insured share of total volume around 45-50%. Exhibit 91 shows that Provo Surgery Center's commercial share increased from 38.2% in 2000 and 45.9% in 2003 even though its overall commercial volume declined slightly.

There are some indications that payers' networks in Utah County continue to be in flux. As discussed previously, DMBA is restructuring its managed care products, and the networks of hospital and ambulatory surgery centers that used by each product. Aetna has already approached some of the ambulatory surgery centers along the same lines. Potentially more significant are indications that United Healthcare may switch out of its exclusive arrangement with the IHC-oriented network.<sup>80</sup>

Despite the benefit of having access to alternative non-hospital facilities, competition would not necessarily be harmed if some of the non-hospital facilities were unavailable.

---

<sup>79</sup> Despite the expansion of services at Timpanogos Regional Hospital, some sophisticated tertiary services are offered in Utah County only at IHC's Utah Valley Regional Medical Center. Regence BC/BS and Altius Health Plans both have contracts with Utah Valley Regional for their enrollees to access those "unique community services" at Utah Valley Regional.

<sup>80</sup> The reports regarding Aetna and United Healthcare have not been verified.

The presence of two viable competing facility networks is likely to be sufficient to maintain competitive price and quality for payers and patients. At a minimum, it prevents either network from exercising unilateral market power. Each network competes with the other to attract payers and patients. Each network also offers plans greater discounts in exchange for excluding other providers in an attempt to limit the likelihood of patients switching to the other network by. The independent competitors continue to offer their services as part of broader provider networks which evidently are attractive to a significant number of enrollees. The competitive process is maintained and consumers benefit even if the number of specific independent alternative providers might decline.

To the extent that consumers prefer to have broader networks, managed care plans can develop those networks since both IHC and MountainStar contract with plans on a non-exclusive basis. As discussed previously, health insurance products in Utah County that do not steer patients away from the major facilities account for 71,000 covered lives, or about 27% of commercially insured enrollment. In addition, more commercially insured enrollees reside in counties in the Utah County providers' service area to the south and east of Utah County. The access to these commercially insured lives, as well as to the significant volume of Medicare-insured patients in the area provides a substantial base of available patient volume for the non-network providers.

### **Hospital Contracting Models and Negotiations**

As a general matter, hospitals approach negotiations with managed care plans with business models that guide their side of the negotiation process. The major hospital systems in Utah are no different. Each hospital system in Utah has developed some type of contracting model that informs itself and the payers as to the trade-offs typically inherent in the negotiation process. These models are developed and used in the context of the competitiveness of the market structure. Although important similarities exist among the models, the complexity and the application of individual models may differ significantly.

Some payers have asserted that the hospital pricing and contracting model used by Intermountain Health Care is vague, confusing, non-transparent and inconsistently applied. IHC has stated that its model determines discounts to payers based on (1) volume, (2) directability of patients, and (3) administrative ease with slightly more weight placed on volume than on the other components.<sup>81</sup> IHC's discounts do not increase in step with increases in enrollment. Rather, discounts increase more slowly than increases in enrollment might suggest.<sup>82</sup> At least two of the other hospital systems in Utah—MountainStar and IASIS—also have specific contracting and hospital pricing

---

<sup>81</sup> IHC has recently added another component related to a plan's participation in various clinical quality-improvement initiatives.

<sup>82</sup> As discussed previously, IHC maintains this relationship between enrollment and discounts intentionally to promote the growth of small payers. At least one other hospital system in Utah has the same policy.

models. These models have largely the same basic building blocks as IHC's model. Like IHC, MountainStar gives greater discounts to managed care plans that exclude competing providers from their networks. MountainStar's model also awards payers for directing patients to MountainStar facilities and for whom claims administration is not difficult. The managed care contracting model used by IASIS gives weight to the steerage of patients to IASIS hospitals and for the inclusion in the network of all services offered at all IASIS hospitals. In addition, IASIS incorporates factors related to the ease and promptness of the claims payment process. A plan's enrollment level is included in the IASIS model as well in a manner that relates it specifically to expected patient volume for IASIS.

The complaint against IHC is that some plans with small patient volume but exclusive contracts receive more favorable hospital discounts than plans with larger patient volume but non-exclusive contracts. The continued existence of smaller plans in the market is consistent with IHC's hospital contracting policy enabling plans with smaller enrollment to receive significant discounts. IASIS also promotes the growth of small managed care plans with the focus of its contracting model. Favorable discounting may enable smaller plans to offer attractive networks at acceptable prices, though, as discussed previously, the overall claims history is affected by, but not determined by, hospital pricing. To the extent that smaller plans offer attractive products, the result may be that fewer individuals choose to subscribe to the larger plans than might otherwise be the case. As a general matter, a contracting policy of IHC or any other provider that facilitates the growth of smaller managed care plans enhances consumers' choice of plan. It should be noted in this context, however, that the discount that a plan receives from IHC hospitals does not appear to be a clear indicator of that plan's ability to market its products. Exhibit 50 shows considerable variation in the level and growth of enrollment among health insurance products with IHC-oriented networks, non-IHC oriented networks and mixed networks.

Contract negotiation between health plans and each of these hospital systems can be very different regardless of any similarity in the hospitals' pricing models. Each party to a negotiation has a perception of its bargaining strength and that may be influenced by many factors, not the least of which is the overall volume accounted for by the party, either as a seller or a buyer of services. Contract negotiations between parties that both perceive themselves to have considerable bargaining strength, as might be expected with IHC and Regence BC/BS, are likely to be very contentious. It is common in health care markets across the country for large plans and large hospital systems to engage in protracted contract negotiations punctuated with terminations, threatened terminations, retracted offers, inconsistent demands, public relations campaigns, and other negotiating tactics by one or both sides. Negotiations of this nature are not necessarily indicative of either party possessing market power. Rather, they could easily reflect a highly competitive market.

Regardless of the contentiousness of contract negotiations in Utah, one aspect of Intermountain Health Care's negotiations in particular raises potential concerns. That

aspect concerns the construction of IHC’s contract negotiation teams. In recent years, IHC employed some of the same individuals to negotiate its SelectHealth contracts with other hospitals and to negotiate its hospital contracts with other health plans. The primary issue of concern is that non-IHC managed care plans reveal confidential information to IHC in the context of negotiating contracts with IHC hospitals. For example, a non-IHC health plan would not normally know the rates that the a competing health plan negotiates with hospitals. Yet those rates would become known to SelectHealth if the SelectHealth contract negotiating team were involved in negotiating IHC hospitals’ contracts.

Both IHC and other market participants report that IHC recently instituted a separation of negotiating teams. Evidently, IHC hospital contract negotiators are now separated by a “Chinese Wall” from SelectHealth negotiators. The timing of this new policy coincides with the advent of the Task Force. Separation of negotiating teams is a positive step to alleviating non-IHC health plans’ concerns about confidentiality. Nevertheless, this issue is likely to remain at some level as long as IHC remains vertically integrated and non-IHC health plans want to contract with IHC hospitals.

### **Hospitals’ Position as Sole Community Providers**

Intermountain Health Care is regarded by some market participants as possessing and exploiting market power through its position as the sole community hospital in many rural areas in Utah. Analogously, IHC is the “sole community provider” of specialty children’s hospital services in the state of Utah. As discussed previously, several of the rural communities in Utah are served by one local hospital and few patients travel outside of those areas to other hospitals. In some other rural communities, however, some residents use a local hospital while others use rural hospitals in nearby communities or larger hospitals located in more distant urban communities. Among IHC’s eight hospitals located in rural areas, at least four of them—Bear River Valley Hospital, Heber Valley Medical Center, Sanpete Valley Hospital and Sevier Valley Hospital—compete with non-IHC hospitals.

The significance of sole rural community hospitals in terms of patient access appears to be substantially ameliorated with Utah’s Rural Access to Health Care Providers law.<sup>83</sup> This statute is widely considered to be confusing to hospitals and payers, and presumably it is confusing to consumers as well. The law provides some protection for HMO enrollees who live within 30 miles of a rural hospital by allowing them to use that hospital as if it were in their managed care plan’s network. It also benefits health plans whose patients use these rural hospitals by enabling the plans to receive in-network rates and direct billing from the rural hospital. It protects rural hospitals as well by enabling them to serve commercially insured patients who might otherwise be steered to more distant, in-network hospitals. Interestingly, the Rural Access to Health Care Providers law excludes IHC’s rural hospitals because they are part of an integrated system. Thus

---

<sup>83</sup> Utah Code § 31A-8-501.

HMO-insured patients who use a rural IHC hospital that is not contracted with the HMO would be billed at out-of-network rates and subject to balance billing. The practical significance of the IHC exclusion is not likely to be substantial, however, because all of the major payers contract with all of IHC's rural hospitals.

Regardless of the precise contours of the antitrust markets in which the rural hospitals compete, the question remains as to whether IHC's practices related to its rural hospitals in some way harm competition. Parallel questions arise about IHC's contracting practices for Primary Children's. With regard to pricing, IHC does not negotiate discounts at its rural hospitals or Primary Children's, but offers all plans, including SelectHealth, the same discount. This discount is generally smaller than the discounts for its urban hospitals. IHC's charge structure is such that its rural hospitals tend to have lower charges than its urban hospitals, though that is not universally true. Thus, to some extent, the lower discount at the rural hospitals is offset by the lower charge structure at those hospitals. Insofar as differences in discounts equate to differences in effective prices, however, IHC's rural hospitals and Primary Children's may have generally higher prices. If so, such price differences may reflect higher unit costs associated with those facilities. The rural hospitals may not have all of the cost-saving efficiencies that come with larger, more centrally located facilities, resulting in higher unit costs than larger, urban hospitals. Indeed, Utah's rural hospitals have historically faced numerous financial difficulties. Some of these problems are likely inherent in the operation of a small, rural facility regardless of its affiliation with a system. In addition, rural hospitals may have significantly different payer mixes, resulting greater amounts of cross-subsidization of Medicaid and indigent patients. With regard to Primary Children's, its unit costs may be higher than its neighboring IHC urban facilities. This cost difference could stem from minimum staffing needs or stand-by capacity requirements (among other things) of the specialty services provided at Primary Children's.

It is also possible that the greater distances between rural hospitals in Utah or the unique position of Primary Children's creates enough product differentiation to enable IHC to have higher effective prices for those facilities. Other hospitals in Utah have similar geographic or service differentiation. IASIS's Davis Hospital is included in virtually all hospital networks because of its unique geographic location and that presumably endows it with the ability to receive higher rates from payers. University Health Care offers the sophistication and reputation of an academic medical center that is not matched elsewhere in the state. It, too, gains some pricing advantage from those attributes. In addition, any of the eleven non-IHC rural hospitals that are located in areas with few alternatives and presumably could price in the same manner as IHC's rural hospitals.

Importantly for a competitive analysis, a theory of pricing distinguished by proximity to alternatives does not provide a consistent explanation for IHC's overall rural hospital pricing policy. IHC offers the same discount for all of its rural hospitals regardless of whether an individual hospital competes with neighboring non-IHC hospitals (as is the case for some IHC rural hospitals). If IHC possesses market power in some rural facilities but not others, its pricing would be expected to reflect those differences rather

than be uniform across all rural hospitals. Similarly, in areas such as Washington County in which IHC is presumed to face little hospital competition, its unbundled discounts should be no greater than in markets in which it has the sole rural hospital, but that is not the case. In reality, IHC's least favorable unbundled discount for Dixie Regional Medical Center is greater than its standard rural-hospital discount or its Primary Children's discount. Moreover, any market-structure-related pricing advantage that these rural hospitals or Primary Children's receives are not attributable to IHC's ownership. Rather, those hospitals would be expected to price in the same manner even if each one were independently owned.

It also does not appear that IHC uses its ownership of the rural hospitals or Primary Children's (or, for that matter, Dixie Regional or Logan Regional) to achieve more favorable terms from payers for its other hospitals. Such a "leveraging" theory posits that an entity with market power in the supply of one service can extend that to anticompetitive action in another service. IHC's behavior is not consistent with attempted leveraging. IHC does not withhold any of its hospitals from participation in the networks of any bona fide payer, regardless of whether the hospitals are sole community providers. Neither does IHC require payers to include all of its hospitals if the payer wants only some of them. Payers can choose as many or as few IHC hospitals as they wish. In addition, IHC's discounts depend on whether competing facilities in the same market are included in the network rather than on the inclusion or exclusion of its sole community hospitals in their networks.

Some market participants believe that IHC combines its ownership of rural hospitals and employment of rural physicians to harm competition by having its physicians direct patients to IHC rural hospitals. The IHC-employed physicians in rural areas generally staff IHC's seven rural-area Health Centers. Three rural Health Centers located in Cache County are associated with Logan Regional Hospital but are near to Cache Valley Specialty Hospital as well. IHC's Budge Clinic physician group in Logan is especially large and to the extent that it refers most of its patients to Logan Regional Hospital, fewer patients will be available for CVSH. Nevertheless, Budge Clinic physicians are not prohibited from referring patients to CVSH.

IHC Health Centers in central Utah in Ephraim and Richfield are comparatively close to non-IHC rural hospitals in the area. In addition, IHC hospitals in Mt. Pleasant (Sanpete Valley Hospital) and Richfield (Sevier Valley Hospital) bracket Gunnison Valley Hospital and substantially overlap Gunnison Valley's service area. Nevertheless, nine non-IHC family practitioners are available in Gunnison and Gunnison Valley Hospital draws patients from all of Sanpete and Sevier counties. Gunnison Valley Hospital has been in SelectHealth's Choice network for several years, but only recently was added to the SelectMed panel. Gunnison Valley Hospital's inclusion in the SelectMed panel evidently resulted from intervention by a state legislator. In light of Gunnison Valley's on-going inclusion in the Select Choice panel, its previous absence from the SelectMed panel does not likely reflect an exercise of market power by IHC.

Subsidies of employed physicians, especially primary care physicians, is common in all types of market structures. Hospitals that employ primary care physicians often lose money on those physician practices. Some hospitals have divested themselves of these practices as a result, while others have subsidized them. The existence of a subsidy alone does not necessarily indicate harm to competition. It may also be characterized as an effort to meet the medical needs of a community. Any public policy initiatives aimed at employment of physicians runs considerable risk of reducing the supply of physicians available to consumers, especially in rural areas, or of increasing demands for government-funded subsidies of these physicians.

### **Investment in New Facilities and Equipment**

A concern that has been raised by some market participants is construction of facilities or the installation of equipment at facilities in competitors' service areas that is considered by some to be duplicative. As a general matter, it is highly unlikely that competition would be harmed by additional capital investments in Utah health care markets. Rather, additional facilities and equipment provide more alternatives for consumers. Limiting capital investments, as is done in some states with Certificate-of-Need laws, tends to be harmful to competition.<sup>84</sup> If demand is insufficient to provide a competitive return on the capital investment, the company making the investment rather than payers or consumers is at risk. It is possible, of course, that the investing company's competitors might be at financial risk as a result of the increase in market capacity.

For investment decisions to constitute anticompetitive behavior, very specific, narrowly defined conditions must be met. An investment in additional market capacity might be characterized as "predatory" if it would be profitable only in the context of forcing all competitors out of the market (or reducing their utilization rate sufficiently below efficient levels), thus enabling the firm adding capacity to increase prices above competitive levels. A variation on that theory is a preemptive addition of capacity to thwart entry before it occurs. As is true with any conduct that may have anticompetitive predatory intent, the central question is whether the investing company can recoup its expenditures through future above-competitive prices and whether prices ultimately are raised. Capital investments in competitive markets also need to be recouped through future earnings. Consequently, public policy that attempts to limit "duplicative" capital investment is likely to dampen overall investment and thus harm consumers. If the capital expenditure results in the departure of a single competitor among many from a market, it is not likely to harm competition. Likewise, if the post-investment pricing is not above-competitive, it is not likely that competition was injured.

The source of much of the concern of market participants regarding capital expenditures in Utah is investments made by Intermountain Health Care over the past several years. Other providers, however, have also invested or are planning to invest in new facilities and equipment. Whether additional healthcare facilities or equipment are needed in an

---

<sup>84</sup> See Improving Health Care: A Dose of Competition, A Report by the Federal Trade Commission and Department of Justice, June 2004, Chapter 8.

area is a business decision that is typically made on the basis of factors like the age and condition of existing facilities and equipment, forecasts of demand growth, and perceptions of the types of services and level of quality demanded by payers and their subscribers. Like any business investment decision, the investor may be mistaken in deciding to make an investment or refrain from making an investment.

Intermountain Health Care is currently in the process of constructing Intermountain Medical Center in the central part of Salt Lake City's southern suburbs near Murray. This \$400 million, 376-bed facility is the capstone of a multi-year, \$1.1 billion capital development phase that IHC has undertaken. When the Intermountain Medical Center is completed in late 2007, IHC plans to move its tertiary services currently in LDS Hospital to the Medical Center. IHC will also close its Cottonwood Medical Center (which is one mile east of the new hospital) except for The Orthopedic Specialty Hospital (TOSH) that is located on the Cottonwood campus. No significant increase in overall bed count is expected.

IHC also has planned a new hospital to be located in Riverton in southern Salt Lake County. This new facility would be located about five miles south of IASIS's Jordan Valley Hospital. IHC expects the Riverton area to grow significantly in the coming years and additional hospital beds to be needed to serve that population. MountainStar is also planning to construct a new hospital. MountainStar's facility will be in the Sandy area, also near Jordan Valley Hospital. Both of these new hospitals will overlap IASIS's traditional service area west of I-15. Indeed, IASIS offered to contract with IHC for hospital services to save IHC the expense of constructing its own facility, but IHC declined. IASIS, itself, has recently completed \$78 million in renovations, expansions, and upgrades of its four hospitals in Utah. In addition, several ambulatory surgery centers have also opened in areas served by existing hospitals or other ambulatory surgery centers. Additional ambulatory surgery centers are planned as well. These new facilities may be perceived by competitors to be "wasteful duplication of services" in the area. Such a response is not unexpected from a competitor and, on its own, does not indicate harm to competition.

The provision of radiation oncology services in Utah County is an example of the concern raised regarding IHC's capital expenditures on equipment. IHC recently updated its radiation cancer therapy equipment at Utah Valley Regional Medical Center in Provo. Initially, IHC resisted requests by Central Utah Clinic physicians to upgrade the hospital's equipment. The physicians ultimately opened their own Cancer Center in December 2003 in a location adjacent to Utah Valley Regional. Shortly afterwards, IHC modernized the Utah Valley Regional equipment. In 2006, IHC opened a radiation oncology program at American Fork Hospital, evidently based on IHC's demand projections for that portion of northern Utah County. Central Utah Clinic's Cancer Center initially captured almost all of the radiation oncology treatments being performed at Utah Valley Regional. Some of that patient volume evidently has returned to Utah Valley Regional, but Central Utah Clinic's Cancer Center continues to have high patient

volume. IHC's radiation oncology program at American Fork Hospital has not been open long enough to assess its attractiveness to patients.

Patients now have greater access to modern radiation oncology treatment services in Utah County than they did previously. It is apparent that the Central Utah Clinic physicians hastened IHC's equipment upgrades at Utah Valley Regional by opening their own center. In all likelihood, patients in the service area are better off in terms of access and quality of radiation treatment services as a result. A high proportion of patients receiving radiation oncology treatment are covered by Medicare and thus have no network restrictions. With regard to commercial insurance, the enrollees of several health plans can still use the radiation therapy equipment services provided by Central Utah Clinic.

A similar sequence of events apparently occurred regarding imaging services in Utah County and in Cache County. In Utah County, Riverwoods Imaging Center acquired new imaging equipment and was followed quickly by upgrades of the same types of equipment at Utah Valley Regional Medical Center. Neither SelectHealth nor Regence BC/BS has a contract with Riverwoods for all of the imaging services it provides. In Cache County, some physicians believed that Logan Regional Hospital lagged in updating its equipment. When Cache Valley Specialty Hospital added new equipment, however, Logan Regional followed suit. Equipment upgrades have occurred at many other facilities as well, both IHC-owned and others. Each of these investments enhances the quality of care and access to care available to consumers. Competing entities naturally prefer that only they have the updated equipment, but patients are better off with wider availability of updated equipment among providers.

## **PHYSICIAN EMPLOYMENT AND CONTRACTING ISSUES**

Utah is home to approximately 4,500 practicing physicians in the full spectrum of specialties. Most of the physicians in Utah practice in small groups or solo practices. There are, however, several large groups. Determining precise shares of physician groups is greatly complicated by market definition issues (both product market and geographic market). It is not uncommon in rural areas for all physicians in one specialty to be in a single group, but that does not necessarily signal harm to competition. The same result often occurs in some specialties in urban areas. For example, the only neurologist in the Cache County area is IHC-employed, but the only plastic surgeon is not IHC-employed.

The University of Utah Medical Group (UUMG) is the largest practice in the state with more than 800 physicians. About two-thirds of these physicians are specialists with the remaining one-third offering primary care services. Almost all UUMG physicians are located in Salt Lake County, with 215 of them in UHC's nine Community Clinics located largely along the Wasatch Front. These Community Clinics are multispecialty facilities that offer non-hospital locations for patients to access UUMG specialists. Most of UUMG's primary care physicians are located in the Community Clinics or in two other

small UHC clinics in Salt Lake County that offer primary care services only. UUMG physicians also staff Primary Children's Medical Center and provide physician services at IHC hospitals for clinical maternal-fetal medicine and bone marrow transplants among other services.

The next-largest group, with 575 employed physicians, is the Intermountain Health Care Physician Division. About 335 of IHC's employed physicians are in primary care specialties located throughout the state. IHC's share of primary care physicians in a non-rural local area appears to be highest in the Cache County area. There IHC's Budge Clinic accounts for approximately 50% of primary care physicians.

Other large physician groups in Utah include Central Utah Clinic with 90 physicians located in Utah County. This multi-specialty group is largely made up of specialists, but has a number of primary care physicians as well. Central Utah Clinic's nine cardiologists and six gastroenterologists account for all of each of those specialties in Utah County. In addition, its orthopedists comprise 80% of that specialty in Utah County.

The Tanner Clinic, with three offices and 60 physicians in Davis County, is another large multi-specialty group. Its physicians reportedly account for less than half of all Davis County physicians in any specialty. Tanner Clinic physicians are included on the panels of all major health insurance networks except SelectHealth's SelectMed panel, though they have petitioned SelectHealth to join. Nevertheless, Tanner Clinic sees itself as being successful despite not being on that panel.

Granger Medical Clinic has 53 physicians and two office locations in West Valley City in Salt Lake County. The main office of this multi-specialty clinic is located adjacent to Utah Surgical Center. Some Granger Clinic physicians are investors in Utah Surgical Center and many of them have privileges there. Its providers participate in most managed care networks.

Among Utah's other physician groups are the 15-physician Snow Canyon Clinic in southwest Utah, the 21-physician Utah Valley Pediatrics practice in Utah County, and the 13-physician Utah Cancer Specialists with seven office locations along the Wasatch Front.

### **Employment of Physicians**

Some market participants have expressed concern that the employment of physicians is being used as a means of harming competition in other markets. More specifically, the issue is whether Intermountain Health Care's physician-employment activities result in patients being directed to IHC hospitals such that the hospitals are able to acquire or maintain market power. Similarly, market participants are concerned as to whether IHC harms competition in the health care financing markets by employing physicians and adding them to various SelectHealth physician panels. As discussed previously, IHC's employed physicians account for less than 15% of the total in the state. There do not appear to be any significant markets in which IHC-employed physicians account for the

majority of physicians in a specialty. These facts are not consistent with IHC's physician employment practices creating harm to competition.

Related to these concerns is the assertion that IHC recruits employed physicians to communities in Utah despite there being insufficient "local need." Historically, IHC has recruited physicians in many different specialties to its Physician Division. Whether the communities in which it places these physicians already have enough of any particular specialty is difficult to measure. Various factors influence the perceived sufficiency of physician supply from a clinical perspective including demographic factors (e.g., current and expected population size, healthiness, and age profile) and physician practice factors (e.g., practice styles, expected productivity of incumbent physicians, participation in health insurance networks, and the quality of services provided). In addition, business-related factors of individual and groups practices determine whether entry or expansion of a physician practice is economically sensible (e.g., expected profitability of the practice, expected productivity of the new physicians). At the same time that market participants suggest that IHC adds unneeded physician capacity in some areas, complaints arise that SelectHealth refuses to add physicians to its SelectMed panel in areas in which SelectHealth believes it has a sufficient number to serve its patients. Ultimately, the pertinent question for this report is whether the employment or relocation of physicians has resulted in harm to competition in any markets.

IHC has both introduced new employed physicians to communities and hired physicians who already have established practices in a community. All IHC-employed physicians must acquire active privileges at an IHC hospital and are effectively assured of inclusion on all SelectHealth panels. In order for other physicians to join a SelectHealth panel, a he or she must maintain active privileges at an IHC hospital which requires acceptance of call coverage at that facility, attendance at staff meetings, participation in quality-of-care initiatives, and a minimum number of admissions, among other requirements.<sup>85</sup> IHC reports that any qualified physician can join the panels for the Select Choice and Select Care products. It is likely, however, that physicians with practices at non-IHC hospitals may choose not to meet the requirements for active privileges at an IHC hospital. Nevertheless, a significant portion of physicians with privileges at MountainStar hospitals are on at least one SelectHealth panel. Because of the exclusion of most non-IHC hospitals on the Wasatch Front from SelectHealth panels, there would be little value for a physician without privileges at an IHC hospital to be on a SelectHealth panel in any event.

Participation in the Select Choice and Select Care panels gives physicians access to about one-third of SelectHealth's covered lives. Both of these panels include more than five times as many non-IHC-employed physicians as IHC-employed physicians. The Choice and Care panels have more than 3,200 physicians each which is nevertheless 20-30% narrower the broader networks of most competing plans. The issue that raises most

---

<sup>85</sup> The minimum admissions requirement for IHC hospitals varies by hospital. With the exception of Primary Children's, it is generally between 12 and 25 patients per year. No minimum admission requirement exists for Primary Children's.

concern for market participants, however, is whether non-IHC-employed physicians can join the SelectMed panel. SelectMed accounts for more than 60% of SelectHealth's enrollment. Although more restrictive than SelectHealth's broader panels, SelectMed's panel still is about 85% of the size of the Select Choice and Select Care panels. Thus SelectMed's panel is about five times larger than the number of physicians employed by IHC.

In summary, it is unlikely that IHC's physician employment practices or its practices of empanelling physicians in its networks could harm competition. The number of non-employed physicians on each of its panels is large. SelectHealth's requirements for inclusion of physicians on its panels are not unusual or overly restrictive. It is a common occurrence in managed care markets for patients to switch physicians or use different hospitals as a result of their health insurance choices. In addition, the non-exclusive nature of physician participation in health insurance networks means that patients can access many of the same physicians through different health insurers. These features ensure continued competition in physician services markets.

### **Physician Hospital Privileges and Health Plan Participation**

Some physicians and other market participants have observed that SelectHealth refuses to add some physicians to some or all of its networks. Intermountain has stated that its SelectMed panel is intentionally restricted to ensure patient volume to the physicians on the panel. Nevertheless, as Exhibit 49 shows, SelectMed's panel still has more than 2,700 physicians and Select Choice and Select Care panels have about 3,200 physicians. Other payers, including Cigna Healthcare, DMBA, Educators Mutual, PEHP and Regence BC/BS also offer networks that are comparatively narrow and others that are comparatively broad. The strategy of offering health insurance products with restrictive networks and lower premium levels as well as products with broader networks and higher premium levels is a commonplace approach to cost control in managed care contracting. Enrollees typically can choose among products with different types of networks, regardless of whether the employer offers only one managed care plan or multiple plans. Most plans, including SelectHealth and all of the other major plans in Utah, offer products with broad networks and products with narrower networks. Employees can choose the product that best fits their preferences.

Market participants have noted that in some instances, some physicians in a practice are in a SelectHealth network, but others, especially new recruits to the practice, are not allowed in. IHC acknowledges that credentialing new practice members has produced this result. Reportedly, Intermountain has addressed this problem in the last 18-24 months. The timing of IHC's response appears to coincide with various legislative initiatives directed at IHC. Currently, almost all group practices have all of their physicians on the same SelectHealth panels. Nevertheless, in certain circumstances, SelectHealth might still refuse to credential some physicians of a single practice on the Value or SelectMed panels. If, for example, large, single-specialty groups merge, resulting in more physicians of that specialty than SelectHealth deems necessary in a particular area for its SelectMed enrollees, SelectHealth may refuse to empanel all of the

physicians in that practice. The broader Select Choice and Select Care panels are unlikely to have the same restrictions. SelectHealth further states that in order to facilitate the credentialing process, potential hires of a physician practice can also be pre-credentialed.

Some market participants have also expressed concern that that SelectHealth rewards physicians who are “loyal” to IHC hospitals. Ostensibly, this loyalty is expressed by physicians referring a large share of their discretionary (e.g., Medicare or indemnity-insured) patients to IHC hospitals. The market participants believe that the “loyalty reward” is a preference by SelectHealth to include these physicians on its physician panels in lieu of other physicians. SelectHealth maintains that no such preferential treatment exists and that no physician has ever been removed from any of SelectHealth’s panels solely as a result of his or her hospital referral patterns. Nevertheless, there may be reason to believe that physicians on SelectHealth’s networks admit a greater portion of their discretionary patients to IHC hospitals. All physicians who are on the panel of any SelectHealth product must maintain active privileges at an IHC hospital. Many of these physicians maintain active privileges at non-IHC hospitals as well. Yet it is likely that many physicians (both IHC-paneled and non-IHC-paneled) focus most of their admissions at a single hospital because it is easier to attend patients and meet hospital administrative and call-coverage requirements at a single hospital. The end result is a potentially high correlation between SelectHealth panel participation and admissions of discretionary patients to IHC hospitals, but that does not signal an obvious competitive impact.

A related issue discussed above is the refusal by Regence BC/BS to contract with many new physician-owned ambulatory surgery centers even for its Traditional product. Regence BC/BS argues that not all new centers are needed in order to serve its enrollees and that the addition of new facilities increases overall healthcare costs. This rationale is similar to SelectHealth’s reasoning for excluding some physicians from some of its panels. Regardless of Regence BC/BS’s rationale, its decision not to include all ambulatory surgery centers is made in the context of a competitive market. If enough enrollees want networks with all ambulatory surgery centers, they will demand their inclusion, and either Regence or another insurer will include those centers. The failure to meet consumers’ demands would result in those plans losing enrollees to other plans that provide a more attractive network. If, on the other hand, an insufficient number of consumers want networks with all ambulatory surgery centers (or if consumers are unwilling to pay higher premiums for networks that include those centers), then plans will not include the centers. Regence BC/BS and the other managed care plans in Utah compete with each other by evaluating consumer demand and constructing products to best serve consumers.

### **Physician Payment Rates**

Several physicians practicing in Utah note that neither SelectHealth nor Regence BC/BS typically negotiates with physicians over payment rates. SelectHealth acknowledges that it pays physicians by CPT code and uses the same rates across the state, although there

are a few exceptions in areas with specific shortages of physicians.<sup>86</sup> IHC pays its employed physicians the same rates as it pays non-IHC physicians. Similar to SelectHealth, Regence BC/BS pays all physicians statewide with the same system, though its payment rates are based on the Medicare RBRVS system.<sup>87</sup>

In determining payment rates, SelectHealth consults surveys of information on national and regional payment rates. Both SelectHealth and Regence BC/BS solicit input from local physicians regarding their proposed rates and have specific physician focus groups that provide comments. Both plans consider this physician input in evaluating rate levels and making revisions. The practice of using regional or national benchmarks to determine rates for physicians is common among health insurance plans.<sup>88</sup> Many large health plans nationally use the same practice. Likewise, physicians often have little ability to negotiate individual rates. Uniformity of rates provides a significant administrative efficiency to plans of not having to track potentially thousands of variations of its rates within a single network. Physicians may, however, receive different payment rates for different products offered by a single managed care plan. For example, Altius Health Plans' Peak Advantage product allows physicians to choose one of three different rate levels. Those three rate levels correspond effectively to three physician panels. Consumers who choose to have access to the physicians in the panel with the highest physician payment rates are required to pay higher premiums. Conversely, the panel with the lowest physician payment rates is available at lower premiums. This rate structure is consistent with the basic logic of managed care that providers who are willing to take lower rates from payers will be offered in products that have lower premiums.

Another issue related to physician payment rates concerns fee reductions for physicians who treat patients in out-of-network hospitals. SelectHealth engaged in this practice at some level until the beginning of 2006. While apparently not common, some plans in other states, including Presbyterian Health Plan in New Mexico and Kaiser Permanente in southern California, reportedly have used this tool.<sup>89</sup> The strategy behind the penalty is to provide a financial disincentive for physicians to use non-network facilities, which typically are more costly to payers than network facilities. In part, a fee reduction for physicians is intended to offset the incentive effects on patients of some facilities' waiver

---

<sup>86</sup> CPT refers to "Current Procedural Terminology" which is system that identifies thousands of individual medical procedures. SelectHealth notes that in a small number of circumstances it may offer higher rates to physicians of a particular specialty to encourage entry or expansion of that specialty of physician services in a particular area.

<sup>87</sup> RBRVS refers to the "Resource Based Relative Value Scale" system established by Medicare for measuring the resources used by physicians for specific treatments compared to standard scale.

<sup>88</sup> See *Improving Health Care: A Dose of Competition*, Federal Trade Commission and Department of Justice, June 2004, Chapter 5, fn. 161.

<sup>89</sup> A more common variant of the strategy is risk sharing between physicians and managed care plans in which a portion of professional fees are pooled and ultimately are paid to physicians only if out-of-network utilization is kept below targeted rates.

of the higher out-of-pocket payments normally due from patients for use of non-network facilities.

In 2004, SelectHealth reduced its penalty on professional fees for non-network facility use from 50% to 25%. In early 2006, SelectHealth eliminated the penalty altogether. The timing of this second reduction coincides with the activities of the Task Force. SelectHealth reports that out-of-network utilization has increased noticeably since the penalty was eliminated, which has resulted in increased provider costs for the plan. Evidently, the penalty had been achieving its objective of enforcing the steering of patients to in-network facilities and thus controlling provider costs. Also evident is that some physicians prefer to use out-of-network facilities if they are not subject to a financial disincentive. SelectHealth reports that most out-of-network facility use is to physician-owned hospitals or ambulatory surgery centers.

### **Physician Ownership of Facilities**

Physician ownership of specialty hospitals or non-hospital facilities has increasingly become an issue of importance to hospitals and to physicians in Utah and elsewhere in the United States. The controversy initially received attention with studies of physician-owned ancillary service providers that led to the so-called Stark Laws.<sup>90</sup> More recently, the growth of physician-owned specialty hospitals and ambulatory surgery centers has come under close scrutiny. Recently, a national moratorium was placed on the construction of new physician-owned specialty hospitals, and other regulatory barriers have been imposed as well.

The primary concerns related to physician-owned specialty hospitals or non-hospital facilities in Utah are (1) physician-investors' referrals of the most profitable patients to their own facilities and (2) physician-investors ordering unnecessary tests or procedures in order to earn the facility fees those procedures would generate. These issues are common for all physician-owned facilities. This report addresses the first issue, but the second is beyond its scope.

Cache Valley Specialty Hospital in Logan is currently the only physician-owned specialty hospital in Utah. For fifteen years, The Orthopedic Specialty Hospital, which is located on the campus of IHC's Cottonwood Hospital, was owned in part by physicians and in part by Intermountain Health Care. It is now owned entirely by IHC. All or nearly all of the ambulatory surgery centers in Utah have some form of physician ownership. Neither of IHC's two free-standing ambulatory surgery centers has any direct physician ownership, but IHC employs physicians who have privileges at those centers. Likewise, University Health Care employs physicians who have privileges at UHC's free-standing outpatient surgery facilities. All of the other facilities have direct ownership involvement of area physicians.

---

<sup>90</sup> 42 U.S.C. §1395.

Two recent government studies of these issues concluded that individual physicians typically own small portions of a specialty hospital (1% to 5%), though that can vary substantially. On average, physicians' combined ownership of such facilities is about 60%.<sup>91</sup> The evidence on the impact of the financial incentive on the choice of hospital at which physicians admit patients is mixed, but generally indicates that physicians respond to their financial incentives through their referral patterns. A study by the Center for Medicare and Medicaid Services (CMS), which focuses on Medicare patients only, finds that "the empirical evidence supports the hypothesis that ownership has some effect in directing patients to specialty hospitals, although the effect appears to be weak."<sup>92</sup> The CMS Report also found "a mildly positive correlation between the size of the physician's ownership share and the percentage of his or her patients treated at the specialty hospital."<sup>93</sup>

There is also some evidence in a study by the Medicare Payment Advisory Commission of a significant correlation between physician ownership and the mix of patient by insurance coverage. The MedPAC Report found that physician-owned orthopedic and surgical specialty hospitals treated primarily privately insured patients.<sup>94</sup> Likewise, the Medicaid patient mix at specialty hospitals was substantially lower than for community hospitals regardless of the acuity mix.<sup>95</sup>

In Utah, competition by physician-owned facilities appears to have a significant impact on patient volume at nearby hospitals. Exhibit 91 shows the decline in patient volume at some hospitals that corresponds to the opening and growth of physician-owned facilities. Such a pattern is consistent with patients shifting from hospital to non-hospital facilities, whether attributable to physician referrals, pure patient choice, payer contracting, or some other factors. One estimate of the financial impact on a hospital is a \$1,000 reduction in a hospital's operating income for the average ambulatory surgery case shifted to a non-hospital facility.

The MedPAC Report found that general hospitals tend to be less profitable than specialty hospitals overall, but that there is no significant difference in the profitability of general hospitals that compete with specialty hospitals and those that do not.<sup>96</sup> If lack of a statistically significant difference in profitability proves to be robust over time and across markets in future studies, it may be that the fear of an adverse financial impact of

---

<sup>91</sup> Medicare Payment Advisory Commission, Report to Congress: Physician-owned Specialty Hospitals, March 2005 ("MedPAC Report"), Table 1, p. 20.

<sup>92</sup> Center for Medicare and Medicaid Services, "Study of Physician-owned Specialty Hospitals Required in Section 507(c)(2) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003," May 2005 ("CMS Report") at 26.

<sup>93</sup> CMS Report at 26 and Tables 4.1 to 4.4.

<sup>94</sup> MedPAC Report at 17.

<sup>95</sup> MedPAC Report, Tables 6 and 7.

<sup>96</sup> MedPAC Report at Table 4.

physician-owned facilities on general hospitals might be overstated. MedPAC warns, however, that its analysis is based on a comparatively small number of recently established facilities. The impact might be substantially different when measured over more facilities and a longer time period.

The financial impact on incumbent hospitals of the entry of ambulatory surgery centers is difficult to gauge accurately without the type of detailed analysis that is beyond the scope of this report. In addition, a hospital's financial performance can be affected by many factors other than the entry of a non-hospital competitor. Nevertheless, Exhibit 65 shows financial results that generally parallel movement of patients, at least in the short term, for hospitals located near newly established ambulatory surgery centers.

Any financial losses to hospitals resulting from shifts in patient volume to ambulatory surgery centers or specialty hospitals are likely offset at least in part by gains to patients and payers.<sup>97</sup> The growth of patient volume at free-standing ambulatory surgery centers indicates that patients and payers consider them to be acceptable alternatives. As a recent federal government report finds that entry by specialty hospitals and ambulatory surgery centers "has had a number of beneficial consequences for consumers who receive care from these providers" though it adds that the emergence of these facilities has been "substantially driven" by Medicare's administered pricing system. The study also proclaims that the federal antitrust authorities "will aggressively pursue" circumstances in which they have specific evidence of anticompetitive conduct through unilateral or collusive actions by hospitals.<sup>98</sup>

## COMPARISONS WITH BENCHMARK STATES

A common approach to assessing the performance of a market is to compare the market under consideration to "benchmark" markets that are similar to the market under consideration. Often it is helpful to find benchmarks that differ from the market under consideration in one key aspect to test whether that feature of the market has an impact on performance. To make a benchmark comparison statistically rigorous, a great deal of information typically needs to be gathered. Such a detailed econometric analysis is beyond the scope of this report. Nevertheless, it can be instructive to evaluate differences without the detailed statistical analyses.

---

<sup>97</sup> It is worth noting, however, that the existence of a low-cost alternative such as a specialty hospital or an ambulatory surgery center does not necessarily reduce market prices. In a competitive market, a firm with a cost advantage will accept the market price and keep the difference between its costs and that price as an efficiency rent. See Paul L. Yde and Michael G. Vita, "Merger Efficiencies: Reconsidering the "Passing-on" Requirement," *Antitrust Law Journal*, Spring 1996 at 735-747.

<sup>98</sup> Improving Health Care: A Dose of Competition, Federal Trade Commission and Department of Justice, June 2004, Chapter 3, p. 27.

The benchmark approach allows for a comparison of market structures and performance while controlling for differences in other factors that may affect observed performance. The performance measure that is of primary consideration in this analysis is health insurance premiums. Premiums are a useful metric because they reflect costs in the provider markets (which may be affected by market structure or practices) as well as structure and practices in the health care financing markets. Other measures, such as patient revenue or facility costs might reasonably be used, but they do not capture information from health insurance markets. More complicated measures that incorporate quality are beyond the scope of this report. Premium levels may be affected by many factors, including some that are unrelated to the structure or contracting practices in a market. Several of these factors are discussed below and can be accounted for through simple comparisons. Other factors like state-mandated health insurance benefits can also affect premiums, but are not included in this analysis.

Exhibits 93-95 show health insurance premiums and related information on health systems, payers, system integration, population and employer characteristics among other things for Utah and several benchmark states. The benchmark analyses in this report are limited to state-level comparisons because of the availability of data. Premiums, in particular, are not available on a sub-state level. With regard to the benchmark states, three groups have been chosen: neighboring states, “healthy” states, and states with vertically integrated health systems.

*Neighboring States Benchmark:* The Neighboring States Benchmark is based on geographic characteristics that may be useful in a benchmark comparison. Six of Utah’s neighboring states—Nevada, Arizona, New Mexico, Colorado, Idaho and Wyoming—are included in this benchmark. These states may have regional similarities that could affect the costs and delivery of healthcare including the supply of physicians and other professionals, labor costs, real estate costs, and preferences and attitudes towards different types of health plans.

*Healthy States Benchmark:* Among the important health-related characteristics of a state is the overall healthiness of a population which, in principle, can have a significant impact on health insurance premiums. The Utah population is considered in some analyses to be among the healthiest states in the United States. One commonly cited ranking published by United Health Foundation had Utah as the fourth-healthiest state in 2005.<sup>99</sup> United Health Foundation’s top ten healthiest states in 2005 (excluding Utah) are used to construct the Healthy States Benchmark. The healthiest states are included because they are likely to have similar overall health characteristics (such as prevalence of smoking, obesity, poverty and mortality rates) that may affect the costs and delivery of healthcare.

*Vertical Integration Benchmark:* One of the distinguishing features of health care in Utah is the vertical integration of Intermountain Health Care. Thus another important

---

<sup>99</sup> United Health Foundation, “America’s Health Rankings 2005,” [www.unitedhealthfoundation.org](http://www.unitedhealthfoundation.org).

benchmark consideration is the extent of vertical integration between payers and providers. Among the vertically integrated entities that were considered for comparison are Sentara Healthcare in southeastern Virginia, Geisinger Health System in central Pennsylvania, Providence Health System in Oregon, and Presbyterian Healthcare Services in New Mexico. Each of these systems includes health plans that are vertically integrated with providers. Sentara and Geisinger were eliminated from consideration because neither operated at a statewide level (or was sufficiently large relative to other systems in the state), which is necessary for a comparison of premiums at a statewide level. Like IHC, both Providence Health System Oregon and Presbyterian Healthcare Services of New Mexico operate systems that cover a substantial portion of the state population. In addition, each of these systems is non-profit. Thus New Mexico and Oregon constitute the Vertical Integration Benchmark.

Among the demographic characteristic that likely affect health care premiums is the age of the population. As a general matter, younger populations require lower quantities of less intensive medical care than older populations require.<sup>100</sup> As Exhibit 93 shows, the average age in Utah is substantially lower than the U.S. average and below that of many other states as well. Likewise, the percentage of Utah's population that is younger than 18 years exceeds the U.S. average and that of other states. The younger population will tend to keep Utah's health insurance premiums low relative to other states. Exhibit 93 also shows that Utah's average family size is larger than the U.S. average or that of many other states. The lower average age in Utah is tied closely to the larger family size in Utah relative to the U.S. average. It is likely that Utah's larger family size results in a higher number of insured lives per employee which will tend to increase Utah's premiums relative to other states. It is not clear how the lower age and the large family size offset each other in terms of insurance premiums.

Other characteristics included in the benchmark analysis and shown in Exhibit 93 are HMO penetration rates and employer size characteristics. Employer characteristics might affect health insurance premiums since employers are the primary purchasers of commercial health insurance. In principle, larger firms may be better able to negotiate lower insurance premiums than smaller firms. Exhibit 93 includes information on the share of firms that are relatively large (in excess of 100 employees) and the share of all employees who work in those large firms.

Exhibit 94 shows average 2002-2003 premium levels for a single enrollee in Utah and some benchmark states.<sup>101</sup> Consideration of premiums for single enrollees is one method

---

<sup>100</sup> This relationship breaks down in two particular situations, however. Overall medical expenditures for the very young tend to be higher than for slightly older children, and women of child-bearing age tend to have higher medical expenditures than men of the same age group or women just beyond child-bearing age.

<sup>101</sup> The two-year average is used to mitigate the impact of sharply yearly fluctuations. Nevertheless, Exhibits 93 and 94 display the data for the individual years. Data for 2001 are excluded because several relevant states were grouped in that year. The most recent year for which data are currently available from the Medical Expenditures Panel Survey is 2003.

of controlling for differences in typical family structure in Utah compared to other states. Exhibit 95 shows average 2002-2003 premium levels for families. Utah's average single premium for all types of plans was \$3,167, which is 4.8% lower than the average of its neighboring states (Neighboring States Benchmark) and 6.4% lower than the average of the "healthiest" states (Healthy States Benchmark). It is within 0.3% of the average premium of the two other states with market structures that include large, vertically integrated health plan/hospital/physician systems (Vertical Integration Benchmark). There are, of course, some individual states within each benchmark that have comparable or lower single-enrollee premiums to Utah. On its face, this finding suggests that vertical integration may promote lower premiums for single enrollees. Nevertheless, some contrary evidence exists. For example, Utah has a higher percentage of employees in large firms than do the states in the Vertical Integration Benchmark, which would be consistent with Utah's premiums being lower than the Vertical Integration Benchmark.

Exhibit 95 shows that family premiums follow a pattern that is similar, but not identical to single-enrollee premiums. Utah's average family premium was 7.5% lower than the Healthy States Benchmark premium and 2.9% below the Neighboring States Benchmark premium, but it is also 2.9% below the Vertical Integration Benchmark premium. This observation in conjunction with premium levels from Exhibit 93 suggests that the larger average family size in Utah does not appear to increase premiums enough to offset the lower average age that stems from having more children per family in Utah.

Exhibits 94 and 95 also provide average premiums by three types of plans: exclusive-provider panels, mixed-provider panels, and any-provider panels. Average annual premiums of single enrollees in Utah for exclusive-provider plans was \$2,746 in 2002-2003 which is 13.2% lower than premiums for all plans and 31% lower than premiums for any-provider plans. This comparison does not provide a basis for any definitive conclusions because many factors that are not adequately controlled could influence premiums. For example, it may be argued that lower premiums for exclusive-provider plans reflects those plans' ability to negotiate lower provider costs in exchange for exclusivity. It may also be argued that the largest plan with an exclusive network, IHC's SelectHealth, takes advantage of the company's vertical integration to lower its premiums by contracting with IHC's own hospitals at below-market rates.

Reaching a conclusion is further complicated by the differences in family premium levels. Exhibit 95 shows that Utah's average family premium in an exclusive-provider plan is 6.4% lower than family premiums overall. But, the difference for average family premium in any-provider plans is even greater at 7.4% below overall family premiums. It should also be noted that in each of the benchmarks, a similar pattern exists in family premiums between exclusive-provider plans and any-provider plans. A more detailed study is necessary to understand this pattern of premiums more fully.

Comparing average premiums for the three different types of plans across the benchmarks provides another perspective. With regard to the Vertical Integration Benchmark, Utah's premiums are lower than the benchmark for exclusive-provider plans by 8.2% for single enrollees and by 8.8% for families. It is possible that more tightly

controlled exclusive-provider networks in Utah generate premiums that are lower than in the Vertical Integration Benchmark states. For mixed-provider plans, Utah's premiums are lower than the Vertical Integration Benchmark states for single and family enrollees by 3.3% and 0.7%, respectively. For any-provider plans, Utah's premiums are higher than the Vertical Integration Benchmark for single and family enrollees by 15.5% and 2.1%, respectively. As discussed previously, the lower average family age in Utah may contribute to discrepancy between single-enrollee and family premiums.

In sum, the benchmark analysis of premiums provides useful information, but does not lead to definitive conclusions. It provides some support for the argument that vertical integration helps to reduce relative health insurance premiums. The relationship between integration and premiums is not consistent across network types or between single and family enrollees, nor is it free from contradictory information. Attempts to control for the influence of various potentially important characteristics such as geographic location, demographic differences, health status, and firm size help to direct the analysis, but a more detailed statistical analysis is likely to be necessary to draw stronger conclusions.

## **POLICY RECOMMENDATIONS**

As is detailed in this report, the study team has found that health care markets in Utah are functioning competitively and that no new statutory or regulatory initiatives are recommended. Health care consumers in Utah receive the benefit of significant competition among health insurers and among health care providers. Consumers are offered a variety of services that are generally considered to be of high quality and reasonably priced. Neither the structure, nor contracting practices, nor other business practices in these markets is harmful to competition or appears to reflect past harm to competition. Intervention by the Utah legislature to promote competition in these markets is not necessary, and, as a general matter, competitive markets are more likely to be harmed than helped by regulatory directives. Broad regulatory changes are likely to fail to prevent harmful actions and may hamper practices that are beneficial to consumers. The Federal Trade Commission and Department of Justice affirm this perspective in their comment that "proposals for new regulatory interventions have often focused solely on their claimed benefits, instead of considering their likely costs, where proposals fit into the larger regulatory framework, and whether proposals frustrate competition unnecessarily."<sup>102</sup>

The conclusions of this report should not, however, be interpreted to mean that no competitive problems will ever exist in Utah's markets. To the extent that specific competitive problems arise in the future, they would be addressed most appropriately through the court system. Though correcting competitive problems through the court

---

<sup>102</sup> Improving Health Care: A Dose of Competition, Report by the Federal Trade Commission and Department of Justice, June 2004, p. 4.

system has its own costs, such an approach is more likely to address actual competitive problems and to avoid undermining pro-competitive conduct.

A variety of policy recommendations have been proffered by market participants and others. It may be helpful to the Task Force to examine these proposals in the context of the analysis contained in this report.

### **Discussion of Policy Suggestions of Market Participants**

*Require IHC's Divestiture of Its Hospitals or SelectHealth:* Separation of IHC's provider business from its payer business would not resolve the concerns most often voiced by market participants. In addition, the potential efficiency gains from vertical integration discussed previously would be lost. Among the contracting practices that would persist regardless of IHC's ownership of SelectHealth is bundled-discount contracting. IHC hospitals on their own could continue bundled discounting as a means of directing patient volume to their facilities. Health plans owned by an entity unrelated to the hospitals could still be required to choose between the major networks in order to receive the most favorable discounts. Such is the case currently with MountainStar in Utah County. Bundled discounting would likely remain in the urban counties of the Wasatch Front as well as in Washington and Cache counties.

Likewise, splitting IHC's provider and health insurance arms would not make contract negotiations any less antagonistic. As long as SelectHealth offers popular products, providers must contend with that fact in negotiations. Similarly, the attractiveness of IHC's provider network will be used in its negotiations with payers regardless of whether SelectHealth is IHC owned.

*Require IHC's Divestiture of Its Physician Group:* As discussed previously, IHC's employed physicians do not constitute a large enough share of physicians in Utah or in any significant local markets to create market power on their own. Requiring IHC to divest those practices would eliminate any efficiency gains that derive from enhanced information flows, coordinated clinical quality-improvement efforts, and alignment of financial incentives related to physician ownership. In addition, to the extent that physicians require subsidies to practice in rural areas, divestiture of these physicians from IHC could reduce the supply of those services to patients. For the same reason, it is not likely to be good public policy to limit IHC's employment of physicians in the future. If IHC recruits physicians to an area that does not need physicians, it will suffer the financial consequences. If such recruitment is part of an effort to make its network more attractive to consumers, that is likely to be beneficial rather than harmful to consumers.

*Require IHC's Divestiture of Its Sole Community Hospitals:* Divestiture of Primary Children's Medical Center or any of IHC's hospitals that are sole community providers is not likely to enhance competition for their services. Some of IHC's hospitals are able to differentiate themselves from other hospitals in contract negotiations, either in terms of services offered or in terms of proximity to competitors. Any such advantage gained from differentiation is independent of who owns that particular hospital. Any owner of a

sole community hospital will have the ability to offer payers larger discounts on hospital services in exchange for the exclusion of competing non-hospital facilities from payers' networks.

In Washington and Cache counties, the sole community hospitals should be expected to contract in the same manner under non-IHC ownership as they do under IHC ownership. In Utah County, switching the ownership of the IHC facilities to another entity would not change the structure of the hospital services market unless the IHC facilities were purchased by MountainStar. If all of IHC's hospitals were sold to a non-MountainStar system, the structure would remain unchanged. Dividing IHC's Utah County hospitals between two other systems would leave Utah Valley Regional Medical Center, by far the largest hospital in the county and the sole provider of certain specialty services, owned by a single firm.

The structure of the hospital services markets in the Salt Lake County area and the Ogden-Layton area currently enables managed care plans to offer enrollees multiple network choices. Managed care plans that wish to offer a narrow facilities network can contract with either an IHC-oriented network or the non-IHC-oriented network. Broader networks can include all or some of these facilities since none of them (with the exception of University Health Care) requires full-system contracting. Consequently, divestiture of IHC facilities does not appear to be appropriate for Salt Lake County or the Ogden-Layton area. Likewise, divestiture of Primary Children's Medical Center would not make it any less of a "sole community" hospital.

There is nothing in the evidence to suggest that IHC uses its ownership of particular facilities like Primary Children's to leverage more favorable pricing for its other facilities. IHC does not condition its contracting or its discounting of Primary Children's or any other sole community hospital on a payer's acceptance of particular discounts for other IHC hospitals. Rather, all payers receive the same discount from Primary Children's regardless of whether they contract with other IHC hospitals. The discount that a payer receives from IHC's Utah County hospitals, for example, depends on the inclusion or exclusion of competing local providers. The discount is independent of whether Primary Children's or some other sole community hospital is included in the payer's network (and vice versa).

*Regulate Hospital Managed Care Contracting:* In each of the areas in which bundled-discount contracting exists, it is helpful from a policy perspective to consider the alternatives that might prevail in the event bundled discounts were prohibited. One way to assess the possible outcomes is to consider other areas in which Intermountain owns the only hospital and there are no competing free-standing facilities (i.e., locations in which IHC hospitals do not offer bundled discounts). In those markets, IHC offers all payers the same discount off charges, and that discount is smaller than its bundled discount in other localities. In all likelihood, if IHC were not permitted to offer a bundled discount in other areas of Utah, its prevailing discount would revert to the shallower level common in single-hospital communities, or at least to some lower level than prevails with bundled discounting. If so, consumers would lose the benefit of choosing a narrower

network with lower premiums, and payers (including those with MountainStar bundled-discount contracts) would experience higher provider costs.

*Institute Any Willing Provider Regulations:* Any Willing Provider proposals have been debated as a policy direction for Utah in the past, but have not been adopted. Such regulations favor providers at the expense of reducing payers' ability to control provider costs through panel selection. Simply, the process of competition requires that providers run the risk of not obtaining business if they fail to offer a price/quality combination favored by consumers, and Any Willing Provider provisions attenuate or eliminate this risk. Moreover, Any Willing Provider regulations are largely unnecessary for Utah consumers because enrollees of many of the major health plans already have the option to choose very broad physician and facility panels. Enrollees can sort themselves into products offering broad or narrow networks based on their preferences between provider choice and premium and out-of-pocket costs.

### **Other Policy Recommendations**

The investigation of Utah health care markets conducted for this report has revealed some areas in which further consideration of policy changes may be appropriate.

*Clarify Rural Access to Health Care Providers Law:* As discussed in the report, the Rural Access to Health Care Providers law is widely considered to be confusing to health insurers and providers, and it likely is confusing to consumers as well. Utah consumers may be well served by clarification of that statute.

*Provide Information Regarding Quality of Services:* A common theme in discussions with market participants is the need for consumers to understand better the quality of the health care services provided in Utah. Efforts by the legislature that could promote the assembly and dissemination of information related to health care quality in Utah could be beneficial. The Utah Health Data Committee of the Department of Health already releases annual performance reports for Utah's commercial HMOs with ratings of performance and consumer satisfaction measures. An interested consumer can readily access that information. Numerous initiatives are in place around the nation to assemble and make available quality information for health care providers as well.<sup>103</sup> The Centers for Medicare and Medicaid Services (CMS) is involved with several quality improvement organizations. State governments in New York and Pennsylvania both publish information on clinical outcomes for particular services which are used to rate hospitals and physicians. The federal government report notes that "to be useful, an information disclosure strategy must balance cost-effectiveness, clinical validity, and consumer saliency."<sup>104</sup>

---

<sup>103</sup> See Improving Health Care: A Dose of Competition, Federal Trade Commission and Department of Justice, June 2004, Chapter 1, pp. 17-25.

<sup>104</sup> Improving Health Care: A Dose of Competition, Federal Trade Commission and Department of Justice, June 2004, Chapter 1, p. 24.

*Conduct of Intermountain Health Care:* As has been identified, Intermountain Health Care appears to have responded to pressure or criticism from the Task Force or individual legislators in a number of circumstances. It should not be assumed automatically that a causal connection necessarily exists for each of these actions, but it clearly does exist for some of them. Among these changes are the separation of IHC's negotiating teams, credentialing of new members of physician practices, discontinuation of leased physician panels, elimination of provider sanctions, and addition of physicians or facilities to panels. The report discusses these changes in detail. Some of the changes appear to be unambiguously beneficial to consumers. For others, it is unclear whether the net effect on consumers is positive or negative. Many market participants have expressed concern that IHC will retreat from positions that the participants view as beneficial if the political pressure eases. This report offers no recommendations in that regard largely because competitive markets will produce the best combinations of price and quality in health care services and because regulators' micromanagement of any company's operations is unlikely to improve consumers' well-being in the long run.

## GLOSSARY OF TERMS

*Acute care:* Typically refers to inpatient hospital services other than psychiatric care, substance abuse treatment, rehabilitation, and long-term care.

*Ambulatory surgery:* Surgery that does not require an overnight stay. May be performed in a free-standing ambulatory surgery center or a physician's office.

*Balance billing:* Process in which a health care provider charges a patient for the balance of a health care bill that is not covered by the patient's health insurance.

*Bundled-discount contract:* Contract between a provider and a managed care plan in which the provider offers lower prices (i.e., higher discounts) for its services if the plan does not contract with a competing provider.

*Charges:* List prices.

*Co-pay:* Payment made by a health insurance enrollee to a provider on a per-visit basis. Typically is a flat fee unrelated to the total cost of the visit.

*CPT (Current Procedural Terminology):* System that identifies thousands of individual medical procedures.

*Deductible:* Total amount that a health insurance enrollee must pay to providers out of pocket on an annual basis before insurance coverage begins payments to providers.

*Discount:* Reduction from list prices; usually measured in percentage terms.

*DRG (Diagnostic Related Group):* System established and maintained by Medicare that classifies inpatient hospital services according to related diagnoses. Currently, there are more than 500 DRGs.

*Enrollee:* Individual whose health care expenses are insured by a health insurance plan, including employers (subscribers) and dependents.

*Exclusive managed care contract:* Contract that prohibits a managed care plan from contracting with competing providers in the same market.

*Free-ridership:* Circumstance in which one party receives benefits of the actions of another party without paying for those benefits.

*Harm to competition:* Actions that enable a supplier or purchaser to acquire or maintain market power.

*HMO (Health Maintenance Organization):* Health insurance product originally designed to feature restricted provider networks, discounted prices from providers, and lower premiums for enrollees. Currently, there is less practical significance to the difference between HMOs and PPOs from the patient's perspective.

*Horizontally related:* Products or services that are substitutes for each other.

*Imaging:* Diagnostic services including X-rays, ultrasound, MRI, CT scans and similar services.

*Indemnity:* Type of health insurance that typically has few, if any, restrictions on providers that can be reimbursed by the insurer. Reimbursement may be based on a percentage of charges and does not involve pre-payments of services.

*Managed care:* Type of health insurance that often includes features like limited networks of providers, referrals from "gatekeeper" primary care physicians, utilization reviews, coverage of preventive care services, payments to providers in advance of services being provided, more steeply discounted provider services. Managed care products are often referred to as HMOs, PPOs, or POS products. The distinction between HMO, PPO and POS has blurred significantly in recent years with each type of product offering many of the same features as the others.

*Market power:* Ability of a supplier (or a group of suppliers acting jointly) to increase its profits by pricing above competitive levels or providing quality that is below competitive levels. Analogously, it is the ability of a purchaser (or a group of purchasers acting jointly) to increase its profits by reducing the price at which it purchases goods or services below competitive levels.

*Market structure:* The number and relative size of the independent suppliers in a market.

*Moral hazard:* Increased risk of problematical behavior, and thus a negative outcome, because the person who caused the problem does not suffer the full consequences of the action.

*Network:* Group of health care facilities or professionals who have entered into a contract with a managed care health insurance plan to provide services to the plan's enrollees.

*Panel:* Usually refers to physicians or other health care professionals in a managed care plan network.

*POS (Point-of-Service):* Health insurance product that allows enrollee to choose between an HMO option (restricted network of providers with smaller out-of-pocket costs) or a PPO option (less restricted network with larger out-of-pocket costs) at the point of receiving the service. Premiums for POS products often are between those of HMO products and those of PPO products.

*PPO (Preferred Provider Organization):* Health insurance product with provider networks that are generally less restrictive than those of HMOs, discounts from providers that are generally smaller than those of HMOs, and premiums that are generally higher than those of HMOs. . Currently, there is less practical significance to the difference between HMOs and PPOs from the patient's perspective.

*Price discrimination:* A practice whereby a seller charges different prices to different consumers for the same product or service.

*Principal-agent:* Relationship by which one party makes decision on behalf of another. In health care, a common example is the relationship between a physician (agent) and a patient (principal).

*Product differentiation:* Distinguishing among similar products or services by differences in such characteristics as quality, location, reputation of the seller or other product characteristics.

*Steering (or Directing):* Process by which managed care plans require or induce enrollees to use particular health care providers.

*Tiers:* Subsets of providers in a managed care network for which different levels of out-of-pocket payments by enrollees using those providers may be necessary.

*Unit costs:* Refers to total costs divided by the number of units under consideration. For example, hospitals' unit costs may be calculated as total costs in one year divided by the total number of patients in that year.

*Vertical integration:* The circumstance in which a supplier at one level of production is also a supplier at another level of production