

# **Impact of Physician-owned Limited-service Hospitals: Black Hills Case Study**

**November 18, 2004**

*Based on a case study of market dynamics and community impacts  
completed by McManis Consulting between May and August 2004.*

# Executive Summary

- **Three surgical hospitals entered the Black Hills region between 1996 and 2000; physician owners quickly switched patients to facilities in which they had a financial interest**
- **Patient selection tactics for the two 100% physician-owned surgical hospitals yielded high profits, meanwhile:**
  - *Access to emergency and trauma care declined as neurosurgeons moved their practices to facilities without emergency capacity and stopped providing emergency coverage*
  - *The loss of elective cases left the full-service hospitals with difficulties staffing and scheduling, driving up their costs of care*
  - *The new facilities fragmented care delivery in the region and divided local physicians*
  - *The financial stability of the full-service hospitals declined and bond ratings were downgraded, lessening their ability to subsidize under-reimbursed and un-reimbursed community health services (e.g., endocrinology, health education)*
  - *The full-service hospitals lost trained staff to the surgical hospitals*
- **Utilization of surgical procedures in the overall community rose – outpatient procedures by 120% and inpatient procedures by 50%**

# Executive Summary (continued)

- Patient selection tactics yielded attractive profits for physician investors, but at the expense of the community hospitals.

## Financial Performance of Black Hills Surgery Center 2003

Total revenues	\$63.4 million
Net revenues	\$41.6 million
Net income	\$16.8 million
Operating Margin	40.4%

## Comparative Operating Margins:

### Rapid City Regional Hospital:

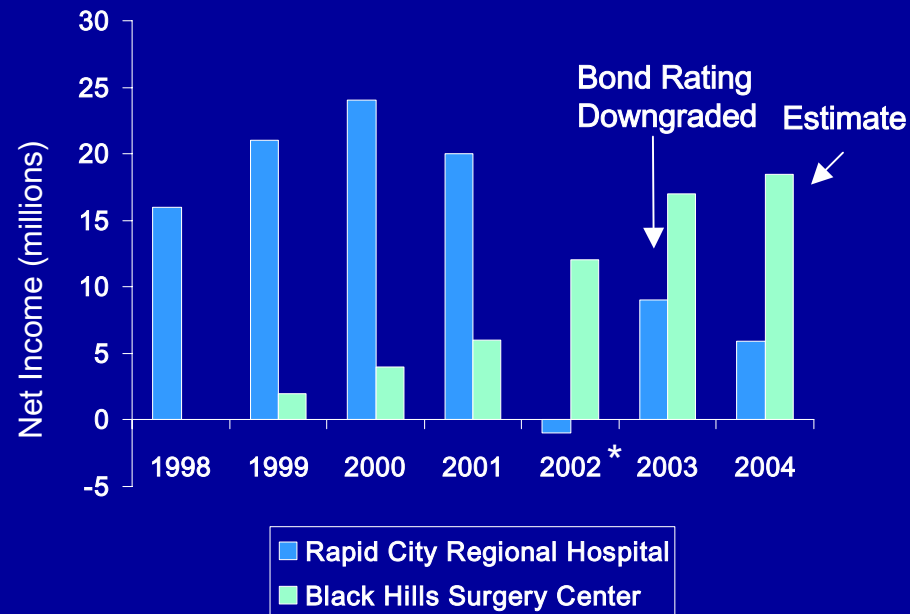
FY03	0.8%
FY04	-3.1%

### All U.S. Community

Hospitals (2003): 3.3%

Source: IPO Prospectus, February 17, 2004; Rapid City Regional Hospital; AHA Annual Survey, 2003.

## Net Income, Rapid City Regional Hospital vs. Black Hills Surgery Center 1998-2004



\* RCRH had one time write-off of \$6 million dollars in 2002. Fiscal years differ by six months. (See additional notes, p. 30.)

# The Black Hills region is served by a network of community hospitals.

## Regional Tertiary Center:

Rapid City Regional Hospital (RCRH)  
(282 beds, trauma center)

## Community Hospital:

Lookout Memorial Hospital (LMH)  
(40 beds)

## Critical Access Hospitals:

Custer (16 beds)  
Sturgis (25 beds)  
Deadwood (18 beds)



# Three surgical hospitals were opened between 1996 and 2000.

## **Black Hills Surgery Center (BHSC)**

(26 beds + diagnostic center, 35 physician shareholders, specializing in neurosurgery and orthopedic surgery, opened 1997)

## **Same Day Surgery Center (SDSC)**

(6 beds, 40/60 joint venture between RCRH and 16 physicians, opened 1996)

## **Spearfish Surgery Center (SSC)**

(4 beds, 13 physician shareholders, providing general surgery, opened 2000)



**Black Hills Surgery Center**  
(front and lobby)



# The two physician-owned surgical hospitals achieved high profits by limiting services offered and patients served.

## Patient Selection Tactics

- Focus on Well-reimbursed Procedures

- Avoid Emergency Cases

+

- Focus on Patients with Good Reimbursement

- Focus on Patients in Good Overall Health

- Resulted in -

High Profits For Physician Investors

*But Reduced Resources to Meet  
Broader Health Care Needs*

# Why do these patient selection tactics yield high profits?

- **Certain services and patients are more profitable than others:**
  - Procedure-based services -- cardiovascular care, spine surgery, orthopedics, general surgery -- tend to pay more relative to costs than medicine, obstetrics, and behavioral health
  - Private payers pay more relative to costs than Medicare and Medicaid
  - Fixed payment systems don't reimburse more for sicker patients, except for "outliers"
  - The standby capacity for emergency services is costly to maintain but is under-reimbursed
  - Not having an emergency department allows a facility to be selective in which patients it serves (in terms of payers, services and acuity level)

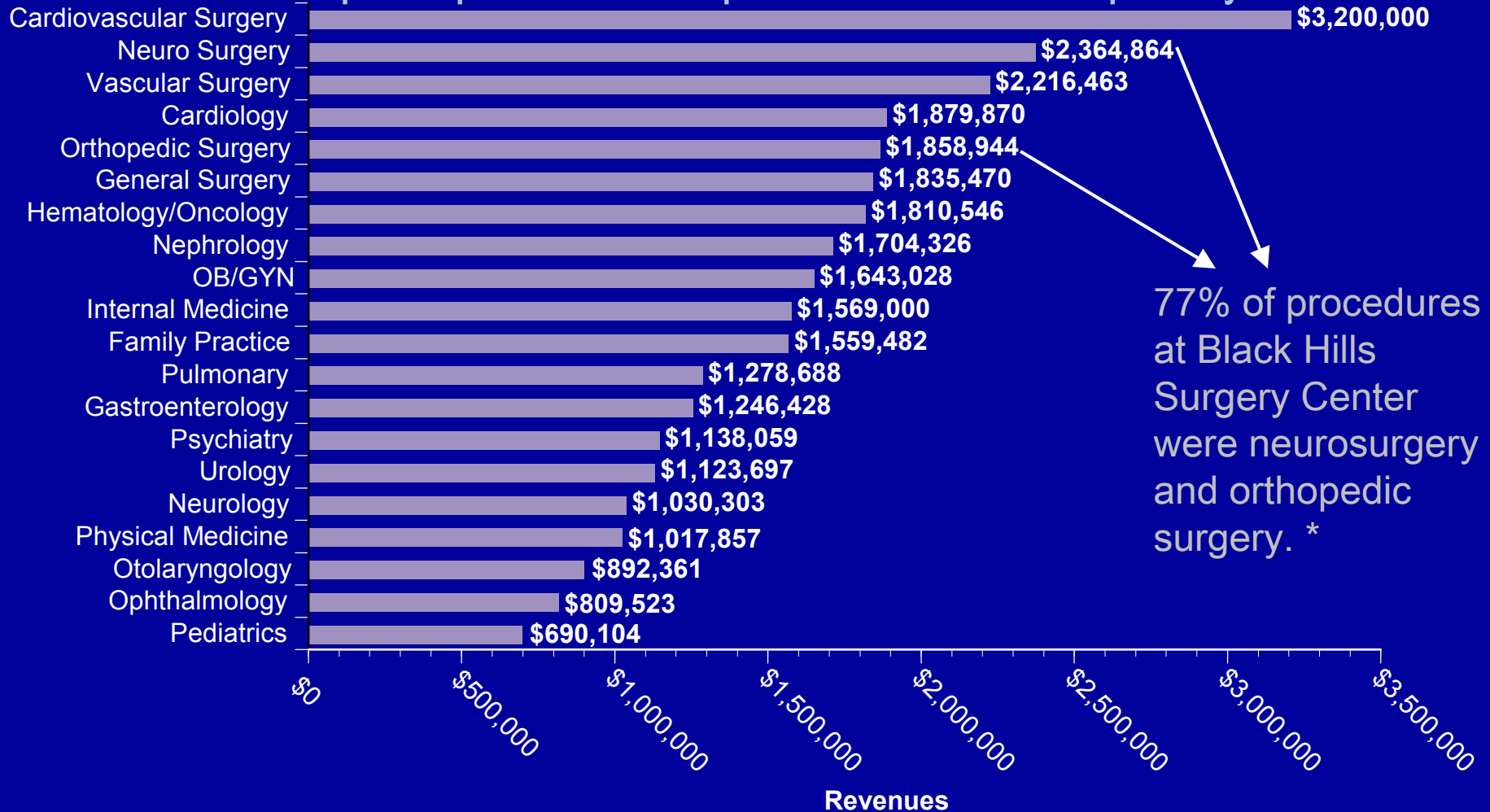
**Tactic: Focus on Well-reimbursed  
Procedures**



# The physician-owned surgical hospitals focused on higher revenue services.

Merritt Hawkins & Associates

## Hospital Inpatient and Outpatient Net Revenues per Physician



Source: Merritt Hawkins and Associates national survey data; IPO Prospectus, February 17, 2004.

\* Note: In Spearfish, the surgical hospital also focused on high revenue services (orthopedic and general surgery).

**Tactic: Avoid Emergency Cases**

# Not offering emergency services allowed the surgical hospitals to avoid certain costs and scheduling inefficiencies...

## Managers were able to:

- Avoid purchases of seldom used equipment
- Plan in advance without the potential for emergency cases to disrupt the schedule
  - Match staffing to cases, avoiding the costs of standby capacity
  - Offer an attractive schedule for physicians (free of interruptions)
  - Provide physicians with a practice environment without the responsibilities of night and weekend call
- Exert control over acuity and payer mix (avoiding EMTALA\* mandate)

“ the ability to schedule consecutive cases without pre-emption by emergency procedures ...”

Competitive advantages for the Black Hills Surgery Center cited in the Initial Public Offering to Investors (Medical Facilities Corp., p. 9)

\* *The Emergency Medical Treatment and Labor Act (EMTALA) requires hospitals with emergency departments to screen and stabilize all patients, without regard to ability to pay.*

# ...but the loss of elective cases created difficulties for the full-service hospitals in both Rapid City and Spearfish.

- **Full-service hospitals were left with:**
  - A higher mix of emergency, low reimbursement and high acuity cases
  - Lower staff and operating room utilization; thus higher costs per case
  - Inability to plan staffing, leading to high overtime costs
  - Reduced ability to plan and conduct staff training on elective cases
- **The result: lost efficiencies, strained resources, and higher costs to community for services that remained in full-service hospitals**

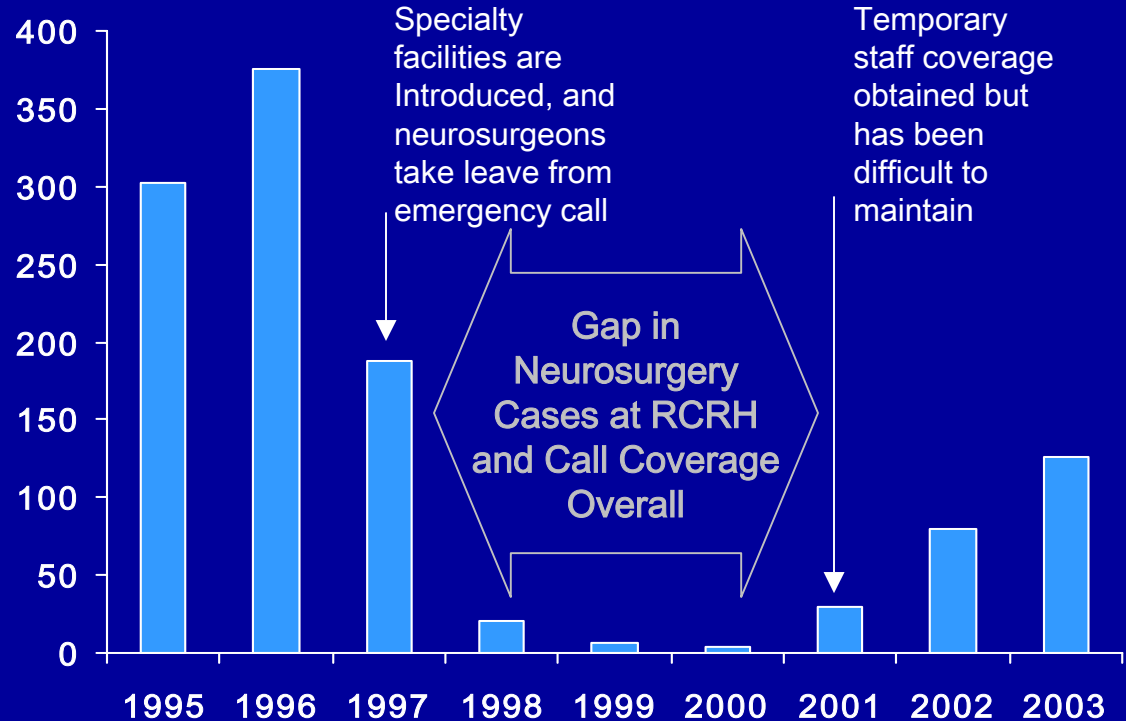
# Emergency and trauma coverage for neurosurgery suffered for the region at large.

The lead organizers of Black Hills Surgery Center, who were the most active neurosurgeons in the region, no longer provide emergency coverage at the full-service hospital.

And, no emergency service is offered at the surgical hospital.

The result: a significant access problem for the region for emergency neurosurgery.

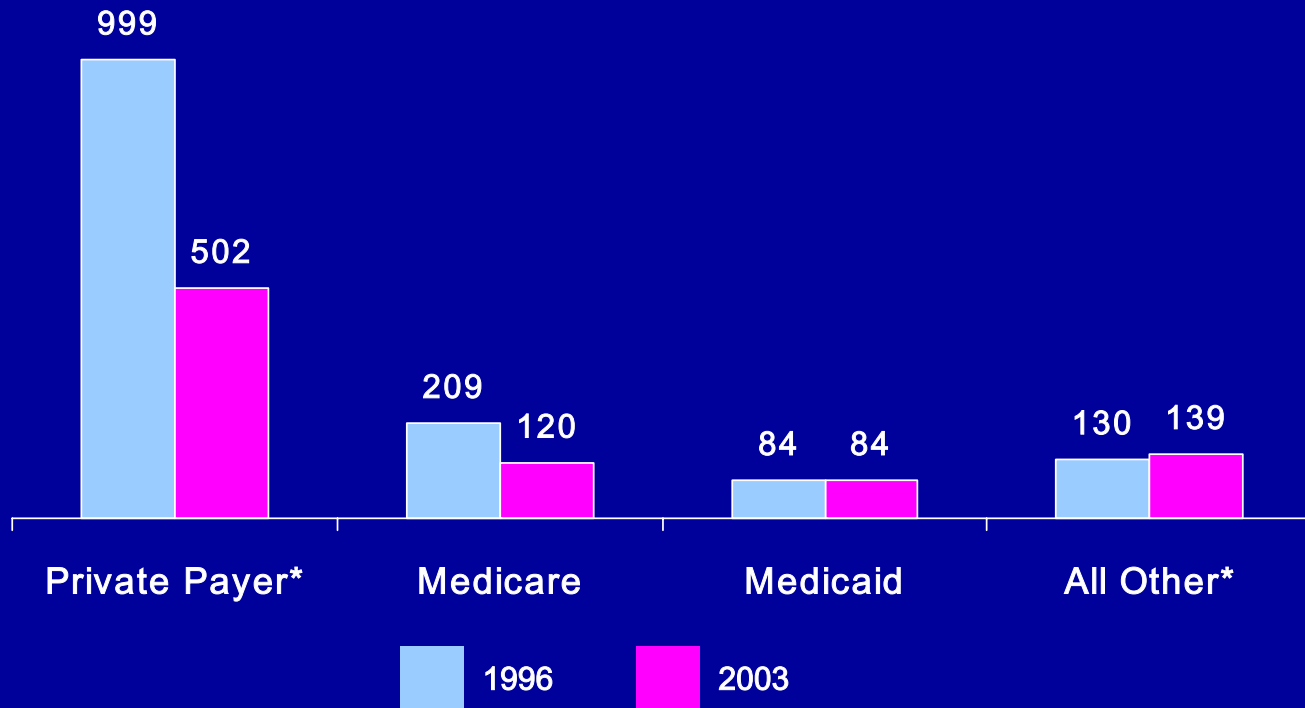
## Number of Outpatient Neurosurgeries at Rapid City Regional Hospital, 1995-2003



**Tactic: Focus on Patients with Good  
Reimbursement**

# Physician-owners took the better-reimbursed patients away from the full-service hospital...

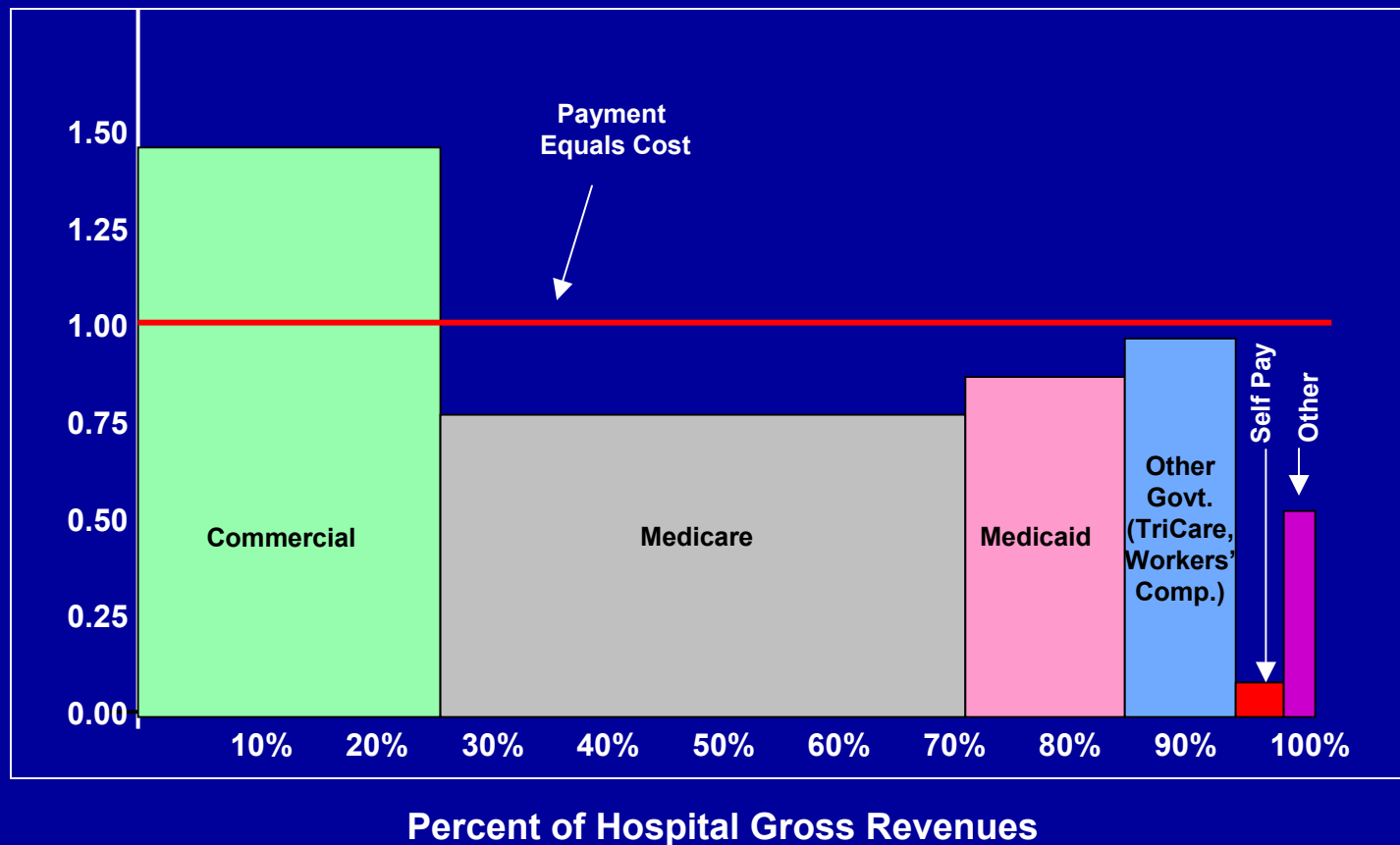
Changes in Outpatient Orthopedic Case Volume at  
Rapid City Regional Hospital, 1996-2003  
(coinciding with the opening of the Black Hills Surgery Center in 1997)



*"Private payer" includes BCBS, workers compensation, commercial insurance, managed contract care, and other insurance. "All other" includes CHAMPUS, self-pay and public health insurance.*

# ...leaving the community hospital less able to subsidize under-reimbursed care.

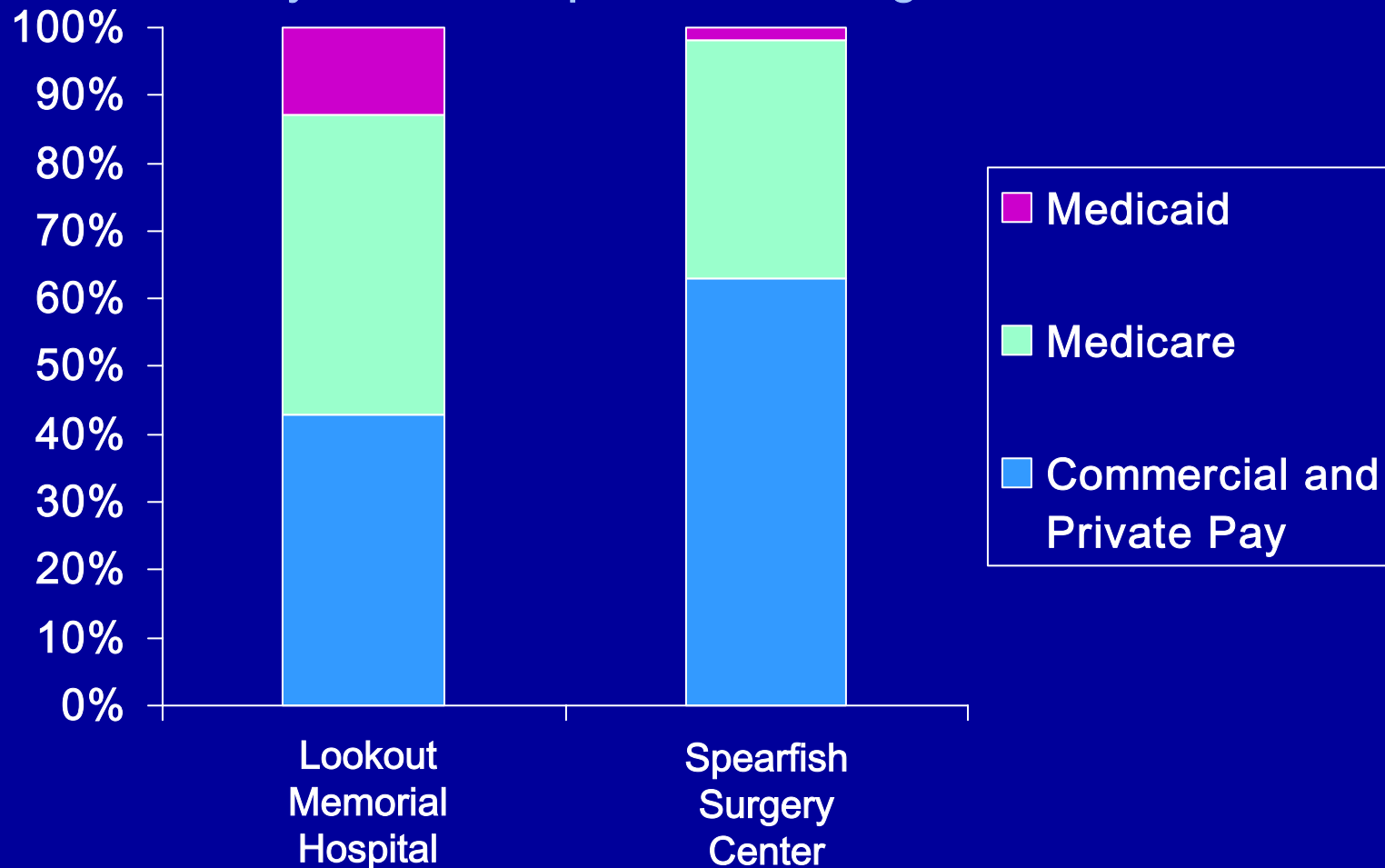
Reimbursement Relative to the Cost of Care by Payer, Rapid City Regional Hospital, 2003





# Physician movement of patients to the Spearfish Surgery Center left Lookout Memorial with the more challenging payer mix.

Payer Mix for Inpatient Discharges, 2003



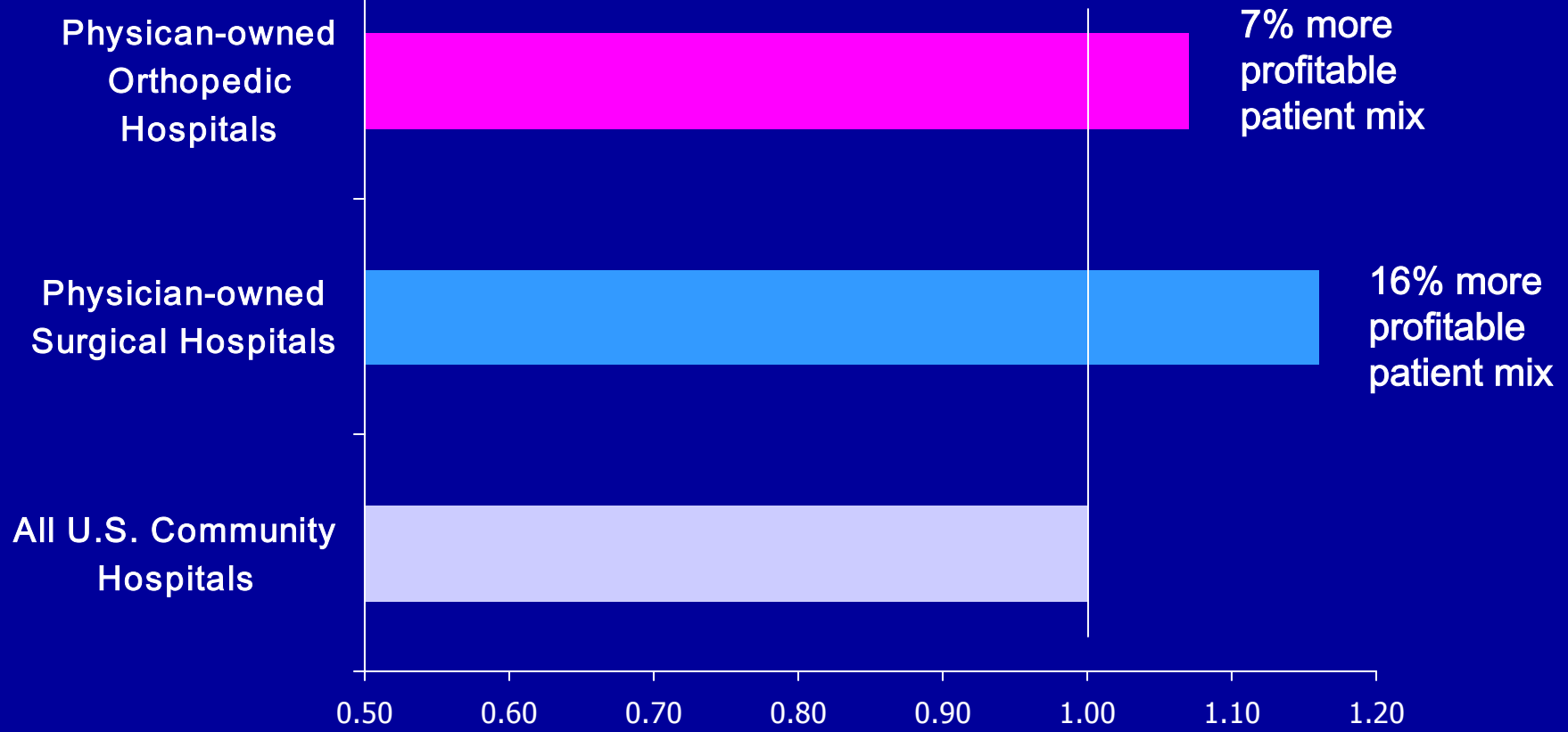
**Tactic: Focus on Patients in  
Good Overall Health**

# Movement of healthier patients to the surgical hospital left Rapid City Regional Hospital with a sicker mix of patients.

Changes in Case Mix Indices, RCRH 1996-2003			
	1996 Case Mix Index	2003 Case Mix Index	Percentage Change
Orthopedics	1.65	1.98	+ 20%
Neurosurgery	1.99	2.84	+ 43%

# Serving less sick patients produces higher expected profitability for physician-owned surgical hospitals, according to MedPAC.

Expected Relative Profitability  
Given Lower Acuity Mix (Within DRG)

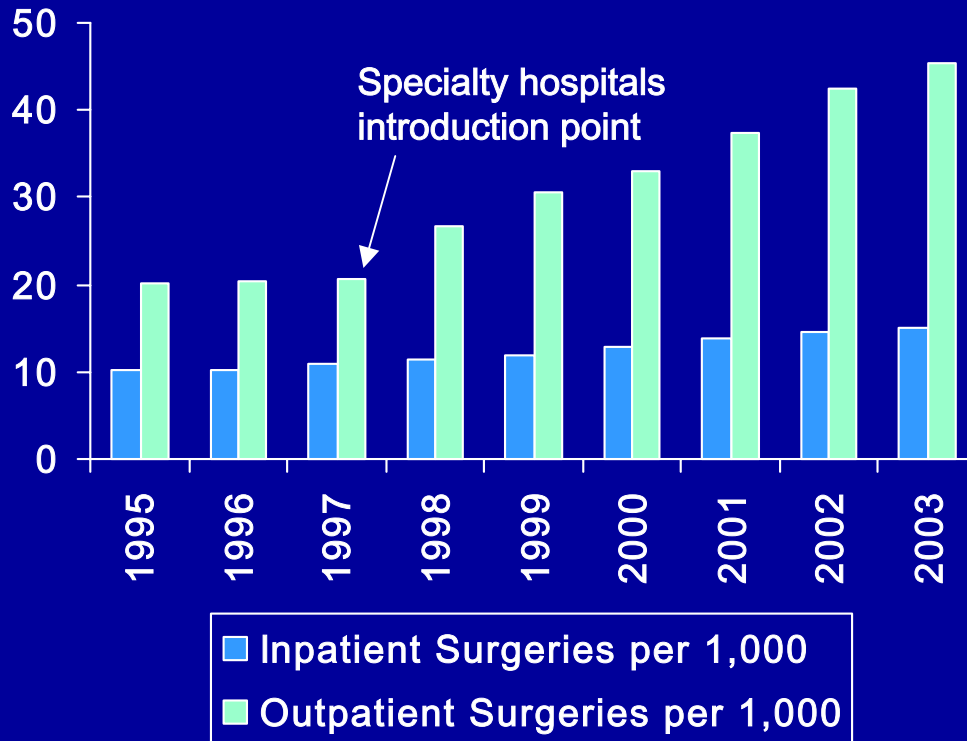


Source: MedPAC, DRG Relative Profitability and Patient Selection in Specialty Hospitals, preliminary data, presented at MedPAC meeting, October 29, 2004

**Other Effects:  
Increased Utilization**

# Added capacity and volume in the Black Hills region has raised concerns about over-utilization.

Total Surgeries in Rapid City  
per 1,000 Service Area Residents



- Outpatient surgeries up 120%
- Inpatient surgeries up 50%

Dartmouth Atlas (2001) reports that the frequency of back surgeries in the Rapid City area has reached the 99<sup>th</sup> percentile for all U.S. study areas.

**Other Effects:  
Patient, Physician and Staff Impacts**

# The impact on patient service and access was mixed.

## For patients sought by surgical hospital:

- **Additional choices**
- **Attractive service environment**
  - Smaller, newer facility
  - More individual attention
  - Better aesthetics

## For the broader community:

- **Reduced access (neurosurgery)**
- **Reductions in access to subsidized services**
  - Endocrinology
  - Community health education
- **Fragmentation of care (e.g., medical records not available for emergency patients)**



# The surgical hospitals divided the medical community.

## Viewed as positive by some...

- Physician owners of the Black Hills Surgery Center have done well financially
- The prospect of a specialty facility affords a competitive edge in recruiting new surgeon partners
- Physician users of specialty hospitals reported a greater sense of control over operating room practices and their schedules

## ...and negative by others.

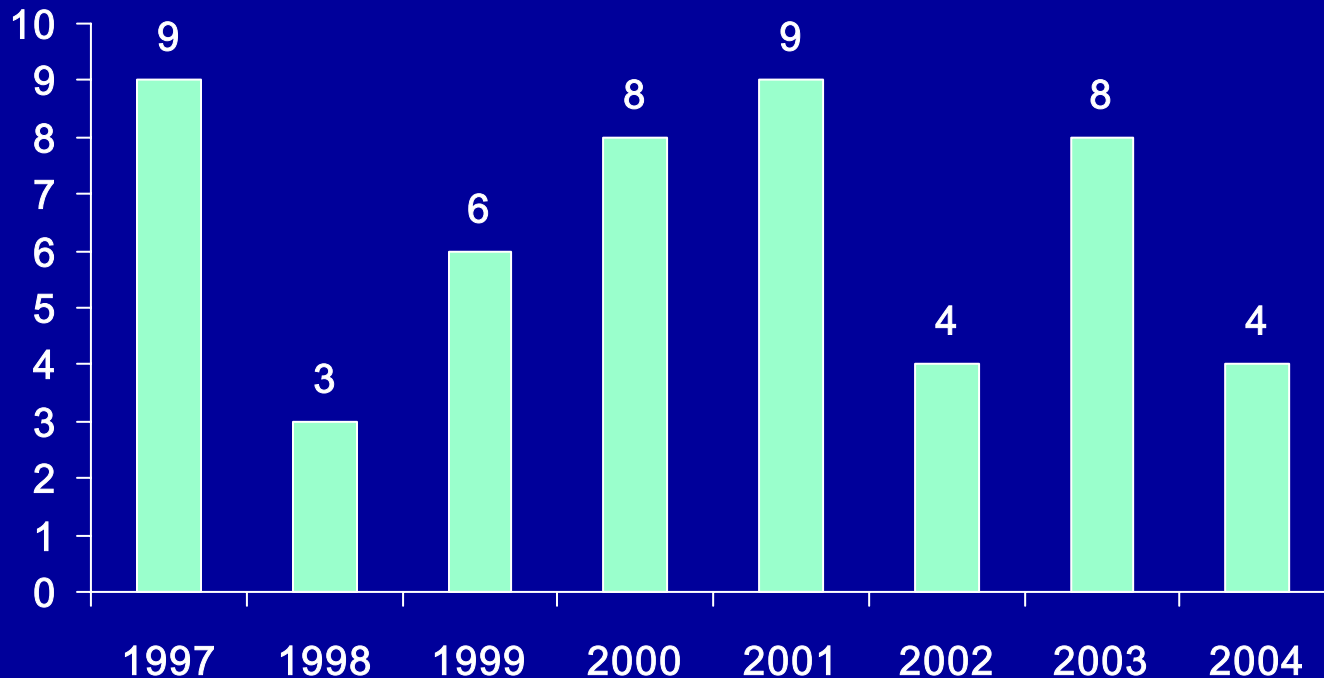
- Family practice physicians in both communities noted a deterioration in relations within the physician community
- Physicians expressed concern about neurosurgery coverage in Rapid City
- Physicians expressed concern about the financial health of the full-service hospitals
- Burden of emergency cases shifted to non-owner physicians

“Up until 1998, there was a collegial medical community in Spearfish. We used to work together, cover each other for vacations, but no more. The establishment of the Spearfish Surgery Center ... has torn our medical community apart.”

*Family practice physician in Spearfish, SD*

# The Black Hills Surgery Center recruited trained staff away from the full-service hospital.

Number of Registered Nurses Lost by Rapid City Regional Hospital to Black Hills Surgery Center, 1997-2004



“It’s like professional sports; we cannibalize the hospital. That’s where we get our best staff.”

*Larry Teuber, MD, Physician Executive, Black Hills Surgery Center  
Outpatient Surgery Magazine, January 2004*

**Other Effects:  
Financial Impact on Physician Owners vs.  
Full-Service Hospitals**

**For physician owners, the selection of services, patients and payers yielded high annual profits.**

Financial Performance of Black Hills Surgery Center, 2003

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Gross revenues	\$63.4 million
Net revenues	\$41.6 million
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Operating Margin	40.4%

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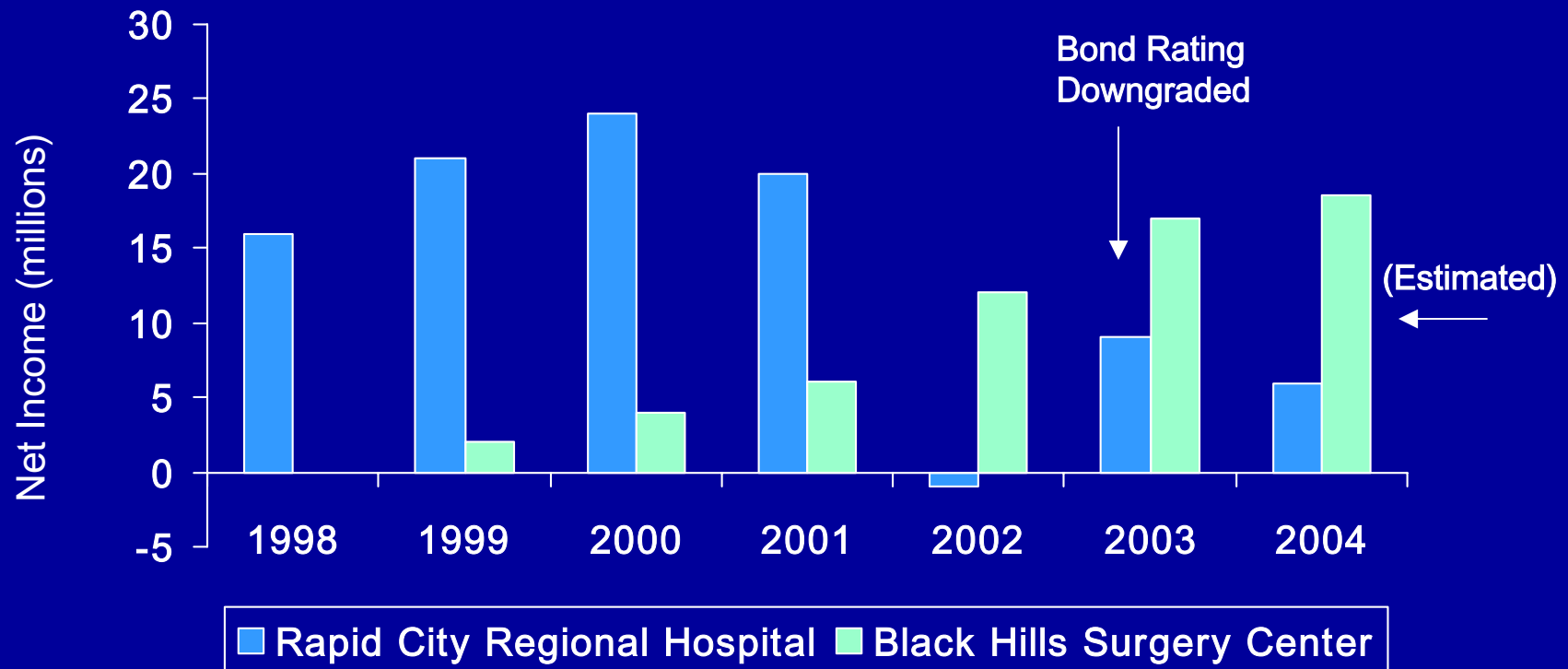
**Comparative Operating Margin Data:**

Rapid City Regional Hospital FY03	0.8%
Rapid City Regional Hospital FY04	-3.1%
All U.S. Community Hospitals 2003	3.3%

**Physician owners later sold a 51% interest in the Black Hills Surgery Center's future cash flow to Canadian investors for \$71 million (but retained control over hospital management).**

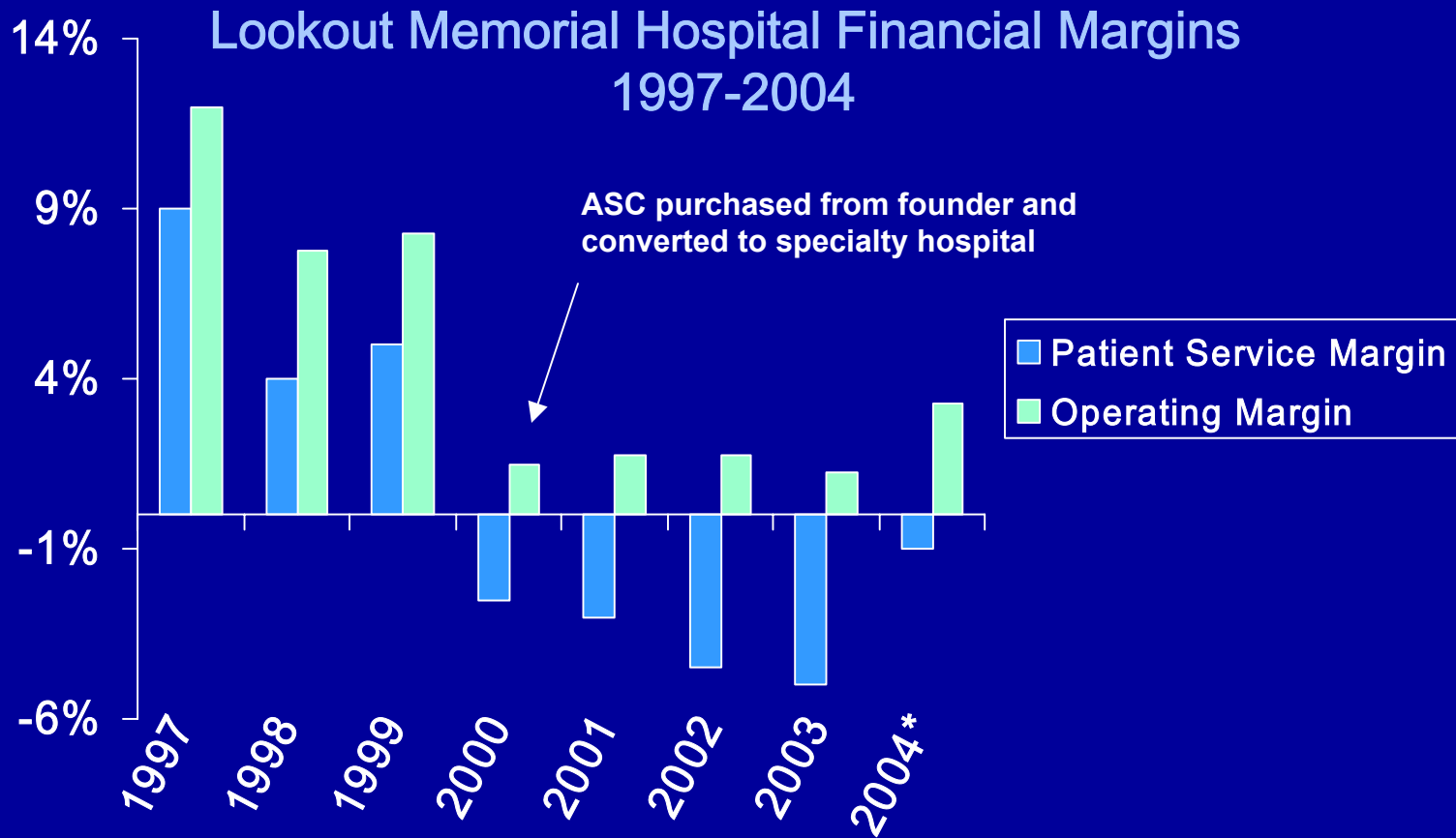
# From 2000 to 2004, the specialty hospital's net income grew by \$16 million...and the full-service hospital's net income fell by \$17 million.

Net Income, Rapid City Regional Hospital vs. Black Hills Surgery Center, 1998-2004



\* Sources: IPO (2004) and RCRH (2004). RCRH had one time write-off of \$6 million dollars in 2002. RCRH has a 7/1-6/30 fiscal year; BHSC uses a calendar fiscal year. BHSC's 2004 net income is an estimate based on data contained its investor owners' 2nd quarter report.

# In Spearfish, financial performance of the community hospital also declined markedly.



*\*A special provision of the Medicare Modernization Act of 2003 allowed LMH to reclassify for purposes of the wage index significantly improving Medicare reimbursement*

# The loss of revenue has left the full-service hospitals with difficult choices.

- **Both full-service hospitals have begun to incur losses from patient services and must rely on philanthropy and investment income to cover costs.**
- **Although the effects have not fully played out, the choices open to the full-service hospital system include:**
  - Reductions in subsidized and/or poorly reimbursed community services (e.g., wellness)
  - Reductions in services in outlying areas (e.g., support for critical access hospitals)
  - Staff lay-offs
  - Reductions in non-paying or low-margin services
  - Curtailments in plans for expanding services that would require subsidies (e.g., endocrinology/diabetes)
  - More dependence on philanthropy
  - Price increases

# Summary

- **Physician owners quickly moved patients to their new limited-service hospitals and gained:**
  - High annual profits (on top of practice income)
  - \$71 million on later sale of part interest to Canadian investors
- **Patient selection tactics were key to high profits:**
  - Focus on well-reimbursed services
  - Avoid emergency cases
  - Focus on patients with good reimbursement
  - Focus on patients in good overall health
- **But adversely affected the full-service hospitals and the communities they serve**
  - Problems with emergency service coverage
  - Reduced operating efficiency due to the removal of elective cases
  - Higher overall utilization and costs
  - A division within the medical community
  - Reduced funds for capital investments and less favorable financing terms
  - Reduced financial capacity to support services requiring subsidies
    - Services to low-income populations
    - Sub-specialties requiring subsidies such as endocrinology
    - Services to outlying areas
    - Community services





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