

CapStar Health System Case Study



CapStar Health System Case Study

The CapStar Health System Case Study was prepared for use in the 2002 Malcolm Baldrige National Quality Award Examiner Preparation Course. The CapStar Health System Case Study describes a fictitious not-for-profit health system. There is no connection between the fictitious CapStar Health System and any health system, either named CapStar Health System or otherwise. Organizations cited in the case study also are fictitious, with the exception of a few national organizations.

CapStar Health System scored in band 3, showing that the organization demonstrates an effective, systematic approach responsive to the basic requirements of most Items, but deployment in some key Areas to Address is still too early to demonstrate results. In addition, early improvement trends and comparative data in areas of importance to key organizational requirements are evident. If this were an actual Baldrige application with this scoring profile instead of a case study, the CapStar Health System probably would have been evaluated by a group of Examiners, each working independently during the Stage 1—Independent Review. For the 2002 Examiner Preparation Course, the CapStar Health System Case Study was evaluated using the Stage 2—Consensus Review Process, and site visit issues were developed and included as part of the case study scorebook.



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Malcolm Baldrige National Quality Award

I. Applicant

Official Name CapStar Health System, Inc.

Other Name N/A

Prior Name N/A

Headquarters Address _____

1000 Wellness Way

Cincinnati, OH 45202

2. Highest-Ranking Official

Mr. Mrs. Ms. Dr.

Name Joe Picardson

Title President & Chief Executive Officer

Applicant Name CapStar Health System, Inc.

Telephone No. (513) 555-3616

E-mail jpgicardson@capstar.com

Address 1000 Wellness Way

Cincinnati, OH 45202

Fax No. (513) 555-3108

3. Eligibility Contact Point

Mr. Mrs. Ms. Dr.

Name Leslie Smith

Title Health Care Excellence Manager

Applicant Name CapStar Health System, Inc.

Telephone No. (513) 555-4210

Fax No. (513) 555-4424

E-mail lsmith@capstar.com

Address 1000 Wellness Way

Cincinnati, OH 45202

Overnight Mailing Address (Do not use a P.O. Box number.)

same as above

4. Alternate Eligibility Contact Point

Mr. Mrs. Ms. Dr.

Name Rupert Manning

Telephone No. (513) 555-4212

Fax No. (513) 555-4424

5. Applicant Status (Check one.)

Has the applicant officially or legally existed for at least one year, or prior to April 16, 2001? Yes No

OMB Clearance #0693-0006—Expiration Date: October 31, 2002

This form may be copied and attached to, or bound with, other application materials.

If you are unable to answer any questions or answer any questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

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6. Award Category and For-Profit/Not-For-Profit Designation *(Check as appropriate.)*

- | | | |
|---|---|--|
| <input type="checkbox"/> Manufacturing (For-Profit Only) | <input type="checkbox"/> Education | <input checked="" type="checkbox"/> Health Care |
| <input type="checkbox"/> Service (For-Profit Only) | <input type="checkbox"/> For-Profit | <input type="checkbox"/> For-Profit |
| <input type="checkbox"/> Small Business (For-Profit Only) | <input type="checkbox"/> Not-For-Profit | <input checked="" type="checkbox"/> Not-For-Profit |

Criteria being used: *(Check one.)*

- | | | |
|-----------------------------------|------------------------------------|---|
| <input type="checkbox"/> Business | <input type="checkbox"/> Education | <input checked="" type="checkbox"/> Health Care |
|-----------------------------------|------------------------------------|---|

(For-profit Education and Health Care organizations may also choose to use the Business Criteria and apply in the Service or Small Business categories.)

7. Industrial Classification

List up to three of the most descriptive three- or four-digit NAICS codes. *(See page 19 of this booklet or the PDF version of Baldrige Award Application Forms at www.quality.nist.gov/Award_Application.htm.)*

- a. 622 b. 6214 c. 6219

8. Size and Location of Applicant

- a. Total number of
- employees (business) _____
 - faculty/staff (education) _____
 - staff (health care) 4981
- b. For the preceding fiscal year,
- Check one financial descriptor: Sales Revenues Budgets
 - Check amount: 0-\$1M \$1M-\$10M \$10M-\$100M \$100M-\$500M \$500M-\$1B Over \$1B
- c. Number of sites: U.S./Territories 12 Overseas 0
- d. Percentage of employees: U.S./Territories 100% Overseas 0%
- e. Percentage of physical assets: U.S./Territories 100% Overseas 0%
- f. If some activities are performed outside the applicant's organization (e.g., by an overseas component of the applicant, the parent organization, or its other subunits), will the applicant, if selected for a site visit, make available in the United States sufficient personnel, documentation, and facilities to allow full examination of its operational practices for all major functions of its worldwide operations?
 Yes No Not Applicable
- g. In the event the applicant receives an Award, can the applicant make available sufficient personnel and documentation to share its practices at the Quest for Excellence Conference and at its U.S. facilities?
 Yes No
- h. Attach a line and box organization chart for the applicant organization, including the name of the head of each unit or division.

If you are unable to answer any questions or answer any questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

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9. Subunits *(If the applicant is not a subunit as defined on pages 6-7, please proceed to question 10.)*

a. Is the applicant _____ a larger parent or system? *(Check all that apply.)*

- | | | |
|--|---|--------------------------------------|
| <input type="checkbox"/> a subsidiary of | <input type="checkbox"/> a unit of | <input type="checkbox"/> a school of |
| <input type="checkbox"/> a division of | <input type="checkbox"/> a like organization of | <input type="checkbox"/> owned by |
| <input type="checkbox"/> controlled by | <input type="checkbox"/> administered by | |

b. Parent Organization

Name _____	Highest-Ranking Official _____
Address _____	Name _____
_____	Title _____
Number of worldwide employees of the parent _____	

c. Is the applicant the only subunit of the parent organization intending to apply? *(Check one.)*

- Yes No *(Briefly explain.)* Do Not Know

d. Name of the official document (e.g., dated Annual Report, press release) supporting the subunit designation.

e. Briefly describe the organizational structure and relationship to the parent.

Attach line and box organization chart(s) showing the relationship of the applicant to the highest management level of the parent, including all intervening levels. Each box within the chart should include the name of the head of the unit or division.

f. Is the applicant's product or service unique within the parent organization? *(Check one.)*

- Yes No

If "No," do other units within the parent provide the same products or services to a different customer base? *(Check one.)*

- Yes No

If "No," please provide a brief explanation of how the applicant is distinguishable from the parent and its other subunits *(e.g., market/location/name)*.

If you are unable to answer any questions or answer any questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

Malcolm Baldrige National Quality Award**9. Subunits—continued**

- g. **Business only.** Are 50 percent or more of the applicant's products or services sold or provided to customers outside the applicant's organization? Yes No
- h. **Business only.** Are less than 50 percent of the applicant's products or services sold or provided to the following? *(Please indicate "Yes" or "No" for each part of this question.)*
- the parent organization Yes No
 - other organizations controlled by the applicant or parent Yes No
- i. **Business only.** *(Check all that apply.)*
- Does the applicant have more than 500 employees? Yes No
 - Do the applicant's employees make up more than 25 percent of the worldwide employees of the parent? Yes No
 - Was the applicant independent prior to being acquired—and does it continue to operate independently under its own identity? Yes No
- j. **Business only.** Briefly describe the major support functions provided to the applicant by the parent or by other subunits of the parent. *(Examples might include human resources, legal, accounting, information technology, etc.)*

10. Supplemental Sections *(Check one.)*

- The applicant has: (a) a single performance system that supports all of its product and/or service lines; and (b) products or services that are essentially similar in terms of customers/users, technology, types of employees, and planning.
- The applicant has: (a) multiple performance systems that support all of its product and/or service lines; and (b) products or services that are essentially similar in terms of customers/users, technology, types of employees, and planning.

Note: The applicant's Eligibility Contact Point will be contacted if the second option is checked. Applicants may have two or more diverse product and/or service lines (i.e., in different NAICS codes) with customers, types of employees, technology, planning, and quality systems that are so different that the application report alone does not allow sufficient detail for a fair examination. Such applicants may submit one or more supplemental sections in addition to the application report. The use of supplemental sections must be approved during the Eligibility Certification process and is mandatory once approved.

(Please describe briefly the differences among the multiple performance systems of your organizations in terms of customers, types of employees, technology, planning, and quality systems.)

If you are unable to answer any questions or answer questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

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11. Summary List of Questions

Have each of the questions that follow been answered "Yes" or have the applicable responses been checked? (Answering any of these questions "No" or leaving a response blank means that the applicant is not eligible for the 2002 Malcolm Baldrige National Quality Award.)

- Question 5: Has the applicant officially or legally existed for at least one year, or prior to April 16, 2001?
- Question 6: Have an Award Category and a For-Profit/Not-For-Profit Designation been checked?
- Question 9g: **Business only.** Are 50 percent or more of the applicant's products or services sold or provided to customers outside the applicant's organization?
- Question 9h: **Business only.** Are less than 50 percent of the applicant's products or services sold or provided to its parent and other organizations controlled by the applicant or parent? Question 9g and both parts of question 9h should be answered "Yes."

At least one of the responses to the three questions included in Question 9i must be answered "Yes."

- Question 9i: **Business only.**
 - Does the applicant have more than 500 employees?
 - Do the applicant's employees make up more than 25 percent of the worldwide employees of the parent?
 - Was the applicant independent prior to being acquired—and does the applicant continue to operate independently under its own identity?

12. Self-Certification Statement, Signature of the Highest-Ranking Official

I certify that the answers provided are accurate and that my organization is eligible based on the current requirements for the 2002 Malcolm Baldrige National Quality Award. I understand that at any time during the Award Process cycle, if the information provided was inaccurate, my organization will no longer be eligible for the award and will only be eligible to receive a feedback report.

March 14, 2002
Date

X 
Signature

Joe Picardson, MD
Printed Name

The Malcolm Baldrige National Quality Program is launching a pilot program in 2002 that enables one member of each eligibility applicant's organization to become a member of the 2002 Board of Examiners. To take advantage of this opportunity, self-certified eligibility applications must be postmarked on or before March 15, 2002.

We are sending Dr. Mark Worfman to serve on the 2002 Board of Examiners.

If you are unable to answer any questions or answer any questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

Malcolm Baldrige National Quality Award

The following information is needed by the Malcolm Baldrige National Quality Award Program Office to provide the most effective evaluation possible by the Board of Examiners.

I. Site Listing and Descriptors

Please refer to the instructions on page 15 of this booklet or the PDF version of *Baldrige Award Application Forms* at www.quality.nist.gov/Award_Application.htm to complete this Site Listing and Descriptors form. It is important that the totals for the number of employees, faculty, and staff; percentage of sales, revenues, and budgets; and sites on this form match the totals provided in response to questions 8.a., 8.b., and 8.c. on page 2 of the 2002 Eligibility Certification Form. For example, if you report 600 employees in response to question 8.a., the total number of employees provided in the Site Listing and Descriptors form should be 600.

Address of Site(s)	Number Employees, Faculty, and/or Staff	Percentage <input type="checkbox"/> Sales <input type="checkbox"/> Revenues <input checked="" type="checkbox"/> Budgets	Description of Products, Services, and/or Technologies for each site
Excelsion Medical Center 1000 Wellness Way Cincinnati, Ohio	2212	41.2%	General hospital services and tertiary care specialties in cardiac services, oncology, trauma, stroke, sports medicine, and physical rehabilitation; medical student and resident training.
Founders Hospital 1 Faith Hill Road Stoneville, Ohio	1161	20.8%	General hospital services, with specialties in women's care, geriatrics, general and plastic surgery, and behavioral health
Roseleaf Community Hospital 9 Daniel Way Crockett, Kentucky	739	14.3%	General hospital services, including pediatrics, with regional strength in orthopedics and arthritis care
Hergh Community Hospital 8 Tupelo Avenue Benjamin, Indiana	460	11.6%	General hospital services, pediatrics, and dialysis
CapCare Centers (6) (Cincinnati Metropolitan Service Area)	88	7.3%	Primary care physician offices with selected specialties, including cardiology, pediatrics, obstetrics/gynecology, dermatology, and plastic surgery
			<i>continued on next page</i>

Provide all the information for each site, except where multiple sites produce similar products or services. For multiple site cases, refer to "c" under item 8, which is titled Size and Location of Applicant. See page 8, 2002 Eligibility Form—Instructions, of this booklet or the PDF version of *Baldrige Award Application Forms* at www.quality.nist.gov/Award_Application.htm.

Use as many additional copies of this form as needed to include all sites.

If you are unable to answer any questions or answer any questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

Malcolm Baldrige National Quality Award**I. Site Listing and Descriptors (continued)**

Address of Site(s)	Number Employees, Faculty, and/or Staff	Percentage <input type="checkbox"/> Sales <input type="checkbox"/> Revenues <input checked="" type="checkbox"/> Budgets	Description of Products, Services, and/or Technologies for each site
Galaxia Home Health Care 405 Inverness Drive Cincinnati, Ohio	118	2.1%	Durable medical equipment and IV home services
CapStar Corporate Office 1000 Wellness Way Cincinnati, Ohio	203	2.7%	Corporate administration, financial services, information services, legal, compliance, CapCollege, and regional affiliations

2. Key Business/Organization Factors—List, briefly describe, or identify the following key organization factors:**A. List of key competitors**

Riverport University Hospital
Goldenrod Hospital System
Zefram Memorial Hospital
CNT Integrated Care
Veterans Health Administration
Outpatient diagnostic and treatment centers (various)
River's Edge Surgical Center, Inc.

B. List of key customers/users

Active Inpatients, Outpatients, Home Care Patients, and Families of Patients
Potential or Inactive Patients
Physicians
Payors
Employers
Community Organizations

If you are unable to answer any questions or answer any questions "No," please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.

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C. List of key suppliers

Beaver and Newton (Medical/Surgical Supplies)
Middleton and Green (Office and Other Nonmedical Supplies)
South Summit Laboratories
Express Pharmaceuticals
Twin Scientific Products
Stoneyridge Foods
Majestic Housekeeping
ERCare, Inc.
Calmstate Anesthesiology Services
InsideYou, Inc.
Healthcognizant, Inc.
Reliastate Insurance Management System (Insurance Contract Management)
Uriwise, Inc. (Dialysis)

D. Description of the major markets (local, regional, national, and international)

Ninety-one percent of CapStar's patients reside within the 13 counties of the Greater Cincinnati Metropolitan Service Area (MSA). This encompasses five counties in southern Ohio, two counties in southeast Indiana, and six counties in northern Kentucky. Seven of the counties constitute the Primary Service Area, and six counties fall into the Secondary Service Area. The remaining 9 percent of patients come from other areas in the tristate region.

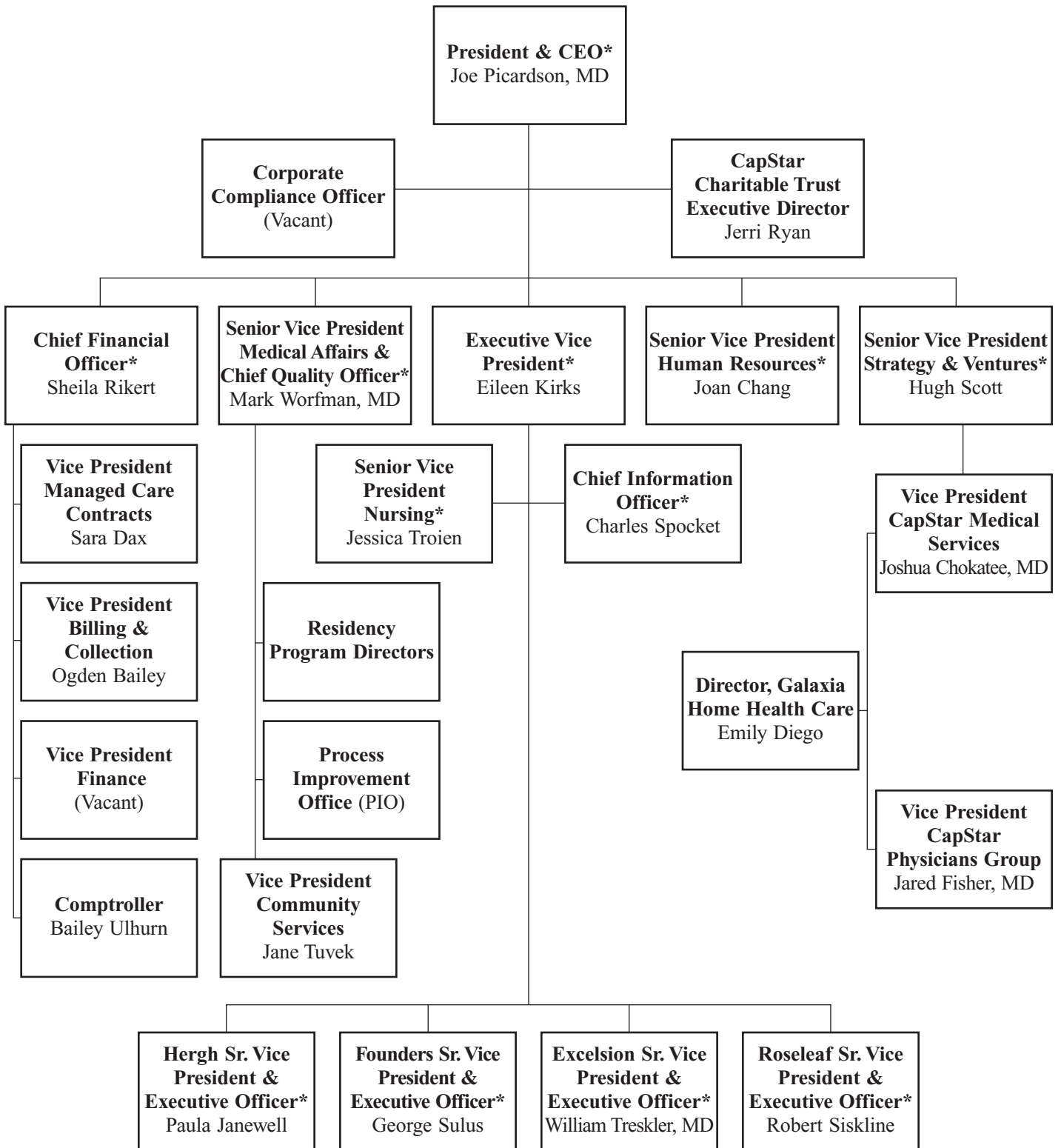
E. The name of the organization's financial auditor

Upper Middle States Accounting, an independent auditor, audited CapStar's consolidated financial statements in accordance with generally accepted auditing standards.

**If you are unable to answer any questions or answer any questions "No,"
please contact the Baldrige Program Office at (800) 898-4506 before submitting your form.**

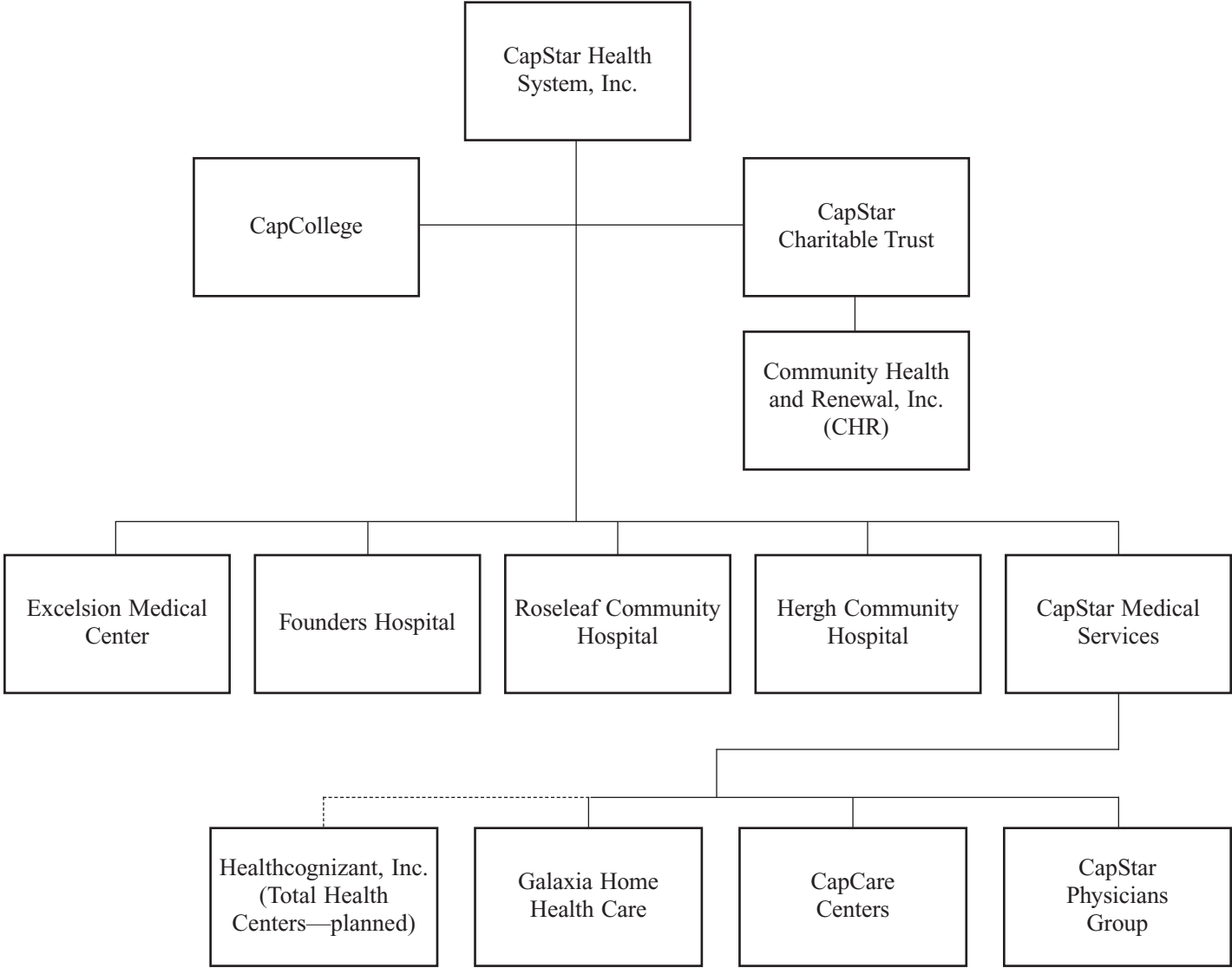
Corporate Staff Organizational Chart

CapStar Health System, Inc. (CapStar) Board of Directors



* Member of CapStar Executive Leadership Team (ELT)

CapStar Corporate Structure



----- Indicates joint venture with partner

2002 Application Form

Malcolm Baldrige National Quality Award

1 Applicant

Name CapStar Health System, Inc.

Mailing Address 1000 Wellness Way

Cincinnati, OH 45202

2 Award Category (Check one.)

Manufacturing Service Small Business
 Education Health Care

For small businesses, indicate whether the larger percentage of sales is in service or manufacturing.
(Check one.)

Service Manufacturing

Criteria being used (Check one.)

Business Education Health Care

3 Official Contact Point

Mr. Mrs. Ms. Dr.

Name Leslie Smith

Title Health Care Excellence Manager

Applicant Name CapStar Health System, Inc.

Mailing Address 1000 Wellness Way

Cincinnati, OH 45202

Overnight

Mailing Address (Do not use P.O. Box number.)

same as above

Telephone No. (513) 555-4210

Fax No. (513) 555-4424

4 Alternate Official Contact Point

Mr. Mrs. Ms. Dr.

Name Rupert Manning

Telephone No. (513) 555-4212

Fax No. (513) 555-4424

5 Application Fees (See page 23 for instructions.)

Enclosed is \$ 5,000 to cover one application report and _____ supplemental sections.

Make check or money order payable to:

The Malcolm Baldrige National Quality Award

6 Release Statement

We understand that this application will be reviewed by members of the Board of Examiners.

Should our organization be selected for a site visit, we agree to host the site visit and to facilitate an open and unbiased examination. We understand that our organization must pay reasonable costs associated with a site visit. The range of site visit fees is \$20,000 – \$35,000.

If our organization is selected to receive an Award, we agree to share nonproprietary information on our successful performance excellence strategies with other U.S. organizations.

7 Signature of the Highest-Ranking Official

Date May 24, 2002

X 

Mr. Mrs. Ms. Dr.

Name Joe Picardson

Title President and Chief Executive Officer

Applicant Name CapStar Health System, Inc.

Mailing Address 1000 Wellness Way

Cincinnati, OH 45202

Telephone No. (513) 555-3616

Fax No. (513) 555-3108

OMB Clearance #0693-0006
Expiration Date: October 31, 2002

This form may be copied and attached to, or bound with, other application materials.

Organizational Profile

P.1 Organizational Description

P1.a Organizational Environment

Based in Cincinnati, Ohio, CapStar Health System, Inc. (CapStar) is a not-for-profit health care system providing services in southern Ohio, northern Kentucky, and southeast Indiana. CapStar is composed of its corporate office, four hospitals, six outpatient centers, and a home care operation. Net patient service revenues were \$754 million in 2001. The Operating Units (OUs) of CapStar are Excelsion Medical Center (Excelsion); Founders Hospital (Founders); Roseleaf Community Hospital (Roseleaf); Hergh Community Hospital (Hergh); and CapStar Medical Services (CapStar Medical), which includes the six outpatient CapCare Centers (CapCare), CapStar Physician's Group, Galaxia Home Health Care, and the joint venture with Healthcognizant, Inc. CapStar was founded in 1994 through the merger of Excelsion in downtown Cincinnati and Founders in a northern suburb following a cooperative relationship. Both were among the first Ohio members of the Preeminent Hospitals of North America (PHNA) hospital alliance. The alliance enabled independent hospitals to jointly develop strategies and gain other advantages such as discount supply purchasing. The two hospitals merged from positions of strength as a proactive move to protect their financial performance and to retain their market shares as Managed Care Organizations (MCOs) sought deep pricing discounts. In addition, a competitor, Riverport University Hospital (RUH), started to reverse its isolationist tendencies by developing relationships with other hospitals in the area. Roseleaf in Kentucky and Hergh in Indiana joined CapStar in 1997 and 1998, respectively. Both were concerned about becoming isolated as other hospitals in the region merged and managed care companies continued to receive pricing concessions from independent hospitals. Hergh was vulnerable since it had a comparatively weak balance sheet and a physical plant that was seriously outdated.

Like many health care organizations, CapStar incurred operating losses in 1999 and 2000. Losses were due to the combined effects of the reduced reimbursement resulting from the Balanced Budget Act (BBA), increased costs of drugs and technology, accelerating costs to recruit staff in several shortage disciplines, and costs associated with the Roseleaf and Hergh mergers. CapStar improved its financial performance in 2001 and 2002 year-to-date (YTD) and has been able to protect its balance sheet. In addition, CapStar has a limited amount of unrestricted assets. As the stock market declined in 2001, investments were moved into conservative investment portfolios, resulting in negligible losses in capital to date.

The CapStar Charitable Trust is the principal fundraising arm of the health system. Its subsidiary, Community Health and Renewal, Inc. (CHR), works with other community-based organizations to provide access to health services and to support neighborhood renewal.

P.1a(1) Main Health Care Services

Each hospital offers general medical, surgical, and obstetrics inpatient services. Roseleaf and Hergh also offer pediatrics because Riverport Children's Hospital is distant from their service areas. In addition to basic inpatient services, Excelsion, Founders, and Roseleaf specialize in several areas:

Excelsion: trauma, cardiac services, oncology, stroke, sports medicine, physical rehabilitation

Founders: women's care, geriatrics, plastic and reconstructive surgery, behavioral health services

Roseleaf: orthopedics, arthritis

Hergh has long served as the sole general acute care hospital in a rural area of Indiana with a declining population. The six CapCare Centers are primary care centers for family practitioners and internists in the Cincinnati Metropolitan Service Area (MSA). Several specialists, including allergists, gastroenterologists, and neurologists, rent space in these centers.

CapStar is a teaching organization with resident training programs in internal medicine, general surgery, family practice, emergency medicine, radiology, and orthopedics. It also provides training in association with the Central Ohio School of Public Health for physical therapists, nutritionists, and nurse anesthetists. CapStar purchased 11 physician practices as an offensive strategy to secure influence over primary care services and has reduced significantly early losses in operating these practices.

Discussions are under way to sell Galaxia Home Health Care to a third party, since this segment faces lower Medicare funding.

P.1a(2) Purpose, Destiny, and Values

Since its founding, CapStar has been devoted to service to people. CapStar's fervent belief in Purpose, Destiny, and SPIRIT Values (shown in Figure P.1-1); Commitment to Excellence; and Critical Success Factors (CSFs) (Figure P.2-1) is the result of two tragic events that occurred in 1993. Although Excelsion was an adopter of quality management in the late 1980s, these early efforts were not fully productive. Early in 1993, a six-year-old boy hospitalized for a routine hernia repair died in the operating room due to a medication error. Two months later, the wife of one of the internists on staff died following many years of severe diabetes with multiple complications requiring frequent admission to the hospital. Several days following

her death, her husband addressed the hospital’s Board and described in detail the problems experienced during her hospitalizations, including charting and medication errors, miscommunications, delays in administering pain medication that caused his wife to suffer unnecessary agony, and staff and physician insensitivity. The retelling of this experience by this well-regarded member of the medical staff had a profound effect on the organization. Both tragic events highlighted the need for Excelsion to explore new ways to become a better health care provider. By the time CapStar was formed, the pursuit of excellence had become pervasive throughout the organization and served as a foundation for the new CapStar system.

P.1a(3) Talent Profile

CapStar employs 4981 colleagues in 315 job classifications. The workforce is primarily female (71 percent). Over 90 percent of colleagues are in non-management roles—41 percent professional, 22 percent technical, 14 percent clerical, and 13 percent service. Forty-one

percent of full-time colleagues are licensed clinicians. Nurses at Excelsion have been represented by Nurses Unity Local 32 since 1981. Local 77 of the Pinewest Engineers Council represents the plant engineering and maintenance staff. There are no other unions at CapStar. CapStar colleagues generally represent the demographic makeup of their respective communities.

CapStar employs 34 FTE hospital-based physicians, including residency program directors and 14 hospitalists (see Glossary) in various administrative/clinical capacities, in addition to the 11 primary care physician practices acquired since 1996. CapStar contracts centrally for radiologists, anesthesiologists, pathologists, and emergency physicians except at Hergh, which continues to contract separately for these services. CapStar provides training for 102 residents in internal medicine, general surgery, family practice, emergency medicine, and orthopedics. There are 711 independent physicians on the active staff of all CapStar hospitals. CapStar has had workforce reductions of 807 FTEs since 1996. These reductions included 484 FTEs affected by the closure of Romland Hospital in 2000. CapStar acquired Romland in 1995 and closed it after five years of losses. Located northwest of Cincinnati in an area that had lost significant population, Romland could no longer exist in the midst of downward pricing from insurers. In each layoff, CapStar offered affected employees job placement and retraining support uncommon for the health care industry.

P.1a(4) Facilities, Equipment, and Technology

All CapStar facilities (Figure P.1-2) use an extensive array of surgical, diagnostic, and therapeutic equipment. In the past year, CapStar’s systematic technology evaluation method has focused on radiological imaging and medical error elimination technology. As a certified trauma center, CapStar is a part owner with other area trauma centers in a shared air ambulance company, RiverStar Rescue. For over a decade, CapStar has made significant investments in operational, clinical, and financial information systems. All CapStar facilities are connected via the Knowledge Information System (KIS), which is becoming increasingly Web based. CapStar has won several “Most Connected Awards” in the past six years. CapStar plans to invest \$5–8 million/year in KIS during the next ten years.

P.1a(5) Regulatory Environment

Health care is a highly regulated industry focusing on patient and employee safety, compliance, and business processes. CapStar is licensed to operate by the states of Ohio, Kentucky, and Indiana and is subject to numerous state agency regulations dealing with hospital licensure, land use, state charitable agency provisions, trauma center certification, and staff licensure. On the federal level, CapStar is subject to regulations of the Centers for Medicare and Medicaid Services (CMS), Occupational Safety and Health Administration (OSHA), Environmental

OUR PURPOSE	
“To cherish, preserve, and improve health. We exist to enrich the human experience and fulfill the needs of our patients. We pledge to honor the dignity of every person we serve.”	
OUR DESTINY	
“To seek out, embrace, and nurture the finest talent, knowledge, and science possible to deliver role model health services to people.”	
OUR VALUES	
Our Values guide individual and collective work toward achieving our Purpose, our Destiny, and our CSFs. Our SPIRIT Values are a constant reminder of the importance of our work and the vitality of our culture.	
Service	We excel in surpassing even the unexpressed expectations of our patients and customers.
Pride	We celebrate our contribution to society and find in it the energy to excel.
Integrity	We make our promises to patients, customers, and each other come true.
Respect	We appreciate the talent each of us brings to improving health and extending life.
Innovation	We are all explorers and creators of ways to improve how we serve.
Teamwork	We learn from each other and work together to achieve our Purpose and to capture our Destiny.

Figure P.1-1 CapStar Purpose, Destiny, and Values

Facility	Year(s) Built	Condition	Staffed Beds	FTE Colleagues
Excelsion	1925–89	Good	461	2212
Founders	1949–94	Very Good	267	1161
Roseleaf	1993	Excellent	142	739
Herg	1968	Fair	107	460
CapCare	1995–99	Very Good	NA	88
Galaxia	NA	NA	NA	118
Corporate Office	NA	NA	NA	203
<i>Excellent</i> —requires no significant improvements. <i>Very Good</i> —more than adequate for current needs; may require minimum improvements in the future. <i>Good</i> —adequate for current needs; will require significant facility revision to meet future needs. <i>Fair</i> —inadequate to meet contemporary medical delivery; requires extensive to total near-term replacement.				

Figure P.1-2 CapStar Facilities

Protection Agency, Nuclear Regulatory Agency, and Centers for Disease Control and Prevention. In addition to government regulatory requirements, CapStar participates in numerous accreditation programs, including the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the American College of Surgeons, the College of American Pathologists, and multiple accrediting bodies related to CapStar’s teaching programs.

P.1b Organizational Relationships

P.1b(1) Patient/Customer Segments and Requirements

Ninety-one percent of CapStar patients reside within the 13-county MSA that encompasses 5 counties in Ohio, 2 in Indiana, and 6 in Kentucky. Cincinnati is located in Hamilton County. Seven counties constitute the Primary Service Area (PSA), and six counties fall into the Secondary Service Area (SSA). The remaining 9 percent of patients come from other areas in the tristate region. The population of the MSA has increased 8.9 percent since 1990 to 1,979,553. Although the overall population is expected to continue its growth rate, the population has declined slightly in Hamilton County, Ohio, and nearby counties in Kentucky. In addition, 10.2 percent of the overall population is uninsured. CapStar has identified six customer segments as shown in Figure P.1-3.

CapStar did not fully engage in the practice acquisition frenzy of the mid-1990s and acquired only 11 primary care physician practices that staff the six CapCare Centers. Instead of using reserves to buy physician practices, CapStar differentiated itself by systematically integrating physicians into the highest levels of leadership and policy-making, developing and deploying industry-leading methods of patient focus, cultivating the potential of the staff, and adopting Compassionate Operational

Customer Segments	Requirements
Active Inpatients, Outpatients, Home Care Patients, and Families. Subsegments include age, gender, medical condition, clinic relationship, referral source, insurance coverage	Access to effective 24/7/365 error-free care, compassionate/caring environment, reliable/consistent information, participation in health care decisions, accommodations for visitors
Potential or Inactive Patients. No services received within the last three years by CapStar	Easy access, compelling reasons to seek care at CapStar vs. elsewhere, accurate answers to inquiries, knowledge of how CapStar is better
Physicians. Primary care, specialists, referring physicians, and physician competitors	Knowledgeable, pleasant colleagues/staff; easy access to technology and facilities; real-time clinical information; input into CapStar policies and decision making; high patient satisfaction
Payors. Government, managed care, indemnity, billing	Low costs, quality care, responsiveness, accuracy, range of services
Employers. Local businesses/organizations in the communities served	Convenient access; healthy, satisfied employees; quality care at lowest possible cost; wellness and disease prevention information and services
Community Organizations. Local government, schools, churches, tristate civic associations such as Civic Stride, local chapters of heart and diabetes associations	Community health improvement; provision of volunteer support; financial aid and access to health information; support of school-based clinics; violence prevention programs; and economic and development councils

Figure P.1-3 Patient/Customer Segments and Requirements

Excellence (COE) as the operating model. CapStar believes that the best approach to retaining the loyalty of an independent medical staff is to earn it instead of trying to control physicians through ownership. Consequently, CapStar has developed a physician leadership grooming process unique among health care systems and enjoys extensive physician involvement in its key clinical and operational initiatives.

P1.b(2) Key Suppliers and Partners

CapStar belongs to PHNA, one of the largest national group purchasing organizations. Annually, CapStar spends over \$185 million on goods and services. Five nationally known suppliers provide 68 percent of the purchased supplies: Beaver and Newton for general medical/surgical supplies, Middleton and Green for office and other non-medical products, South Summit Laboratories, Express Pharmaceuticals, and Twin Scientific Products. Key service contracts include Stoneyridge Foods; Majestic Housekeeping; Uriwise, Inc. (for dialysis); Reliastate Insurance Management System (for insurance contract management); and multiple agencies for temporary staff. CapStar continuously seeks to reduce the total number of suppliers.

Key clinical partners include ERCare, Inc., for emergency physician services; Calmstate Anesthesiology Services for anesthesiology services; InsideYou, Inc., for radiologists; and Healthcognizant, Inc., for the ten new ambulatory/fitness facilities CapStar plans to open in selected population growth areas of the region. The Veterans Health Administration (VHA) has patient transfer agreements with CapStar and RUH and leases space in four CapCare Centers for Community Based Outpatient Centers.

P.2 Organizational Challenges

P.2a Competitive Environment

P.2a(1) Competitive Position

The health care services industry in the region has been in a state of change since the early 1990s when MCOs entered the marketplace. By 1997, MCOs had achieved significant market penetration and clout with over 50 percent of the total commercial Medicare and Medicaid market. WellOhioCare (WOC), the largest MCO, has over 600,000 members and has secured deep pricing discounts from hospitals and physicians. Hospitals that were not in the network lost significant market share. The cumulative effect of WOC's and the other MCOs' contracting strategy forced the closure of four hospitals, including Romland.

CapStar is the second largest health care system in the region in terms of staffed beds and net revenue. In 2001, CapStar's overall market share based on percent of admissions was 20 percent in the MSA. Excelsion receives 23 percent of all the patients referred to hospitals in Cincinnati for advanced care from across the region. CapStar's principal competitors are as follows:

1. RUH (1236 beds) includes Riverport Children's Hospital and Collin Institute of Psychiatry. RUH is located on the campus of the Exeter School of Medicine (Exeter). RUH and Exeter receive in excess of \$110 million per year from government agencies, foundations, and corporations to support medical research.

RUH is an organ transplant center and a vigorous competitor in oncology services. Riverport Children's Hospital is a highly regarded and cherished asset in the community and dominates the pediatric marketplace.

2. Goldenrod Hospital System has two hospitals (488 beds). One in downtown Cincinnati serves as a trauma hospital and has strong services in cardiology, neurosurgery, and burn care. Its other hospital is located in a southern Cincinnati suburb near Kentucky.
3. Zefram Memorial Hospital (404 beds) is located two miles from Founders with strong programs in psychiatry, physical rehabilitation, and geriatrics.
4. CNT Integrated Care has three hospitals (643 beds)—one in Cincinnati, one in a northwestern suburb, and one in Kentucky. CNT is owned and managed by Klingrom Health Management, a national for-profit hospital company.
5. The VHA operates two hospitals and several medical facilities. Veterans who have dual health care benefits are eligible to use CapStar facilities or VHA facilities.
6. Several competitive outpatient diagnostic and treatment centers have opened, including eight diagnostic imaging centers and two surgical day centers.
7. River's Edge Surgical Center, Inc., specializing in short-stay surgery—3 days or less—is opening a new 80-bed hospital in the same service area as Founders (CapStar's best financial performer). River's Edge focuses on amenities for surgeons, patients, and families to make the surgical experience as dignified and as comforting as possible.

P.2a(2) Principal Factors for Success

CapStar's Purpose and Destiny would be promises unkept were it not for the commitment of senior leadership and colleagues who believe in the SPIRIT Values and demonstrate them every day for CapStar patients, customers, and colleagues. CapStar's success depends upon its ability to achieve its seven CSFs (Figure P.2-1).

P.2b Strategic Challenges

RUH Threat: During the last five years, RUH has become increasingly aggressive in targeting CapStar as its chief competitor. RUH continues its intense pursuit of CapStar's key physicians. Although CapStar has maintained physician loyalty, shifts in loyalty are possible. In addition, RUH has expanded its outreach activities to increase its share of patients referred for advanced care, one of Excelsion's most profitable services. RUH recently announced a new service excellence initiative and a \$15 million endowment to establish a Neurodegenerative Disease Institute to recruit world-class talent and to provide services for patients with Alzheimer's, Parkinson's, and Multiple Sclerosis. RUH, as the area's only multi-organ

1. Patients First: Why We Exist
2. Physician Distinction: Our Key Partners
3. High Performing Colleagues: Extraordinary Talent, Employer of Choice
4. Compassionate Operational Excellence: Efficient, Effective, Affordable, and Caring
5. Finance and Market Strength: Bottom Line Performance
6. Information Anywhere Anytime: Belief in Knowledge
7. Community Support: Citizenship

Figure P.2-1 CapStar’s Critical Success Factors (CSFs)

transplant center, has captured the advanced care image in the region. CapStar constantly strives to differentiate its products and services to compete with this image.

Managed Care Price Pressure and Increasing Drug Costs: Extensive changes in the health care system in the United States have brought challenges to the relationship between the insurance market and hospitals. CapStar is impacted by the downward price pressures from Medicare, Medicaid, and MCOs despite increases in operating costs due to manpower shortages and steep increases in drug costs. Additionally, the insurance market itself has been in turmoil, with several companies competing for market share. Consequently, it is difficult to establish mutually beneficial, long-term relationships with insurers, who influence where patients seek care. Despite these challenges, CapStar is committed to working with MCOs and other key organizations in promoting and protecting patients’ health, as well as seeking opportunities for developing common goals to ensure quality health care services are delivered to its patients.

River’s Edge Surgical Center: This new hospital threatens the profitable ambulatory surgery service of Founders.

Uncompensated Care: Excelsion is adjacent to one of Cincinnati’s most economically depressed neighborhoods. Consequently, it carries a disproportionately high volume of Medicaid and free care. Medicaid reimbursement is the lowest among all insurers. CapStar’s uncompensated care in FY 2000 was \$42 million.

Aging Plant: Excelsion is aging and no longer suitable for easy adoption of emerging technology. Extensive facility expansion will cost an estimated \$80 million. However, the population has declined 9 percent in the immediate area surrounding the hospital.

Increased Access: CapStar is opening ten Total Health Centers (THCs) in partnership with Healthcognizant, Inc. These centers will house physician offices, fitness facilities, rehabilitation services, and counseling/preventive health services. THCs represent CapStar’s primary strategy to increase presence in and provide access for higher population growth areas.

Achieving Systemwide Quality, Productivity, and Medical Staff Collaboration: Although CapStar has made measurable progress in service excellence, productivity, and clinical processes, the full advantages of creating CapStar remain to be leveraged. CapStar continues to align once independent physicians from four separate hospitals into a collaborative medical staff.

Staffing Shortages: There is a regional and national shortage of therapists, technicians, and nurses, many of whom are approaching retirement age without sufficient numbers of qualified candidates to replace them.

Hergh Performance: The decision to join CapStar in 1998 was controversial and not unanimous within the Hergh community. Consequently, Hergh was a reluctant partner in several CapStar initiatives. Until recently, Hergh’s performance lagged well behind the rest of the system. Since then, the CEO has retired, and Hergh has made progress in catching up with the other OUs.

P.2c Performance Improvement System

The performance improvement system begins with the Executive Leadership Team (ELT) and each Interlocking Committee (IC) responsible for assuring high performance targets are met. This system is mirrored at each OU with a Senior Leadership Team (SLT) and OU-level ICs (Figure 1.1-1). The new service design and improvement processes, the Process Evolution Cycle (PEC) (Figure 6.1-1) and the Process Improvement Cycle (PIC) (Figure 6.1-4), respectively, have been developed and fully deployed to all OUs. Since 1998, the Baldrige framework has been used to design the culture and performance improvement system. CapStar completed a high-level Baldrige self-assessment in 1998 and a more in-depth assessment in 2000. The Baldrige Criteria and Core Values serve as the foundation for the leadership system’s strategy development and are referenced frequently as the Baldrige nomenclature becomes the common language of the organization.

Glossary of Terms and Abbreviations

ADE

Adverse Drug Event

AP

Agility Process

AMI

Acute Myocardial Infarction

BBA

Balanced Budget Act

Board

Board of Directors

BSC

Balanced Scorecard

CABG

Coronary Artery Bypass Graft

CapCare

CapCare Centers

CapStar

CapStar Health System

CBC

Complete Blood Count

CCR

Customer Concern and Recovery Process

CHF

Congestive Heart Failure

CHR

Community Health and Renewal, Inc.

CIO

Chief Information Officer

CMS

Centers for Medicare and Medicaid Services

CNT

CNT Integrated Care

COE

Compassionate Operational Excellence

COPD

Chronic Obstructive Pulmonary Disease

CQO

Chief Quality Officer

C-section

Cesarean Section

CSF

Critical Success Factor

CT

Computerized Tomography

CXR

Chest X-Ray

Dialogue

Colleagues' Dialogue

DRG

Diagnosis Related Group

ED

Emergency Department

EKG

Electrocardiogram

ELT

Executive Leadership Team

EPI

Excellence Performance Institute

EVP

Executive Vice President

Excelsion Medical Center

Excelsion

Exec Med

Executive Medical Staff Team

FMS

Finance and Market Strength

Founders

Founders General Hospital

FTE

Full-Time Equivalent

Galaxia

Galaxia Home Health Care

Gyn/Oncologist
Gynecologic Oncologist

Hergh
Hergh Community Hospital

HIPAA
Health Insurance Portability and Accountability Act

Hospitalist
Full-time physician directly employed by CapStar

HPC
High Performing Colleagues

HR
Human Resources

I2
Inspiring Ideas (CapStar's suggestion program)

IAA
Information Anywhere Anytime

IC
Interlocking Committee

ICU
Intensive Care Unit

IHS
Integrated Health Information Systems

IT
Information Technology

JCAHO
Joint Commission on the Accreditation of Healthcare Organizations

KB
Knowledge Board

KIS
Knowledge Information System

LVEF
Left Ventricular Ejection Fraction

MCO
Managed Care Organization

MLT
Medical Leadership Team

MRI
Magnetic Resonance Imaging

MSA
Metropolitan Service Area

NB
National Benchmark

OB
Obstetrics

OKU
Ohio/Kentucky University

OR
Operating Room

OSHA
Occupational Safety and Health Administration

OU
Operating Unit

PACT
Patient Centered Team

PDA
Personal Digital Assistant

PDSA
Plan-Do-Study-Act

PDV
Purpose, Destiny, and SPIRIT Values

PEC
Process Evolution Cycle

PEP
Performance Evaluation Plan

PFC
Patient Focused Care

PHNA
Preeminent Hospitals of North America

PIC
Process Improvement Cycle

PIO
Process Improvement Office

POES
Physician Order Entry System

PSA
Primary Service Area

PT
Physical Therapy

RAC
Regulatory and Accreditation Committee

RIMS
Reliastate Insurance Management System

Roseleaf
Roseleaf Community Hospital

RUH
Riverport University Hospital

Rx
Prescription

S&P
Standard and Poor's

SD
Standard Deviation

SLT
Senior Leadership Team

SPP
Strategic Planning Process

SSA
Secondary Service Area

SVP
Senior Vice President

TAP
Triannual Action Process

THC
Total Health Center

VHA
Veterans Health Administration

WOC
WellOhioCare

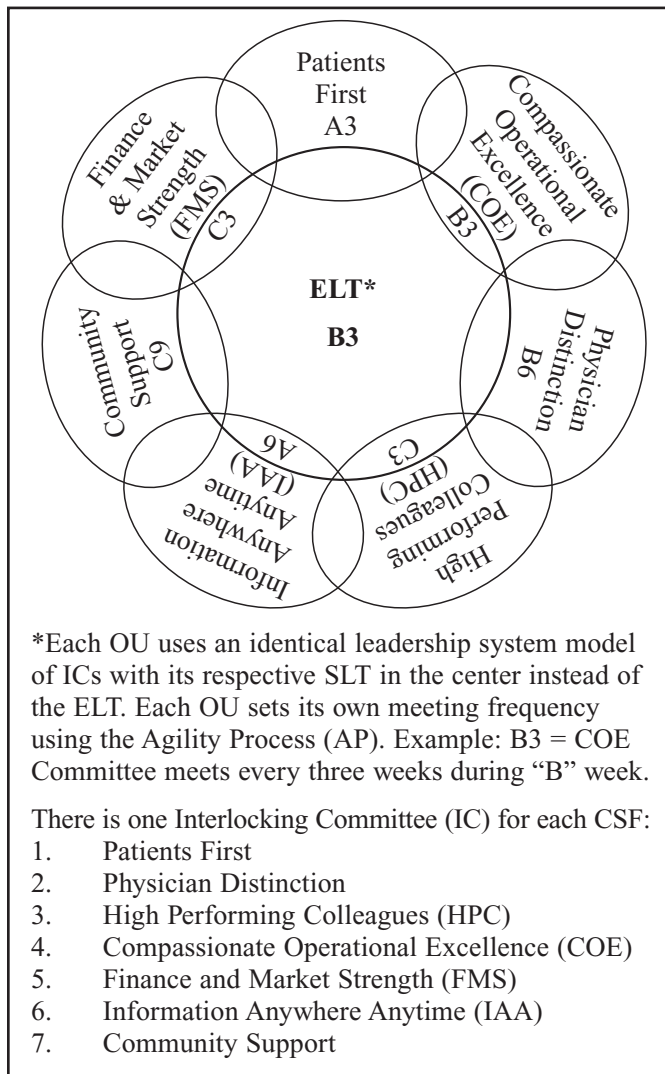
1 Leadership

1.1 Organizational Leadership

Immediately following the creation of the CapStar Health System in 1994, senior administrators, medical staff leaders, and members of the newly combined Board of Directors (Board) met in a three-day retreat to establish the fundamental philosophical and operating principles of the new system. Discussion reaffirmed CapStar's commitment to excellence as the region's preferred advanced care provider that would compete directly with RUH and other community hospitals. CapStar would differentiate itself from other providers by offering only the highest possible compassionate service and clinical excellence in the practice of medicine. To reflect these lofty ideals, the CapStar Purpose and Destiny were established followed by the SPIRIT Values. The Purpose, Destiny, and SPIRIT

Values (PDV), shown in Figure P.1-1, guide the entire organization.

Last year, the Board was streamlined from more than 45 to 22 members. Six members of the Board are physicians, consistent with the CapStar commitment to Physician Distinction. For a health care system the size of CapStar, this streamlined Board is designed to provide effective and agile governance. The Board meets quarterly, and its Executive Committee, consisting of twelve members (four physicians and eight community members), meets monthly. Each Operating Unit (OU) has a local Advisory Committee, appointed by the Board, to serve as a vital communication link between the system's Board and local needs and interests. One member of the Advisory Committee from each OU serves on the Board.



1.1a Senior Leadership Direction

In 1998, Joe Picardson, CEO of Founders, was promoted to CapStar President and CEO following the retirement of Gene Roddwine, CapStar's first CEO. Picardson adopted the Baldrige framework as the fundamental method to promote a culture that would enable achievement of CapStar's PDV and Critical Success Factors (CSFs). Figure 1.1-1 depicts the CapStar leadership system of seven Interlocking Committees (ICs) that support the Executive Leadership Team (ELT). There is one IC for each CSF to assure alignment. At least one ELT member serves on each IC with at least one additional executive who overlaps with another IC to establish the interlocking function. To assure a systematic approach throughout the leadership system, each OU uses an identical IC system in support of its respective Senior Leadership Team (SLT). Each OU determines how often its ICs meet by using the Agility Process (AP) (Area 1.1b[1]).

1.1a(1) The ELT is composed of senior executives at the CapStar level (see Organizational Chart). Each OU is led by its respective SLT, which mirrors the ELT and is tailored for the size and unique circumstances of the OU. Every member of the ELT and SLTs is actively engaged in living and deploying the PDV. The CapStar leadership succession process (Item 5.1) emphasizes the selection and grooming of leaders who not merely support deployment of the PDV but who use the PDV as guides to self-assessment and encourage and inspire colleagues accordingly. The SPIRIT Values were established over a nine-month period in 1996. Multiple colleague teams drafted the first CapStar Values, which were then presented to the entire workforce for comment. The PDV are revisited annually by the ELT and the OUs. This ensures that the

Figure 1.1-1 Interlocking Committees—CapStar System and OU Levels

PDV remain relevant and inspiring as the practice of medicine continues to change and also gives new colleagues the opportunity for input. As a result of this process, the CapStar Values were revised in 1998 to become the SPIRIT Values after input was received from new colleagues at Roseleaf.

Systematic methods used by the ELT/SLTs to reinforce and deploy the PDV throughout all OUs include the following:

- Triannual Colleagues' Dialogues (Dialogues), held by senior leaders, are round-the-clock forums in each OU that are well attended. Each Dialogue focuses on one or more of the SPIRIT Values, in addition to reviewing and discussing recent operating results tracked in the Balanced Scorecard (BSC) (Figure 2.2-1).
- Each month, a member of the ELT or an SLT writes a column in the *CapSpirations* newsletter about the PDV, referencing specific examples of how one or more colleagues supported another colleague or met even the unexpressed needs of a patient or other customer.
- There are more than 100 Knowledge Boards (KBs) posted throughout all OUs. Each KB contains the PDV, the SPIRIT Value of the Month, and recent operating results, including volume, revenue, expenses, and customer satisfaction data. Approximately one-third of each KB is devoted to specific departmental results, customer feedback, and other information.
- At the beginning of a shift or workday, each colleague logs into the Knowledge Today (KT) e-mail system at his/her personal workstation or at a PC in a Knowledge Information System (KIS) kiosk and receives a brief message from an ELT or SLT member about CapStar or about feedback received from a grateful or concerned customer.

Always present at Dialogues, ELT members are visible and approachable, consistent with the CapStar Open Door Policy. Each quarter, systemwide and OU Inspiration Awards are given by senior leaders to colleagues who demonstrate passionate and effective commitment.

The ELT systematically integrates physicians into the highest levels of leadership and policymaking, consistent with the Physician Distinction CSF and the strategy to uniquely empower and communicate with independent physicians (as opposed to buying physician practices). Physicians hold several key leadership positions, as noted on the CapStar Organizational Chart, and are well represented on each of the systemwide and OU ICs. A key measure of ELT and SLT members' performance is the

ability to actively and comfortably engage physicians in operational and strategic policies. This is also a key determinant of leadership selection. ELT and SLT members seek out physicians for input, engage physicians in discussion in the hallways and cafeteria, visit physicians in their offices, and remain open and accessible. Daily interaction with physicians is an expected leadership behavior and key to CapStar's culture. Issues of medical staff policy and clinically related decisions are addressed by the Executive Medical Staff Team (Exec Med) for CapStar overall and by the respective Medical Leadership Teams (MLTs) for each OU. Each member of the medical staff receives, via KIS, the monthly BSC update. The full medical staff meets three times per year—two times by OU and once systemwide—to review organizational performance, provide input on improving performance, and anticipate and address emerging issues.

CapStar uses a Triannual Action Process (TAP) to develop and rapidly adjust short- and longer-term directions and performance expectations. TAP meetings are held in January, May, and October. Longer-term directions are established at the May TAP meeting when the ELT, SLTs, Exec Med, and MLTs meet in a "Drill Down" process to evaluate thoroughly multiple external and internal trends, issues, and outcomes and to set a one- to four-year organizational direction as explained in Item 2.1. Short-term directions and expectations of one year or less are considered at all three TAP meetings, during which all ELT and SLT members report progress on their 120-day plans and propose priority actions for the next 120 days. ELT 120-day plans are shared and deployed to the SLTs, which in turn deploy them to operational management staff and then to all colleagues. TAP actions are taken whenever any result falls below the BSC target. For example, in January 2000, the Emergency Department (ED) at Founders was hit by the sudden loss of four physicians due to illness, accidents, and military assignment, causing very long waits and a precipitous drop in patient satisfaction. While all critical care patients are seen immediately, ED management established a temporary fix that enabled all other ED patients to be seen by a caregiver within 18 minutes of arrival. Annual performance targets are presented in the BSC and are posted on all KBs.

CapStar senior leaders are passionate about the focus on patients. CapStar's PDV and first and fourth CSFs emphasize the provision of health care services to people as its highest priority. However, CapStar senior leaders recognize that statements are only words unless converted into action. Accordingly, several systematic processes presented in Figure 1.1-2 are used by all ELT and SLT members to reinforce the importance of patients and other customers.

1.1a(2) CapStar CEO Joe Picardson has long been a student of CEOs of high-performing manufacturing and

service companies with sustained success. He believes in aggressively benchmarking best practices that have proven results. On the basis of his observations of other mergers, he concluded that each employee needs to feel empowered and that failure to empower would lead to OU silos. Accordingly, Picardson replaced the term “employees” with “colleagues.” (The term “staff” also is used, given its prevalence in the health care sector.) To assure that the use of “colleagues” was more than simply a change in terms, Picardson focuses much of his efforts in establishing a culture of excellence around the belief that employees should be treated as, and behave as, colleagues. Patient Centered Teams (PACTs), described in Item 5.1, function as somewhat self-governing teams of caregivers, a key example of delivering on this promise.

The CapStar-level High Performing Colleague (HPC) IC and the respective HPC ICs in each OU are responsible for identifying and overseeing the implementation of empowerment initiatives. Some specific methods include the following:

- SLT members visit different parts of their facilities, giving colleagues ongoing opportunity to discuss issues and make recommendations.
- Since information is empowering, current financial, operational, and satisfaction results are posted on all KBs throughout the OUs and on KIS.
- The ELT and SLTs maintain an Open Door Policy in which any colleague, at any level, can access a member of the senior staff. At CapStar, there is no such thing as an end-run—any colleague can, and is expected to, talk to anyone at any level, anytime; to put patients first; and to get the work done.
- Inspiring Ideas (I2, pronounced I-Too) is a formal innovation process in which colleagues and physicians are encouraged to submit ideas and experiences to improve service and/or operating performance. These ideas and experiences also can be submitted through the KIS electronic chatroom. All participants are recognized for their participation in the process.
- In the Rapid Recovery \$\$ Program, each colleague is given up to \$50 or more if needed with a supervisor’s approval to correct service miscues or to replace lost items.

The AP (Area 1.1b[1]) was established to address an improvement opportunity identified during the first Baldrige self-assessment in 1998. As a relatively new and growing system, CapStar learned in this assessment that it had not established the expectations, structure, or processes

<ul style="list-style-type: none"> • Each ELT and SLT member conducts walk-through rounds and personally surveys five patients/families per month about their care experience, asking them to compare their CapStar experience to other hospitals. Results are reviewed at each ELT/SLT meeting.
<ul style="list-style-type: none"> • A member of the Customer Focus Team trains all colleagues to be advocates, supported by senior leaders. These leaders rotate responsibility for assisting colleagues in handling patient complaints.
<ul style="list-style-type: none"> • Senior leaders personally respond to patient correspondence.
<ul style="list-style-type: none"> • Senior leaders benchmark Baldrige recipients and other companies known for uncommon attention to customer service. New senior leaders attend a two-day customer service excellence course.
<ul style="list-style-type: none"> • ELT/SLT members rotate the responsibility of presenting at new colleague orientation. They explain the CapStar history and the PDV and teach a two-hour segment on customer service excellence.
<ul style="list-style-type: none"> • Senior leaders hand out individual and team customer service Inspiration Awards.
<ul style="list-style-type: none"> • ELT/SLT members talk about the PDV, patients, and customer service excellence, always reinforcing CapStar’s purpose for existing, culture, and common language that guide its service to mankind.

Figure 1.1-2 Senior Leadership Commitment to Patients and Customers

to be agile in an ever-changing health services marketplace. The AP provides a three-week meeting cycle of key CapStar-level ICs and OU ICs that enables CapStar to be an agile decision maker at the strategic and policy levels. Agility on a daily operational basis is fostered through the PACTs, in which each colleague is authorized and encouraged to meet or exceed patient service expectations and to ensure patient and colleague safety without first seeking permission. CapStar borrowed an approach from the airline industry to create a culture of no blame. Without placing blame, any CapStar colleague is permitted—even expected—to voice concerns about any practice that may put a patient or colleague at risk.

1.1b Organizational Performance Review

1.1b(1) CapStar’s AP is a unique three-week meeting cycle schedule and performance review process. Each of

the three weeks is designated as “A,” “B,” or “C,” and each IC or other standing committee is assigned an “A,” “B,” or “C” week. For example, the Patients First IC is designated as A3, meaning that it meets every third week on an “A” week, whereas the Physician Distinction IC is B6 and meets every six weeks on a “B” week. Teams meet during off weeks only by exception if more frequent meetings are needed. The AP reinforces organizational agility and establishes the importance of frequent interaction and timely decision making. This process also enables CapStar to balance committee and team assignments so that a disproportionate number of meetings do not occur during the same week of the month. In addition, since “A,” “B,” and “C” weeks are designated two years in advance, physicians on committees can schedule around patient visits. Team members can schedule vacations, travel, and other obligations in weeks in which their key teams are not meeting. The AP has evolved into a simple-to-follow process that enables the ELT and SLTs to review performance and act quickly. It provides discipline and opportunity for empowerment by encouraging extensive team participation by colleagues. The IC AP schedule is depicted in Figure 1.1-1.

The BSC is reviewed by the ELT, SLTs, and each IC according to the AP schedule to track and review performance compared to short- and longer-term goals.

1.1b(2) The ELT and SLTs use two methods to identify and take action on priorities for improvement. (1) Issues that surface or results that fall below expectations are assigned to an IC for corrective action. The assigned IC establishes a time frame and target measure for each issue. If the issue requires input from several colleagues or is cross-OU or cross-departmental, a Process Improvement Cycle (PIC) Team is established. Since many ICs meet on a three-week schedule, problems are raised, assigned, and addressed with little delay. Identified corrective actions are added to the 120-day TAP reviews and monitored to ensure that changes produce sustained improvement. (2) All CapStar and OU senior leaders and managers have 120-day plans that cascade from the CSFs to assure that opportunities to improve are deployed to all OUs. Every 120 days, each manager reports on progress related to his/her 120-day plan. Since all of CapStar’s key partners (including ERCare, Inc., Calmstate Anesthesiology Services, and InsideYou, Inc.) have staff on site, they also attend 120-day TAP reviews and participate on ICs and PIC Teams.

1.1b(3) The October TAP review is the final TAP meeting of each year in which ELT and SLT members discuss leadership performance issues. The BSC and the Baldrige self-assessment constitute the leadership report card used

to identify strengths and weaknesses of the senior leaders, the ELT/SLT system, and ICs. Each senior leader is allocated up to \$4000 a year for off-site training for knowledge or skill improvement tied to a BSC measure, the Baldrige self-assessment, or the personal Performance Evaluation Plan (PEP). Alignment among performance, senior leadership compensation, and leadership system improvement is reinforced by basing 100 percent of ELT and SLT incentive compensation on achievement of the operational, clinical, and financial measures in the BSC.

1.2 Public Responsibility and Citizenship

1.2a Responsibilities to the Public

1.2a(1) The CapStar Compliance Officer chairs the CapStar Regulatory and Accreditation Committee (RAC), a joint subcommittee of the Patients First and Finance and Market Strength (FMS) ICs. The RAC is responsible for tracking, linking, providing guidance on, and monitoring organizational compliance with laws and accreditation standards. CapStar believes it has an obligation to its customers to achieve the highest possible accreditation survey scores as one indication of its performance. The ELT is adamant that CapStar comply with all regulations to protect the assets of CapStar which, as a not-for-profit organization, are owned ultimately by the communities in which it operates. Accordingly, CapStar has established a systematic approach to assuring compliance. An ongoing committee supports the RAC and the JCAHO and General Accreditation Committee. OUs have similar committees to assure consistent deployment. For example, the CapStar-level JCAHO and General Accreditation Committee meets at nine-week intervals. The JCAHO and General Accreditation committees at the OU-level also meet in nine-week intervals, increasing to three-week intervals and then weekly as their respective accreditation survey date draws closer. The CapStar-level committee promotes systemwide sharing of best practices and establishes policy and procedures related to new accreditation standards and other operational issues that may have accreditation implications. The RAC committee is responsible for assuring state license regulatory compliance. The CapStar Patient Care and Rights Committee, under the direction of a newly recruited Patient Rights Officer, has been meeting at three-week intervals during the past year to develop policy related to JCAHO’s Sentinel Event standard on medical errors and to prepare for the impact of the Health Insurance Portability and Accountability Act (HIPAA), new federal legislation that limits access to patient information in hospitals and physicians’ offices. A sample of targets for regulatory and legal performance is provided in Figure 1.2-1.

Requirement	OU/Program Impact	Goal
JCAHO	Each OU, including Galaxia Home Health Care	>92% score
All House Staff Trained	Departments with residents	Full accreditation, >95% match
College of American Pathologists	All laboratories accreditation	Full
Ohio, Kentucky, Indiana Licensure	All OUs	Full license
CMS	All OUs	No financial denials*
HIPAA	All OUs	100% compliance
* ELT BSC measure		

Figure 1.2-1 Sample of Regulatory/Legal Performance Targets

Earlier this year, the RAC began a proactive initiative to identify laws, regulations, and standards that, if exceeded, would provide competitive advantage related to one or more of the CSFs. The RAC recommendations are expected in September 2002.

1.2a(2) Although the importance of eliminating medical errors only recently has emerged in the public arena following the release of two reports by the Institute of Medicine, CapStar's efforts to identify and prevent errors date back to the tragic deaths of the six-year-old patient and diabetic spouse of a member of the staff as described in P.1. Excelsion's first efforts were to understand the causes of certain mistakes and to create a culture in which it was acceptable to report mistakes. Initial efforts have focused on accurately reporting and then analyzing data on medication errors, medical service errors, and clinically avoidable skin ulcers for home care patients.

The responsibility for understanding and addressing other potential public concerns with CapStar services resides with the ELT and SLTs. Picardson and the Executive Officer and Advisory Board of each OU are responsible for maintaining contact with business and civic leadership in their communities. They are actively involved in the respective Chambers of Commerce, Civic Stride, and other community organizations. These relationships are used to obtain feedback from community leaders about the quality of health care services. On a biennial basis, CapStar plays a leadership role with other hospitals in the region to complete an areawide analysis of health care needs, disease rates, and key demographic trends. CapStar

participates in collaborative efforts with its competitors on disaster planning and other specific public concerns, such as the potential spread of the West Nile Virus.

1.2a(3) The ELT holds firm to its conviction that every patient and customer encounter, every interaction among colleagues, and every business transaction follow the highest ethical standards. The SPIRIT Value of Integrity allows no room for compromise. Ethical behavior is systematically reinforced to ensure a culture committed to excellence. Ethical expectations are spelled out in detail in *The CapStar Pride and Ethics Handbook* given to each colleague upon recruitment. Ethical requirements are delineated in the *CapStar Compliance Commitment* given to each colleague during new colleague orientation. Every colleague signs a compliance statement as a condition of employment. The CapStar Compliance Officer is a high-level and visible member of the leadership staff, reporting directly to the ELT and the Board, if appropriate. The Compliance Officer serves as the focal point for the OUs to drive conformity to compliance requirements throughout CapStar. The Compliance Committee reviews audits of billing and coding compliance and assigns related issues to the appropriate ICs for evaluation and action. The ongoing focus on ethics includes ethics discussions at each Dialogue; a toll-free hotline to report ethical concerns; and an Ethics Consultant Team to provide guidance to physicians, colleagues, and patients on ethical dilemmas and to reinforce the use of the hotline. Colleagues with contact with business partners and suppliers attend a three-hour session on business transaction protocol each year.

1.2b Support of Key Communities and Community Health

Fulfillment of CapStar's Purpose and Destiny as an organization devoted to cherishing, preserving, and improving health includes responsible citizenship in everything it does. Shortly following the national tragedy of September 11, 2001, and the subsequent anthrax-related events, CapStar helped form a regional emergency preparedness task force composed of other hospitals and the Greater Cincinnati Business Roundtable. CapStar actively promotes United Way giving and provides manpower support to the United Way in each community served. Leaders and managers are encouraged to serve on civic boards and can do so on CapStar time. Eight of the twelve ELT members serve as adjunct faculty at the Central Ohio School of Public Health. At the October TAP meeting, the CapStar Charitable Trust evaluates community needs and recommends community support activities and priorities. Based on analysis of demographics and community needs, CapStar has selected four long-term priorities for community

development and support. Colleagues who participate in any of these four priorities or other CapStar-supported programs are eligible for paid time off at the discretion of their managers.

CapStar developed a unique system that tracks monetary and in-kind contributions to community support programs. This information was used to identify the four ongoing priorities. Over 80 percent of the CapStar community support budget of \$4 million is earmarked for these priorities. The remaining 20 percent is used for community support programs requested by colleagues or other agencies that meet a compelling community need or are emergent in nature. The Community Support IC monitors activity to assure that community support levels remain on target.

The following examples illustrate recent efforts in support of CapStar's community priorities.

1. Healthy Community Programming
 - Counseling for battered women (Hergh)
 - Advisors for Healthy Kids/School health program in partnership with Riverport Children's Hospital (all OUs)
 - Management for Alzheimer's Caregivers and Breast Cancer Survivor Counseling Groups (Excelsion and Founders)
 - Free occupational safety consultation (Roseleaf)
 - Free physical exams for high school athletic teams (all OUs)
 - Pharmaceutical company partnerships to provide prescription drugs for indigent citizens
 - Blood drives
 - Free use of conference rooms for community-sponsored health meetings
2. Support of K-12 school districts to develop future health care workers
 - Health Career Days at local schools
 - Ongoing classroom presentations from colleagues representing various health care disciplines
 - Job "shadowing" in nursing, physical therapy, nutrition, pharmacy, and radiology for high school seniors
 - Volunteer opportunities for high school students in CapStar hospitals
3. Regional economic development
 - Tailored employee health programs and a clinical liaison program, joint efforts to control health care costs to encourage prospective employers to select the CapStar service area for new employment, and meeting with new companies in the service area to introduce CapStar.
 - Programs to help low-skilled, low wage earners return to school to achieve the necessary certifications and licenses to enter higher paying health care disciplines.
 - An ongoing partnership with the Department of Economic Security to identify health-related issues in areas of high unemployment and to provide appropriate education, prevention, and health care services to address these issues.
4. Community Renewal and Health Services, Inc.
 - This subsidiary of CapStar Charitable Trust supports residential neighborhood renewal as a not-for-profit community-based organization and includes renovation of housing in the Excelsion area.
 - Community Renewal and Health Services also provides access to health services for residential neighborhoods.

CapStar operates a fully equipped diagnostic van used at health fairs and other locations, such as assisted living facilities, churches, synagogues, shopping centers, and lower income neighborhoods, including government-funded Community Health Centers for the underserved. The van is also used by the Veterans Health Administration (VHA) in a unique venture to reach out to disabled veterans.

2 Strategic Planning

2.1 Strategy Development

2.1a Strategy Development Process

2.1a(1) Following his appointment as CEO of CapStar, Joe Picardson recognized that a comprehensive process of strategic development and deployment could serve as the glue to effectively integrate the organization. Consequently, CapStar studied the planning frameworks of other members in the Excellence Performance Institute (EPI) and of Baldrige Award manufacturing and service recipients. Following these external evaluations and several years of refinement, the Strategic Planning Process (SPP) was developed as seven steps that align with the TAP. The linkage of the SPP with the TAP creates a systematic and fluid strategy process that is directly tied to operational

performance review. This linkage eliminates the separation between strategy and operations that is a weakness in other strategic planning approaches.

Figure 2.1-1 illustrates the SPP framework, including its alignment with TAP and the “bottom-up” input from the OUs. Much of the SPP effort is conducted in the months preceding and during the three-day May TAP meeting and Drill Down Retreat. The Drill Down results in identification of strategic options, with sufficient time to enable budget preparation. Then these options are articulated into specific strategies that are rolled out to the organization through the ICs. The set of strategies serves as the basis for developing action plans and improvement plans across the ICs and through the OUs, using the PEC and PIC processes described in Category 6.

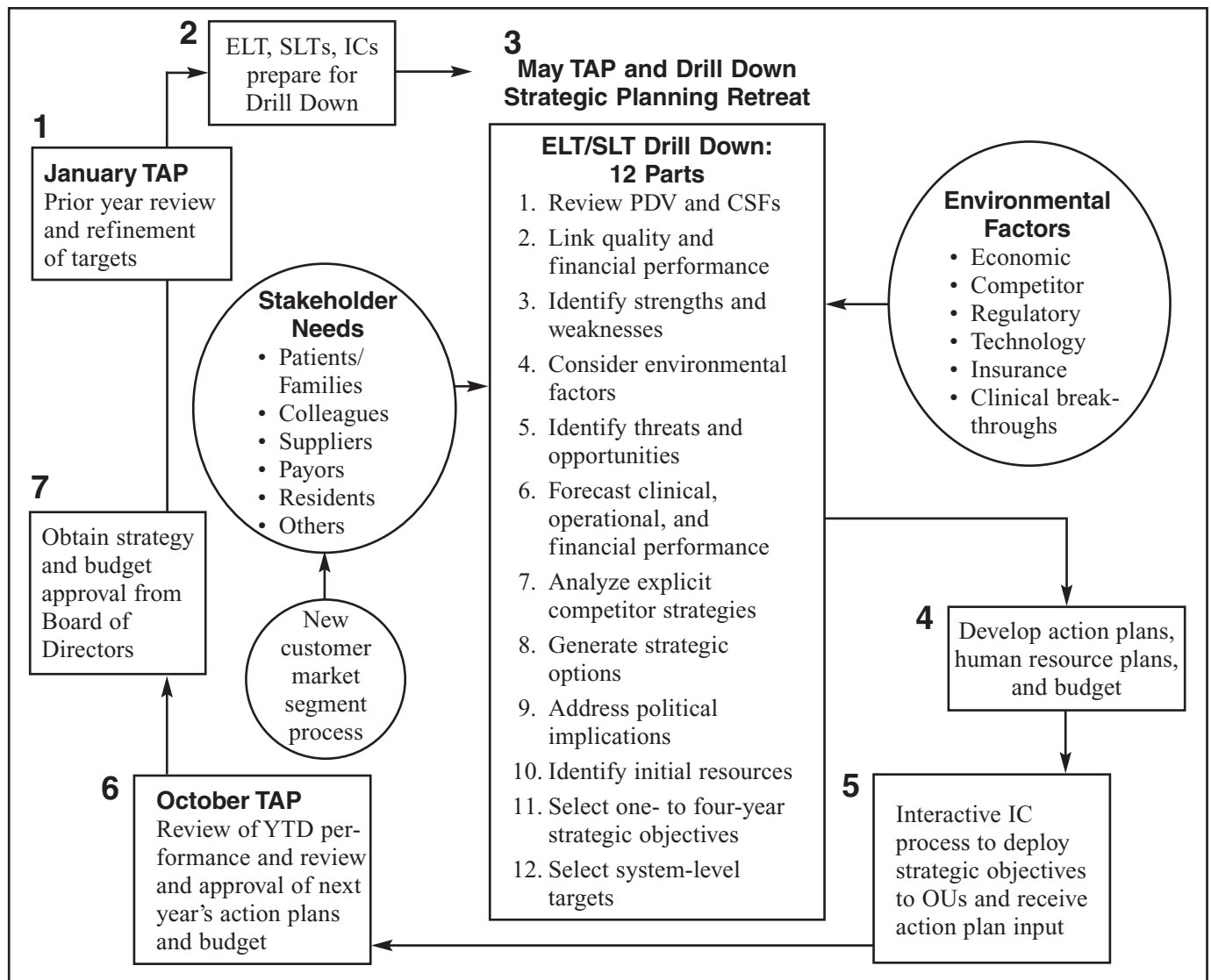


Figure 2.1-1 Strategic Planning Process

The Drill Down is a twelve-part process facilitated by the Senior Vice President (SVP) for Strategy and Ventures, Hugh Scott. The Drill Down enables senior leaders to revisit mission and goals (Parts 1 and 2); assess multiple external and internal issues, trends, potential outcomes, and newly identified actions (Parts 3–7); generate strategic options (Part 8); consider these in the context of local and broad industry knowledge, best practices, and resources to understand the implications of the scenarios and project the initial and future resource implications (Parts 9 and 10); and then concur on system-level, one- to four-year strategies and targets (Parts 11 and 12). This extensive planning effort is accomplished in only three days due to the preceding months of careful preparation by the ICs. In addition to the ELT and SLTs, selected Board representatives and IC members from the OUs participate in the TAP Drill Down to ensure representation from all organizational levels.

Following the Drill Down, the CapStar and OU ICs play an essential role in providing a bridging function across OUs to establish action plans, as shown in Figure 2.1-2. Within each OU, department and program leaders are charged with identifying those factors most significant to their work. Then they develop specific and measurable actions using forecasting, scenario planning, projections, and identification/analysis of options as appropriate. Where recommendations cross OUs, the IC structure ensures smooth collaboration and avoids duplication of effort. The final plan prepared for the October TAP incorporates a series of action steps articulated over a one- to four-year horizon.

2.1a(2) Each IC begins to prepare for the Drill Down following the January TAP meeting (Step 1). The ICs gather and analyze information to address the key planning fac-

tors noted in Figure 2.1-1 (Step 2). For example, the Physician Distinction and IAA ICs prepare reports on new technology, and the Patients First IC prepares updates on patient satisfaction. The Customer Focus Team prepares three-year customer satisfaction trends for all customers/stakeholders, including patients, families, medical staff, referring physicians, residents, employers, and payors.

The FMS IC prepares updates on local and national insurance trends, competitive surveillance, and regulatory changes with the assistance of the Office of Marketing and Business Development. The ICs from each OU assist in the preparation of the analyses for the Drill Down to assure that “bottom-up” input is secured from the very beginning of the SPP. These results are analyzed in preparation for and used during the Drill Down to reach consensus on strategic objectives. For example, as a result of referring physician input, a one-call method was implemented in 2001 that offers a referring physician a single call to begin and complete a patient referral.

2.1b Strategic Objectives

2.1b(1) Key strategic objectives defined through the Drill Down are aligned with the CSFs to ensure that all strategic initiatives guide individual and collective work towards achieving CapStar’s Purpose and Destiny. The strategic objectives for 2002 through 2005 and targets adopted at the October 2001 TAP are presented in Figure 2.2-1. The figure also shows some key Balanced Scorecard metrics that support the accomplishment of the CSFs.

2.1b(2) The strategic objectives address the challenges described in P.2 of the Organizational Profile. The needs of patients and other key customers/stakeholders surface as the first priority during the Drill Down since Patients First is the first CSF considered. In addition, patients and/or payors often are invited to a portion of the Drill Down to share their CapStar experiences. FMS is considered last during the Drill Down since CapStar leaders understand that performance in these areas represents lagging indicators of patient care and human resource excellence. An example of this is a new initiative to address community needs through the commitment of fiscal reserves to open ten Total Health Centers (THCs) in high population growth areas. This new approach is one that environmental scanning revealed to be a potential high-growth and revenue-generating activity that also will build considerable goodwill within CapStar’s local communities.

Key Planning Factor	Responsible ICs
Customer and health care market needs, expectations, opportunities	Patients First Community Support COE
Competitive and collaborative environment	FMS COE
Technological and other key changes	IAA Physician Distinction
Strengths and weaknesses, including colleagues and other resources	All ICs
Supplier/partner strengths and weaknesses	FMS
Financial, societal, regulatory, and other potential risks	FMS Community Support

Figure 2.1-2 IC Responsibility for Key Planning Factors

Strategic Objectives	2002 Action Plan	FY 2002 Target	FY 2005 Target	Industry Average	Results Ref.*
Patients First CSF Achieve distinctive outcomes in congestive heart failure, myocardial infarction, and pneumonia Achieve leadership in medical error reporting and in error reduction Secure high patient satisfaction	Continue evidenced-based medicine in these diseases Update clinical protocols and increase use Implement Physician Order Entry System (POES) Provide advanced service excellence training Implement 1:1 marketing	Top 25th percentile 560 patients on cancer protocols Increase error reporting accuracy 25% Decrease actual drug errors by 15% Overall satisfaction to 94% Increase market share 1%	Top 10th percentile 800 on cancer protocols Increase accuracy 75% Decrease errors 50% Overall satisfaction to 96% Increase market share 2.1%	50th percentile NA NA NA 85th percentile	7.1-1 to 7.1-6 7.1-8 7.1-7 7.1-9 to 7.1-14
	Physician Distinction CSF Increase medical staff loyalty Enhance medical staff expertise/reputation	Expand physician leadership grooming Plan with surgeons to counter River's Edge threat Recruit more hospitalists Increase physician satisfaction Recruit specialists in gyn/oncology, minimally invasive surgery, geriatric neurology, and sports medicine	>3 physicians per OU in training Plan completed Recruit 3 hospitalists 80–85% overall satisfaction Recruit 1 gyn/oncologist, 3 sports medicine orthopedists, 2 minimally invasive surgeons, and 3 geriatric neurologists	All interested physicians trained 0% net loss of short-stay surgery patient volume To be determined 85–90% overall satisfaction Recruit per medical staff plan	NA NA NA 75% NA
High Performing Colleagues (HPC) CSF Recruit/retain outstanding staff. Increase colleague competency, productivity, satisfaction, and safety	Begin monthly in-service training for PACTs Deploy Succession Plan to all management colleagues in all OUs Deploy safety rounds to all OUs Increase recruiting from Central Ohio School of Public Health	5% improvement in colleague satisfaction scores 13% nurse turnover Needle stick injuries <18 per 100 beds Reduce pharmacy vacancies by 10%	10% improvement in colleague satisfaction scores 11% nurse turnover Needle stick injuries ≤5 per 100 beds Reduce pharmacy vacancies by 18%	NA 18% 25/100 NA	7.3-1 to 7.3-6 7.3-12 7.3-9 7.3-12

*Source of Balanced Scorecard Metrics

continued on next page

Figure 2.2-1 Sample Strategic Objectives, Action Plans, Targets, and Balanced Scorecard Metrics

Strategic Objectives	2002 Action Plan	FY 2002 Target	FY 2005 Target	Industry Average	Results Ref.*
Compassionate Operational Excellence (COE) CSF Complete implementation of PACTs	Further deploy PACTs	Deploy PACTs to ortho units at Roseleaf, oncology unit at Excelsion	Deploy PACTs to first unit at Hergh	NA	
	Participate in EPI initiative to redefine patient flow to improve productivity and reduce waste	50% CapCare same day appointments	70% of patients get same day appointment		
Improve patient flow		Time to market for new services <2 months	<2 months	NA	7.4-1
Open 10 Total Health Centers (THCs)	Open first 3 THCs on time and within budget	ED average time to admission <71 minutes	<55 minutes	55	7.4-2
Bring physical plants to good to excellent condition	Complete master site plan for Hergh	Open 3 THCs	All 10 THCs opened	NA	
Establish long-term relationships with suppliers	Establish supplier performance targets	Complete site plans	Hergh replacement underway	NA	Future Meas.
Financial and Market Strength (FMS) CSF		10% improvement in supplier performance	Additional 10% improvement in supplier performance		7.4-8, 9
Achieve S&P A+ rating by 2004	Renegotiate WOC contract	All key measures \geq "A"	A+ rating	A-	7.2-1 to 7.2-7
Increase market share	Double fundraising	\$9 million	\$20 million	NA	7.2-10
	Focus on cardiac surgery, orthopedics, CapCare	2% increase in market share; 1200 open heart cases; 3840 orthopedic cases; 21,400 CapCare visits	3.1% increase in market share; 1375 open heart cases; 3980 orthopedic cases; 24,500 CapCare visits	NA	7.2-11 to 7.2-15
Strengthen rural hospital relationships	Develop a unique "Affiliates Program"	Increase tertiary care referrals cases 10%	Additional 5% increase	NA	7.2-16, 7.4-11
Information Anywhere Anytime (IAA) CSF		80% physicians on KIS	100% on KIS	NA	Future Meas.
Improve timeliness and reliability of clinician access to information to facilitate diagnosis and treatment	Pilot Web-based wireless KIS	Complete test	Fully deployed		
Community Support CSF		Uncompensated care \leq \$42M	<\$42M	NA	7.4-13
Continue current levels of program support	Continue Healthy Community Programming	Meet Healthy People 2010 targets	Exceed Healthy People 2010 targets		

*Source of Balanced Scorecard Metrics

Figure 2.2-1 Sample Strategic Objectives, Action Plans, Targets, and Balanced Scorecard Metrics (continued)

2.2 Strategy Deployment

2.2a Action Plan Development and Deployment

2.2a(1) As demonstrated in Figure 2.1-1, annual action plans are developed at the CapStar and OU levels following the May TAP and Drill Down for review and approval at the October TAP. The October TAP serves as the third systematic review of current year performance and the review and approval of action plans and budgets for the upcoming year. Approval of next year's budget at the October TAP enables review and endorsement and/or approval by the OU Advisory Committees and the CapStar Board in December. The strategic objectives agreed to at the Drill Down begin the cascading of strategy throughout the organization. They are used by the OUs to develop specific actions plans, measures, and budgets at the OU level. A sample of the CSFs, related strategic objectives, action plans, and performance targets are included in Figure 2.2-1.

The ELT and SLTs ensure the accomplishment of action plans via the IC review process and the TAP reviews. Each SLT, on behalf of its OU, or the supervisor of any department in an OU must prepare a correction plan and budget for any measure that falls short of target. For example, at the October 2001 TAP, the FMS IC reported that it was falling short of achieving aggressive revenue cycle improvement targets needed to increase the cash flow cushion. In response, action was taken to cross-train staff to reduce the Medicare coding cycle time for inpatients post-discharge. Since the AP and the TAP meetings enable the frequent review of progress on performance targets, agility and responsiveness are ongoing functions and strengths of the leadership system.

2.2a(2) Key short-term action plans and related measures are presented in Figure 2.2-1. Consistent with CapStar's focus on organizational agility, action plans can be modified at any TAP meeting as necessary to reflect key changes observed in the internal or external environment. The migration of population from the Excelsion area to the suburbs, including—in particular—to nearby Kentucky, prompted CapStar's decision to initiate a joint venture with Healthcognizant to plan for the new THC's.

2.2a(3) In March each year, the HPC IC starts to prepare staffing scenarios for the May TAP and Drill Down. Following the Drill Down, the HPC IC coordinates the development of action plans and targets for the HPC CSF. In addition, since virtually all strategic objectives have staffing implications, the CapStar-level HPC IC orchestrates an interactive process with the HPC ICs in the OUs. Each OU identifies the staffing implications of the strategic objectives and action plans and prepares its recommendations on FTE increases or decreases, special skill recruitments, in-house training, cross-departmental sharing opportunities, and budget impact. These staffing plans go through interactive IC review cycles and endorsement in anticipation of approval or adjustment at the October TAP.

2.2a(4) The CapStar BSC provides a framework for performance measurement and evaluation; helps CapStar illustrate how it translates strategic objectives into a coherent set of performance measures; and shows how CapStar aligns disparate elements of clinical, financial, and operational performance objectives and indicators.

ICs have major responsibility for identifying relevant measures and work closely with the OUs to ensure that the identified data can be collected in ways that are both reliable and valid. The alignment of performance measures throughout the organization's operations is discussed in greater detail in Category 4.

2.2b Performance Projection

During Part 12 of the ELT and SLT Drill Down, projected performance targets are defined. These are established after first determining related performance projections for key competitors. For example, during the strategic planning process in 1998, RUH's projected performance in Community Quality Image—Best Hospital Overall caused CapStar to set aggressive improvement targets to overcome a growing gap. Figure 7.1-17 shows the positive results of CapStar's action plans. It strives to equal or exceed the performance of competitors and overall industry performance. Category 7 provides information on how CapStar's performance compares with competitors, key benchmarks, goals, and past performance.

3 Focus on Patients, Other Customers, and Markets

3.1 Patient/Customer and Health Care Market Knowledge

3.1a(1) The core business of CapStar is delivery of evidence-based, patient-centered care, characterized by extraordinary quality, service, and value. It is not CapStar’s goal to excel by aggressive competition in duplicative services that ultimately add cost to the community and to patients; CapStar’s goal is superior performance matched to community need. CapStar segments its key customer groups as shown in Figure P.1-3.

In 1998, Executive Vice President (EVP) Eileen Kirks realigned planning and marketing resources and processes to support the PDV and to respond to marketplace challenges by creating the Customer Focus Team. This team, a subcommittee of the Patients First IC, is led by the SVP of Strategy and Ventures, Hugh Scott, and includes OU representatives and staff from the centralized Office of Marketing and Business Development. The approach links with the CapStar strategic planning process and integrates technical expertise and staff support with operational requirements, processes, and accountability. Responsibilities of the Customer Focus Team include

- performing strategic market analysis and making recommendations to the ELT
- coordinating customer data/information for strategic planning
- supporting leaders in reviewing and acting on customer satisfaction, dissatisfaction, and loyalty data/information
- evaluating and improving methods for customer satisfaction determination, access, and relationship building
- identifying “best practices” in customer service through benchmarking
- leading Baldrige self-assessment in Category 3 and related Results Items and overseeing action plans

The Customer Focus Team ensures that CapStar targets customers and markets and continuously receives internal and external customer market and market segment data/information. The New Customer/Market Segment Analysis Process (Figure 3.1-1) is used by the ELT during the Drill Down and in the PEC.

CapStar identifies new customer groups and market segments by making its products and services known through outreach programs to new community residents and new employers. CapStar partners with community organizations to distribute the CapStar SpiritPak, a new neighbor packet describing CapStar services and providing contact

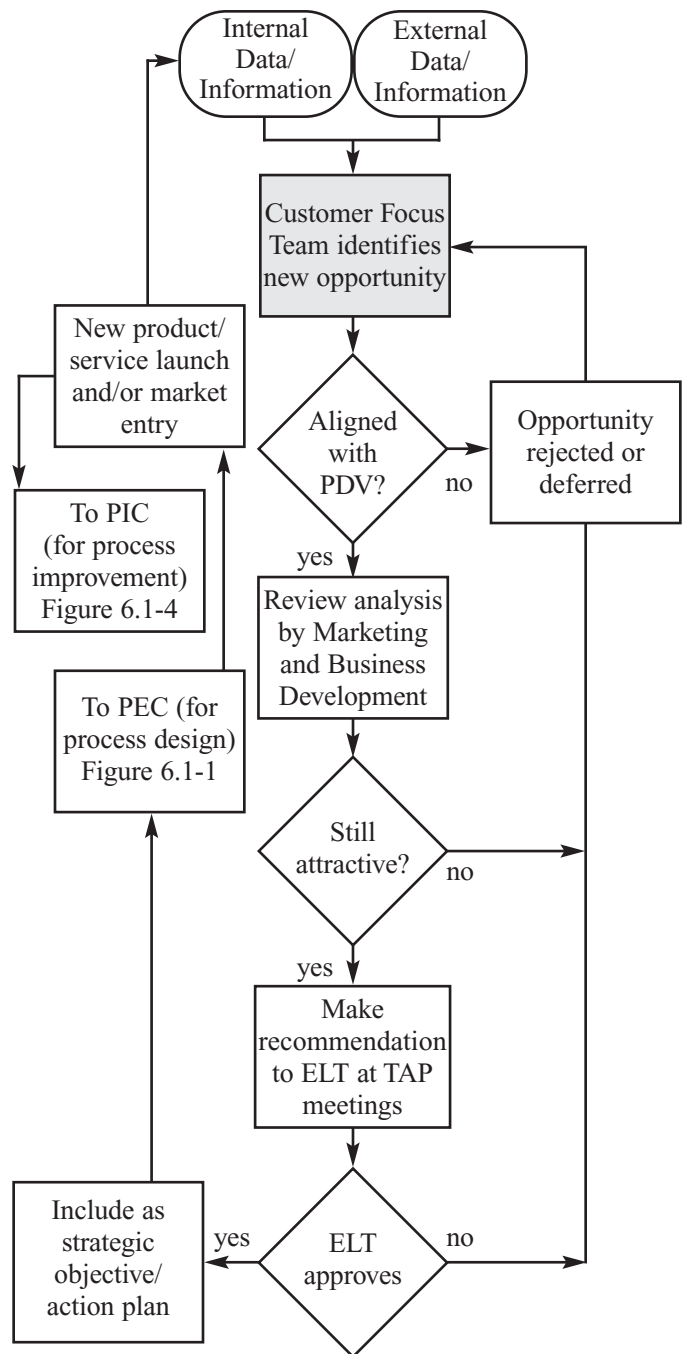


Figure 3.1-1 New Customer/Market Segment Analysis Process

information. CapStar follows up with a personal letter to interested residents identified through this program.

To understand employers’ needs, CapStar senior executives are active in the Greater Cincinnati Business Roundtable. They meet with any company moving into the service area of an OU to introduce CapStar and to discuss the company’s needs. A similar process is used for

companies moving out of the area to understand how health care services and costs may have influenced their decision to move. Such discussions contributed to CapStar’s decision to partner with Healthcognizant to launch the THCs.

3.1a(2) CapStar uses a variety of listening and learning approaches to understand and respond to the drivers of satisfaction and loyalty for its key customers (Figure 3.1-2). CapStar uses a national market research firm to conduct an annual telephone survey of service-area household health decision makers on their perceptions of the “best doctors,” “best nurses,” and “best hospital for ...” (key common conditions). This research shows how a

Listening and Learning Methods	Patients/Families	Independent Physicians	Referring Physicians	Payors/Employers	Community
Market Research	X		X	X	X
Focus Groups	X	X		X	X
Satisfaction Surveys	X	X	X	X	
Complaints (CCR)	X	X	X	X	X
CapStar Toll-Free Number	X	X	X	X	X
Web Site	X	X	X	X	X
ELT/SLT Affiliations		X		X	X

Figure 3.1-2 Listening and Learning Approaches for Key Customers

representative cross section of the community perceives CapStar relative to competitors. Respondents are divided into CapStar patients, patients of competitors, and patients with no service experience at a marketplace hospital. Results on the two latter segments are used by the marketing staff to target programs to attract these potential patients and to counter, for example, efforts by RUH to promote its high technology reputation.

CapStar’s Office of Marketing and Business Development conducts focus groups to explore specific topics with key customer segments. For example, CapStar held focus groups with seniors, family members of seniors, and community agencies serving seniors. Resulting programs developed include the Behavioral Health’s Memory Loss Clinic at Founders to strengthen its service to Alzheimer’s patients.

CapStar satisfaction surveys are used to listen to and learn from all key customers. Patient satisfaction surveys,

designed and jointly administered by a third party, produce monthly qualitative and quantitative reports shared throughout CapStar. The surveys are tailored to CapStar services and patient needs (e.g., inpatient, ambulatory, lab/ancillary, emergency, behavioral health, and home health services). Open-ended questions encourage comments and allow patients to request follow-up. Initially offered only in paper format for return by mail, the survey became available on-line on the CapStar Web site in 1999. Web site access allows CapStar to send an e-mail prompt and a reminder if necessary, which results in higher return rates while reducing mailing and data entry costs. Patients who do not receive service at CapStar within 12 months automatically receive a health education message and a query about possible use of services outside CapStar, including what services they used and the factors that caused them to choose a source outside the CapStar system.

For the majority of physicians, CapStar uses an electronic survey to measure satisfaction and gather feedback. Every physician is surveyed annually. A portion of the physicians are surveyed monthly so that leaders have a steady stream of feedback. The on-line survey questionnaire was further improved to gather specific feedback from key members of the physicians’ office staff. Their feedback has contributed to numerous improvements implemented by the Physician Distinction IC, including direct follow-up scheduling of ED patients seen nights and weekends and on-line pre-admission “paperwork” for elective and direct admissions from physicians’ offices.

CapStar’s Physician Referral Office facilitates patient referrals from physicians outside the 13-county service area who contact the health system directly. Each physician is surveyed two weeks after patient discharge. Questions assess the referring physician’s experience with CapStar and with the physicians who participated in the patient’s care. The Physician Referral Office summarizes this feedback for physicians and for quarterly review by the MLT in each OU.

Customer-initiated communications are a rich source of information—written comments, calls on the system’s toll-free phone line, and Web site messages. The Office of Marketing and Business Development aggregates, analyzes, correlates, and distributes results to the relevant work area. This approach prevents handoff failures.

The commitment to listen to and learn from customers is demonstrated by many methods used to put Patients First, identify individual and family expressed and unexpressed needs, and gather feedback about the care experience.

Examples include

- scripted daily rounds by nurse managers and administrators on patient care units and in clinics
- periodic “through the patient’s eyes” walkthroughs
- customer comment cards in clinics and at the bedside
- patient/family interviews at discharge, especially from complex care units, such as the Intensive Care Unit (ICU)

More and more, patients themselves are directly involved in the design and redesign of care and, in some cases, even care delivery. For example, many departments have established patient advisory groups that act as informal focus groups and sounding boards for proposed changes. The Prostate Cancer Improvement Team and Prostate Cancer Patient Advisory Group developed a peer counseling approach that links active patients with former patients for education and support.

CapStar colleagues share their listening and learning approaches and improvements at Patients First fairs. Best practices are incorporated into customer service training and development programs for deployment across CapStar.

3.1a(3) CapStar’s satisfaction surveys always include two questions: “Is there something we should have asked about (but did not) that would have been important for us to know?” and “Is there another method by which you would have preferred to communicate with us?” Responses to these questions are used by the Customer Focus Team to validate CapStar’s understanding of customers’ needs and their communication access requirements. Responses also guide revision of CapStar’s listening and learning methods to capture issues of greatest importance to customers by methods convenient for them. Responses to these questions resulted in the use of the Web site to obtain satisfaction survey information, which is an example of how listening and learning methods are kept current.

3.2 Patient/Customer Relationships and Satisfaction

3.2a Patient/Customer Relationships

3.2a(1) Redesigning care around the needs and preferences of patients and their families is the fundamental CapStar approach to acquiring, satisfying, and retaining patients. The ELT decided that redesign was essential since a patient typically interacts with 70 or more caregivers in an average traditional hospital stay—far too many for a caring partnership with patients. Patient

Centered Teams (PACTs, Item 5.1) were formed to reduce the number of different staff contacts and to focus on patient needs. This radical redesign of inpatient care characterizes CapStar’s commitment to the care of each patient as a unique individual. PACTs are key differentiators of CapStar from more traditional hospitals.

Patient and Family Satisfaction and Loyalty

Some features of CapStar’s hospital experience that make it a caring partnership are provided below.

- On admission, each patient receives a booklet about his/her PACT core team members. Additional copies are provided for family members.
- Within 24 hours of admission, each new patient is visited by a senior nursing or administrative leader. Using a consistent scripted message, the patient and family are invited to contact him or her with any questions or concerns.
- During daily visits, bedside cards allow patients to note questions they have for doctors or other colleagues. At shift change, PACT members greet patients and ask if any questions have not been answered.
- CapStar’s in-room video system offers entertainment programs and a wide range of educational offerings related to common procedures, conditions, and medications.
- At discharge, every patient receives a one-page exit survey to identify any surprises (good or bad) for the patient or family. This information is used to recognize positive colleague actions and to identify opportunities for improvement.
- Three to five days after discharge, every patient receives a follow-up phone call from a PACT member.
- All patients with e-mail and Internet access are encouraged to complete an on-line survey post-discharge.

The CapCare Centers reinforce patient loyalty. One of the most effective loyalty strategies is the open access scheduling process that guarantees patients of CapStar physicians same-day appointments. The Laboratory has established easy-access, first-floor testing sites with an under 15-minute wait guarantee (or there is no co-pay for the test), with convenient complimentary parking—a service particularly valued by patients who need frequent lab tests (and therefore, whose loyalty is particularly important).

Physician Satisfaction and Loyalty

The Physician Distinction IC focuses on creating strategic leverage by partnering with physicians. Three approaches have been central to the CapStar strategy. First, CapStar deployed a cadre of hospitalists in the new work design (PACTs) to enable independent physicians to spend more time in their offices or operating rooms (ORs). Second, CapStar involved physicians as partners in the leadership

of the delivery system, strategic decisions, and operations improvement. Third, CapStar established an electronic linkage with physicians via KIS. They will have Web-based Internet access from home or office by year-end 2003 so that all independent physicians can monitor and direct the care of their patients from any location. In addition, physician benefits include the following:

- The Physician Distinction IC annually surveys the satisfaction of independent physicians, as well as the satisfaction of their office staff.
- CapStar provides independent physicians with patient satisfaction survey results for their practices, including physician-specific results, at no charge.
- The Physician Referral Office provides specific feedback related to referral relationships from referring physician satisfaction surveys.
- Physicians' offices can receive, free of charge, a daily on-line summary of key health care news items from local, state, and national publications.

Employer and Payor Satisfaction and Loyalty

CapStar's approach to building and maintaining employer and payor loyalty is to make communication simple, convenient, and direct (e.g., CEO breakfast meetings with employers and insurers) and to have prompt responses targeted at employers' needs. CapStar tracks health service usage by major employers and annually prepares recommendations for reducing health care benefits expenses. Work-site clinics and wellness centers are two such examples of CapStar's responses to employers' needs.

3.2a(2) To determine key patient/customer contact requirements, the Customer Focus Team analyzes data and information from multiple listening and learning approaches (Figure 3.1-2), as well as health care and other industry standards, best practices, and emerging applications. Timeliness and convenience are foremost for all customer groups. In addition, all customers rank efficiency, accuracy, and courtesy in their top five requirements. For telephone access, CapStar adopted a rule that permits only one transfer of a phone call. The colleague receiving a transferred call is responsible for handling that call to completion unless a medical emergency dictates otherwise.

CapStar uses multiple methods to deploy key customers' contact requirements to all colleagues and independent physicians. Principal among them are inclusion of a set of core requirements in all job descriptions, new colleague orientation, customer service training, newsletters, and distribution of customer satisfaction surveys. CapStar's customer service standards were first developed in 1997 when it benchmarked a national hotel industry leader for

its design and deployment of customer service training and reward and recognition programs. As a result, CapStar holds brief daily discussions with all colleagues on some aspect of customer service. Discussions occur at the beginning of each shift change at all OUs.

3.2a(3) CapStar strives to prevent problems by thoroughly understanding customer requirements and providing services to match. However, customer concerns do occur. CapStar sees them as recovery opportunities. The Customer Concern and Recovery (CCR) Process, shown in Figure 3.2-1, is deployed at each OU. This process empowers any colleague who identifies a customer concern to resolve it on the spot. If that is not possible, the colleague stays with the problem until resolution and then reports it for further analysis.

Customer concerns most often are received and addressed locally, but the Process Improvement Office (PIO) aggregates the data into monthly reports by OU departments and SLTs for quarterly review by the Customer Focus Team. The reporting/resolution and aggregation/analysis processes became more efficient when CapStar automated the process on KIS throughout CapStar (except at Hergh, where the same paper-based process is used). KIS permits tracking of individual customer concerns in real time by department managers and includes an automatic escalation mechanism to ensure that problems are resolved promptly. Any colleague (all the way to the executive level) may activate the escalation mechanism immediately, if required, to ensure rapid and appropriate intervention.

3.2a(4) The Customer Focus Team monitors the effectiveness of CapStar's methods to build strong customer relationships and provide access to customers. To ensure continual improvement and innovation, the team provides its analyses and recommendations at each TAP meeting and makes changes via a PIC.

3.2b Patient/Customer Satisfaction Determination

3.2b(1) As indicated in Area 3.2a(1), all inpatients and CapCare patients with e-mail receive a survey. Inpatients without e-mail receive a paper survey within one week of discharge. The survey, conducted by a third party, includes comparison with a national group of similar organizations using the same instruments. CapStar retains the database and uses it to perform additional analyses by various demographic factors and Diagnosis Related Groups (DRGs). This has enabled the organization to profile key patient segments, such as asthmatics.

3.2b(2) In addition to the methods previously described, all inpatients and ambulatory surgery patients are called

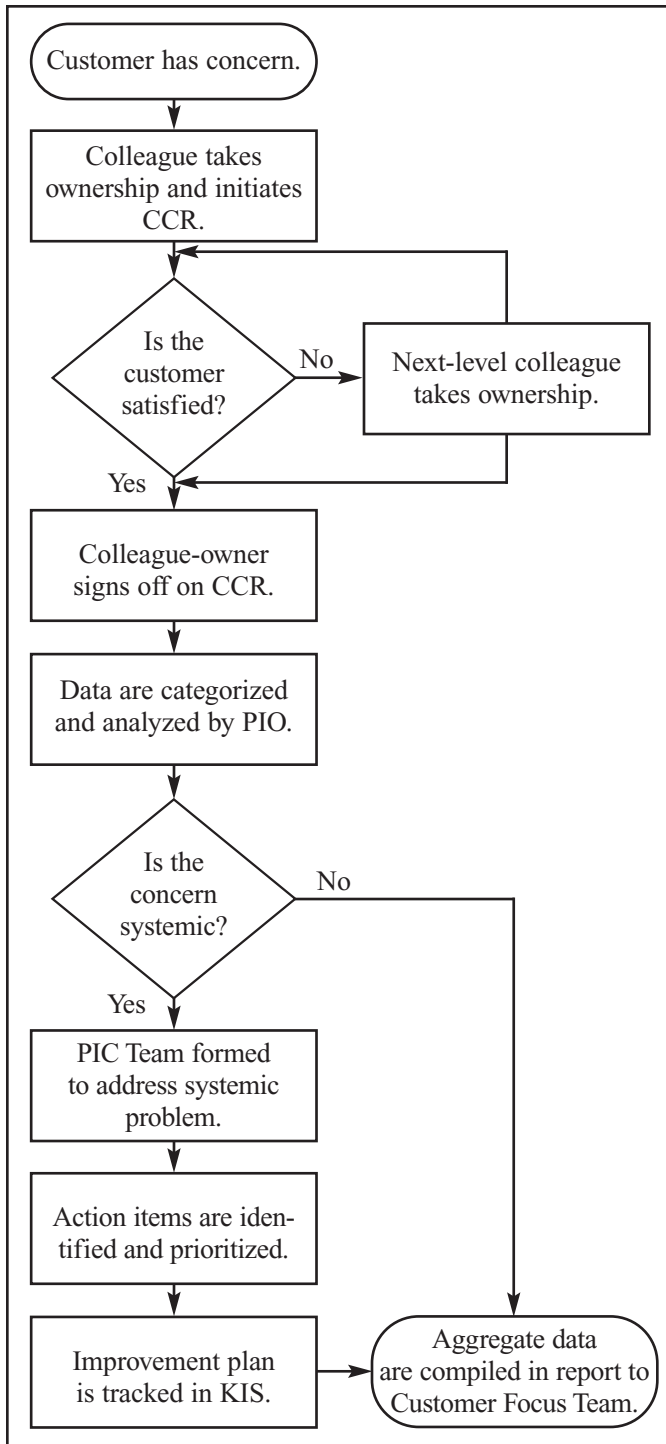


Figure 3.2-1 Customer Concern and Recovery Process

three to five days post-discharge by a PACT member or colleague specifically trained in soliciting feedback.

3.2b(3) CapStar participates in a health care provider “report card” sponsored by the Greater Cincinnati Business Roundtable. This annual report card compares clinical outcomes and satisfaction results among area health care providers on a list of common conditions and treatments (e.g., asthma, pneumonia, stroke, cardiac care, hip and knee replacements, bowel surgery, C-section) using a one- to three-star scale (i.e., better than, good as, worse than expected). CapStar correlates this information with household perception survey results and with other internal data for strategic planning and clinical improvement initiatives. CapStar also participates in various national collaborative improvement activities in which satisfaction results are shared and compared with similar health care provider organizations and used to drive specific improvement initiatives.

3.2b(4) The Customer Focus Team ensures that satisfaction determination methods remain current with health care service needs and directions. Annually, the Office of Marketing and Business Development assesses the effectiveness of satisfaction determination methods as part of a comprehensive review.

CapStar anticipates a continuing shift to the use of electronic methods and prefers these when they also are convenient for the customer. At the same time, in recognition of the diversity of its customer groups, CapStar remains committed to using diverse methods so as not to exclude or underrepresent the needs of any customer segment.

4 Information and Analysis

4.1 Measurement and Analysis of Organizational Performance

4.1a Performance Measurement

4.1a(1) When CapStar was formed in 1994, senior leaders committed the organization to managing through data acquisition and analysis. They recognized that an efficient and effective performance management system was critical to achieve the maximal benefit of the merger. CapStar continues to invest in management information systems to support this belief. The leadership also recognized that to maintain the best relationships with its independent physicians, the organization needed to be on the cutting edge in providing systems that optimized their time and resources. Also, CapStar's commitment to patient safety has enhanced the focus on implementing clinical systems designed to minimize medical errors.

As a result of CapStar's first Baldrige self-assessment in 1998, the performance measurement system became the responsibility of the IAA IC. This committee is chaired by the Chief Information Officer (CIO), Charles Spocket, with representatives from Information Technology (IT), Quality, and Finance, as well as clinical unit managers from each OU. The principal mission of the IAA IC is integration of the varied performance measurement systems found across CapStar into a coordinated, easily accessible, and comprehensive information delivery system. The IAA IC develops a strategic plan called the "State of IT" that takes into account geographic dispersion issues, existing hardware and software at each facility, and the multiple types of information (including financial, operational, and clinical) required to measure, analyze, align, and improve daily operational performance. The IAA IC determined that the hardware and software systems at each facility were incompatible with each other and recommended to the Board that the existing system be replaced with a centrally controlled, Internet-based system. This plan required significant capital investment (\$50 million over three years) to replace computer hardware at each site since many of the computer systems were mainframe based and not easily converted to Internet integration. After a competitive bidding process, CapStar settled on a software suite from Integrated Health Information Systems (IHIS), a nationally recognized leader in health information technology. The new system created by this combination of hardware and software was named the Knowledge Information System (KIS) (Figure 4.1-1). KIS was designed to support current needs as well as future expansion, which CapStar plans to phase in over the next five to ten years. Added value for performance measurement and analysis is provided through national

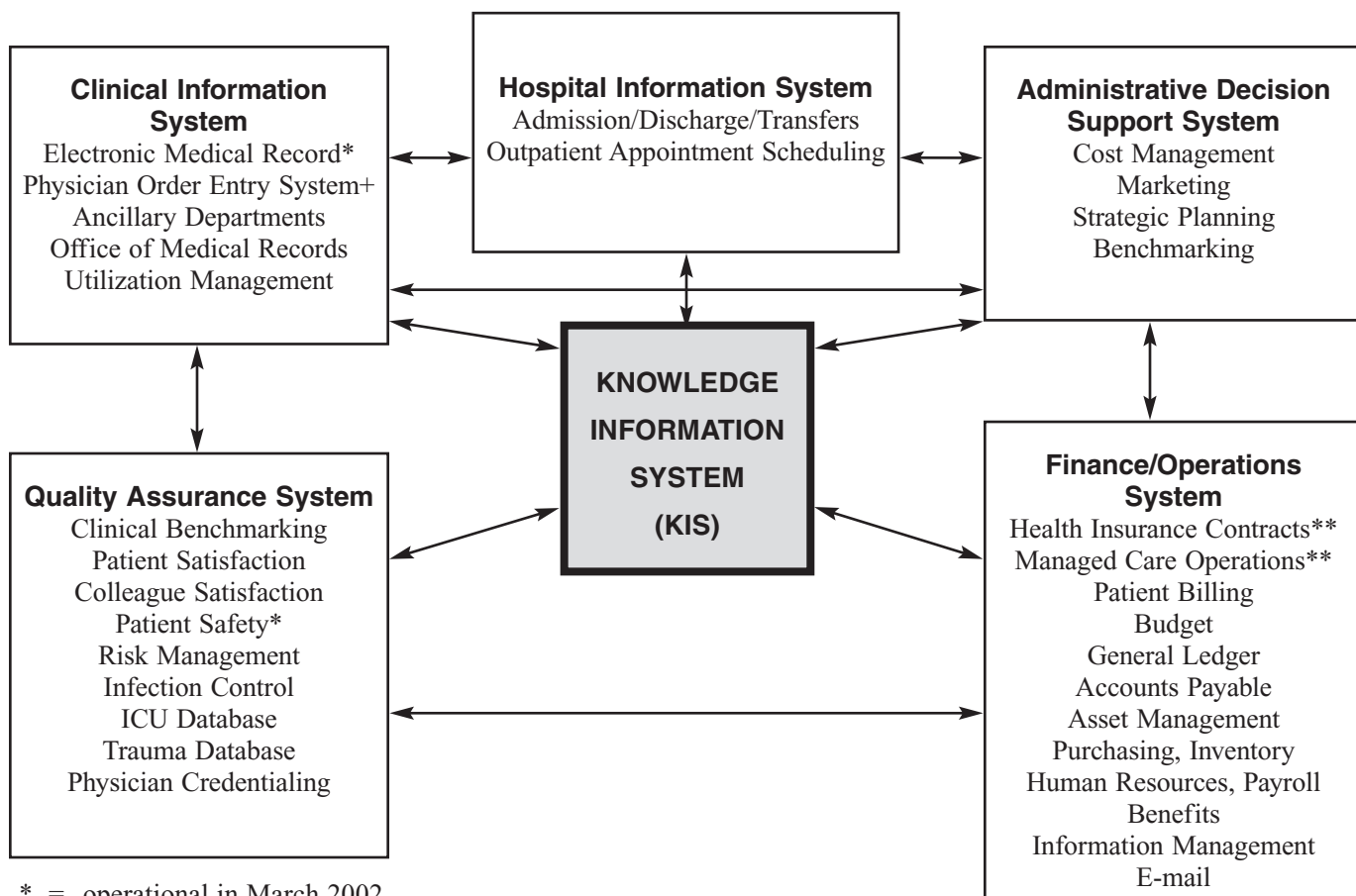
benchmarks from the IHIS national database that are routinely integrated into standardized reporting from KIS. These include clinical severity adjusted process and outcome data, as well as operational and financial data from over 125 similarly sized health care systems nationwide.

The centralized IT Department, with satellite departments in each OU and roving support for the CapCare Centers, is responsible for maintaining KIS. The system is based locally on file server technology, but each file server transfers its data to a central mainframe computer for more efficient information sharing among sites. This system is supported by a backup mainframe computer located at a remote site, which mirrors all mainframe data. This backup can replace the mainframe within 30 seconds of a primary mainframe computer failure. CapStar makes extensive use of advanced data entry tools, including bar code technology, coupled with scanners for patient tracking, process control, and supply management.

Information management systems must be responsive to the CSFs of the organization. One example of this responsiveness is demonstrated by KIS support of the Patient Safety initiative. Bar coding of patient identification bracelets, coupled with medication bar coding, reduces errors, helping to ensure that the right patient receives the right medication at the right time. The computerized Physician Order Entry System (POES), when fully operational in 2002, will further reduce errors in medication by eliminating the potential for transcription errors associated with illegible handwriting. In July 2001, CapStar began supplying physicians with personal digital assistants (PDAs) linked to KIS using wireless links located at every clinical area. These PDAs offer physicians instantaneous access to current clinical information on any patient within CapStar and will enable handheld medication ordering when POES is fully operational. CapStar-affiliated physicians have the option of contracting for billing services through the Reliastate Insurance Management System (RIMS). They can code and initiate the billing process for professional in-patient services directly from their PDAs via a wireless electronic link to the RIMS billing system.

The Administrative Decision Support System (Figure 4.1-1) allows for analysis of performance and reporting with benchmarking against regional and national best practices, sorted by DRG, OU, and provider.

4.1a(2) The SLT for each OU orchestrates the development of clinical, financial, and operational measures that align with the CSFs and strategic objectives. The ICs in each OU work with operating departments to ensure that the cascaded measures through the entire OU and the



* = operational in March 2002

+ = currently operational in ICUs and the ED, with remainder of units to be phased in 2002–2003

** = Managed by Reliastate Insurance Management System (RIMS)

Figure 4.1-1 CapStar's Knowledge Information System

functional components of each OU, such as the PACTs, remain aligned.

The IHIS software is a powerful data integration tool that enables colleagues with access to KIS components (some components, such as patient information and certain financial reports, are restricted for security and confidentiality purposes) to link these components to produce performance reports with a number of variables. An example of this linkage between CSFs and daily operations can be found in the improvement of overall patient satisfaction with wait times to the 90th percentile nationally in FY 2001. To accomplish this, CapStar outpatient radiology services committed to a goal of reducing wait time by 20 percent. The PIO, working with each radiology site, used the PIC model to help all the sites adopt the Roseleaf Radiology Department system for tracking patients. Roseleaf had developed its system through a PIC in 1999, achieving a 50 percent wait time improvement in one year, with Roseleaf wait time satisfaction at the 90th percentile. By bar coding patient arrival and departure at

each step of the radiology process, radiology site managers can instantaneously monitor and report patient flow. Each manager identified the bottlenecks associated with patient flow through radiology, unique to each site, resulting in every outpatient radiology department now matching Roseleaf's results. Through the use of novel technologies, such as bar coding and the soon-to-be implemented Wireless Web System, KIS allows for significant flexibility in tracking and reporting process measures and indicators for meeting CSFs.

4.1a(3) While decentralized use of reporting features is encouraged, the PIO serves as an internal consultant to help users access comparative data and information available on KIS, especially those that relate to the internal (internal sites) and external (national database) benchmark capabilities integrated into KIS. Comparative data are collected through a number of sources, including the EPI and IHIS, which provides coded comparative data with 125 hospitals of similar size.

4.1a(4) The performance measurement system is kept current through a variety of steps. The “State of IT” Strategic Plan, prepared for the Drill Down (Figure 2.1-1), includes an evaluation of the performance measurement system. The focus during the past two years has been on finding and reporting medication errors. The PIO, in collaboration with the ELT, continuously reevaluates the performance measurement system to maximize its value.

4.1b Performance Analysis

4.1b(1) The ELT recognizes that management by fact requires critical examination of results for effective decision making. Rather than specifying the type of analysis, the ELT has adopted a continuous and systematic performance review, based on the CSFs, which serves as the primary focus for ELT meetings. The BSC is used to track CSF results. Those CSFs on target are characterized as “Status Green.” If a measure is falling short of the goals established in the TAP or is not equal to or better than the projected performance of competitors, the CSF changes to “Status Yellow” on the BSC. The responsible IC re-evaluates the CSF results to identify opportunities for rapid improvement to return to “Status Green.” This effort is coordinated and monitored by the PIO. The IC chair is expected to present to the ELT an analysis of why the operations associated with the “Status Yellow” CSF are falling short and to outline a 120-day plan to improve performance to expected levels. All “Status Yellow” CSFs must be presented at the ELT meetings until performance improves sufficiently. If a “Status Yellow” CSF fails to be corrected to “Status Green,” it is categorized as “Status Red.” Additional actions might be considered, including outside consulting support. An example of the effectiveness of this system was the ability to address ED physician staff shortages at Founders that were negatively impacting the Patients First CSF submeasure of waiting times in January 2000. The Patients First IC investigated and improved waiting times within two months of being “Status Yellow.”

4.1b(2) CapStar communicates results of high-level analysis through two principal methods that support its belief in open access to information. First, a formal yet rapid cascading of performance results through the IC structure enables communication to and from the ELT, SLTs, and ICs at the CapStar and OU levels. Second, the BSC is available on KIS and all KBs. In addition, the PIO prepares special organizational, OU, or departmental analysis upon request.

4.1b(3) As outlined previously, organizational-level analysis is focused on the CSFs, the strategic objectives, and

action plans. By integrating CSFs formally into the agenda of the ELT, IC, and TAP meetings, analysis and results, objectives, and action plans remain aligned. By centralizing performance measurement, the PIO serves as an institutional resource for improvement efforts. By focusing maximum improvement efforts on CSFs designated as “Status Yellow” or “Status Red,” resources are prioritized to ensure corrective action and continuous improvement.

4.2 Information Management

4.2a Data Availability

4.2a(1) KIS is accessible from personal computers and distributed kiosks with high-speed T1 lines connecting all sites. KIS is available in both clinical and administrative areas, as well as in physicians’ offices and remotely at physicians’ homes, to facilitate access to medical and administrative information necessary to make clinical, financial, and operational decisions. Independent physicians use KIS to manage their outpatient office records, integrating both the inpatient and outpatient medical records, which facilitates transfer of information to the hospitalists. Over 65 percent of the independent physicians are on KIS. Direct database linkages between PHNA and the Purchasing Department allow for “just-in-time” stocking and reduced inventory costs. Data interchange with CapStar’s partner, RIMS, is accomplished through nightly data downloads via dedicated phone lines. Certain areas of KIS are made accessible to both insurers (extensively used by their case managers) and employers (used by benefits managers) to enhance their understanding of CapStar’s quality improvement efforts. Finally, the BSC is widely distributed throughout the organization through KIS and on the KBs.

Digital radiography is being phased in at all OUs over the next 18 months. Currently, Excelsion is fully digitalized, and Founders anticipates complete digitalization by July 2002. Integration of this system into KIS allows sharing of radiographic images to any site with a PC workstation, eliminating the need for transportation of physical X-ray films to health care providers. Radiographs taken outside the CapStar system are readily scanned into digital format at each OU for inclusion in patient records.

In its next major cycle of improvement, the Electronic Medical Record, piloted by Founders in March 2002, will optimize timeliness and accessibility of medical data at all system locations, eliminating dependence on a paper record that might not be where the information is needed. History and physical examinations, progress notes, consultations, and operative records will be dictated and

transcribed digitally. Transcriptions are expected to be entered into the electronic chart within one to four hours of dictation, depending on criticality. Currently, these documents can be reviewed instantaneously, prior to transcription, by listening to the dictation.

4.2a(2) The IAA IC and the CIO establish policies and procedures to ensure data and information integrity, reliability, accuracy, timeliness, security, and confidentiality (Figure 4.2-1). CapStar must contend with the uncertainties of the new federal HIPAA regulations governing security and confidentiality of patient information. The HIPAA Task Force is responsible for reporting on measures of performance related to the policies and procedures outlined in Figure 4.2-1. The new Electronic Medical Record will significantly improve the security management of confidential patient information. Access codes will be restricted to authorized caregivers and others with a verified need to know.

Data and Information Requirement	Policies and Procedures
Integrity Reliability, Accuracy	Automation of data entry with bar coding and scanning, database scanning for inconsistencies of coding using special software, computer access logs, message authentication codes, a 24-hour crisis team, passwords linked to authority level, CSFs linked to accuracy, a mirrored backup system activated within 30 seconds of main system crash.
Timeliness	CSFs linked to timeliness of admissions, labs, and X-ray; bonuses and penalties for timeliness in RIMS billing activity.
Security and Confidentiality	Formal risk assessment of security and confidentiality, unique identifiers for all operators, access code restrictions, auto logoff, educational programs on HIPAA compliance.

Figure 4.2-1 Data Requirements and Approaches

4.2a(3) CapStar recognizes that significant funds must be spent to keep the data and information availability systems current. To spend assets wisely and to keep systems integrated, all IT purchase requests greater than \$10,000 and all requests for additions to the core KIS functions are reviewed by the IAA IC and require IT Department input and sign off for inclusion in the “State of IT” Strategic Plan. The IT Department keeps KIS hardware functioning and, through a service contract with the primary vendor, IHIS, keeps the software components upgraded to most current versions. Additional requests for improvements in data gathering or information availability are channeled through the IAA IC. System reliability is tracked through measurement of the IT Help Desk and complaint process results, including frequency of complaints and rapidity of resolution. The IT Department or IAA IC appoints PIC Teams as necessary to address recurring IT problems.

4.2b Hardware and Software Quality

4.2b(1-2) Hardware and software assessment, purchase, and implementation occur in a modified PEC process, managed by the IT Department. Any request for new hardware or software must include quotes from at least three potential competitive vendors, accompanied by a complete assessment of the relative benefits, risks, and costs of each option. The IT Department also identifies any other potential vendors. A competitive review of the product then occurs by both end-users and IT support personnel. The two top selections then undergo review through site visits at other facilities where the hardware/software already is installed and in use. Prior to purchase, an implementation plan is formulated. Prior to full implementation of any new system, organization-wide software or hardware is installed at one of CapStar’s facilities for beta testing. In a formal process, all functionality issues are evaluated fully by colleagues who will be using the hardware and software on a regular basis. Training, functionality, and reliability problems must be resolved, in a formal sign-off process, by an implementation team. The team includes managers and end-users of the new system at both the beta test site and the roll-out sites.

5 Staff Focus

5.1 Work Systems

At CapStar, colleagues are skilled and empowered employees operating in an environment of pride and joy. Joe Picardson feels that it is the role of Human Resources to foster this environment. CapStar's ability to achieve industry-leading clinical outcomes and to compete in the regional market is based first and foremost on how CapStar secures and develops extraordinary talent. Staff programs are designed to stimulate collegiality, teamwork, commitment, and well-being.

5.1a(1) As part of its study of best-in-class work system innovation, the HPC IC recommended an evidenced-based practice used in hospitals nationwide called Patient Focused Care (PFC). The driving philosophy behind this practice places the patient at the center of the care-process—with a team of professionals consistently delivering high-quality care over time. Organizationally, this approach clusters patients with similar diagnoses and care needs together with a small, multidisciplinary team that is able to deliver high-quality services at the location that minimizes disruption for the patient—the bedside. The whole approach is designed to emphasize patients' needs as opposed to the traditional emphasis on departments, units, and caregivers. The result is a strong, caring relationship between the patient and team.

PFC is the care model at Excelsion, Founders, and Roseleaf for chronic diseases and other clinical priorities. These include congestive heart failure, physical rehabilitation, oncology, asthma, chronic obstructive pulmonary disease, and diabetes. Roll-out at Hergh is pending physical plant improvements, which currently are unscheduled.

CapStar applies the PFC through Patient Centered Teams (PACTs). Each PACT is a small team that includes an RN and a Care Partner, Patient Support Partner, Pharmacist/Pharmacist Technician, Administrative Support Partner, and Attending Physician/Hospitalist trained to deliver extraordinary care for patients with a particular diagnosis/problem. The RN and the Care Partner form the "core team," caring for an average of 6–10 patients on a shift, with assistance from the Patient Support Partner, Pharmacist, and Administrative Support Partner, who "bridge" several core teams (i.e., the Patient Support Partner, Pharmacist, and Administrative Support Partner will typically handle 2–3 PACTs). Each PACT member functions as a colleague for health care delivery. Staffing is reduced to the core team for evenings, night shifts, and weekends. The PACT approach to work design is supported by physically relocating support services traditionally provided in distant locations from patient units (e.g.,

admitting, laboratory, radiology, business offices). These are integrated into PACT units and decentralized throughout the care system. Figure 5.1-1 details the roles of each member of the PACT. Supplies are located in patient rooms (rather than a central supply system), medications are placed in medication cabinets in patient hallways (activated by electronic mechanisms to ensure access is limited to those authorized), and computers for charting are at terminals in hallways to facilitate more caregiver time at the bedside.

CapStar *does not* use PACTs for many acute-focus diseases such as heart attack or stroke or labor and delivery for which patient recurrence is less frequent/predictable. Work design for these diseases follows a more traditional care pattern with an emphasis on patient-centered care, teamwork, and cooperation.

Much of the work culture at CapStar has been designed to ensure alignment with the organization's commitment to Physician Distinction. Key practices in this area include the following:

- Hospitalists are full-time, salaried, hospital-based physicians responsible for the care of inpatients. They provide coverage for and improve communication with admitting physicians. Hospitalists are integral to the work design to provide the 24/7/365 clinical continuity and expertise necessary to achieve best-in-industry clinical outcome targets.
- Effective and personal communication systems ensure that physicians have patient information when they need it. All nurses carry cordless phones while on duty. These are used to page physicians so that when the physician returns a page or needs information about a particular patient, the nurse who is responsible for that patient responds directly, ensuring a high level of responsiveness to the physician.
- Before any nurse hangs up a phone when speaking to a physician, he or she asks a simple question, "I have the chart in front of me; is there anything else you need?" This ensures CapStar physicians feel a level of communication and teamwork that is absent in most hospitals.

Volunteers are also an important component of CapStar's human resources. More than 1,945 volunteers support CapStar in various capacities and average more than five hours of service monthly per volunteer. Volunteers are supported through a Volunteer Office, under Jane Turek, Vice President, Community Services.

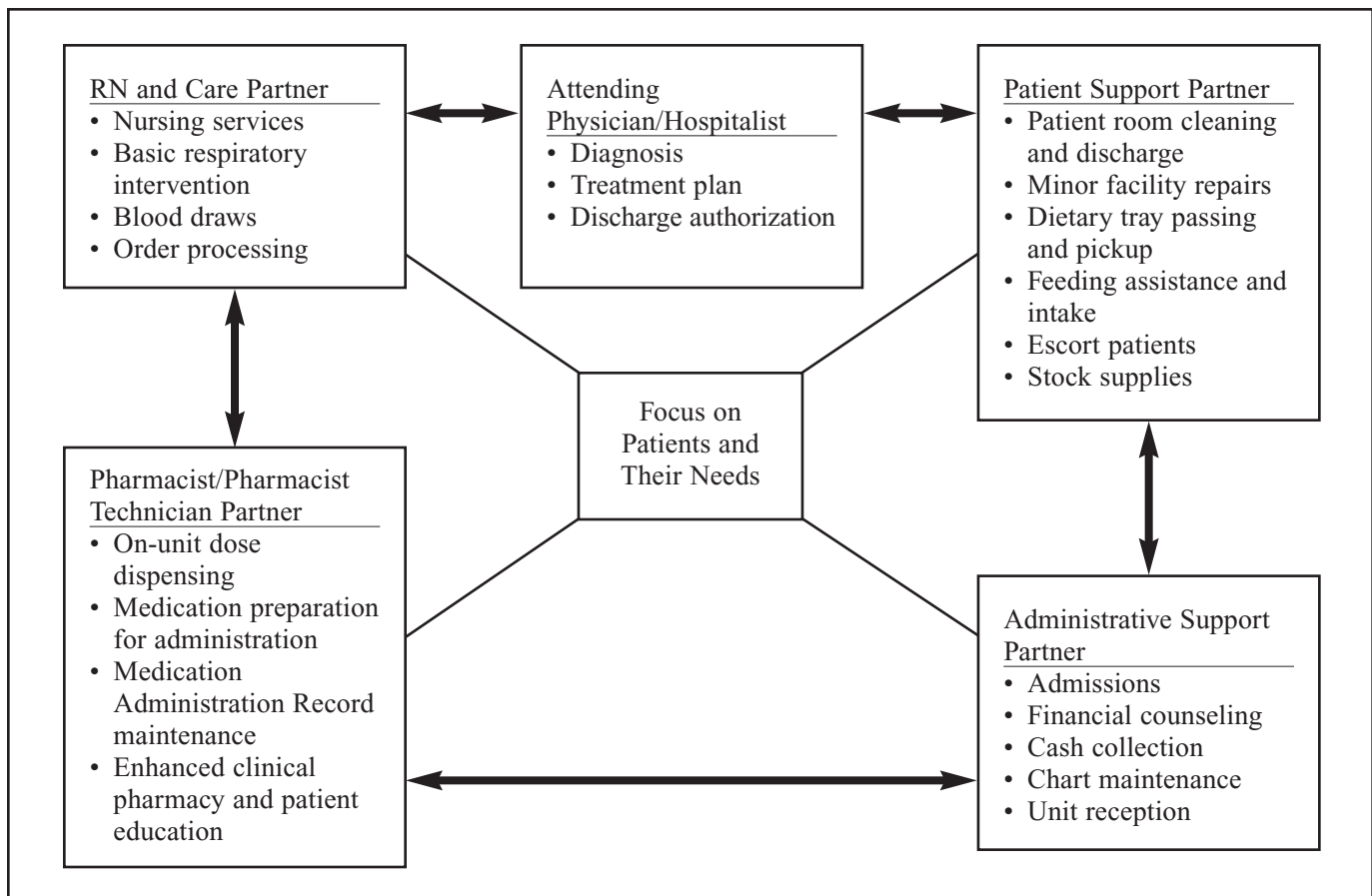


Figure 5.1-1 Roles of PACT Multidisciplinary Team Members

5.1a(2) CapStar uses a variety of techniques to motivate colleagues and to help them achieve their full potential. The performance management system and associated recognition activities described in Area 5.1a(3) provide shared opportunities for colleagues and their supervisors. CapStar also provides course offerings and financial support for colleagues to achieve their personal and career development goals (Item 5.2). In addition, the Colleague Opinion Survey has repeatedly shown that CapStar colleagues find tremendous satisfaction in being empowered, informed partners in delivering excellent patient care. They are motivated by many of the practices at CapStar that support the Patients First CSF:

- participation on PACTs and involvement in PECs and PICs
- Rapid Recovery \$\$ and I2
- Dialogues, KBs, Knowledge Today, and the *CapSpirations* newsletter
- quarterly Patients First fairs

5.1a(3) The performance management system has been redesigned to reinforce the commitment that employees

are skilled colleagues who increasingly are empowered, nurturing a culture of pride and joy. The Performance Evaluation Plan (PEP) views the supervisor and colleague as partners on a path of professional development. Each colleague's PEP is a "template" for career development, personal growth, and performance expectations linked to the reward system. Performance evaluation is based on achieving and exceeding expectations in three key areas established through the PEP: career goals/personal growth, organizational performance targets, and the PDV.

Each colleague's PEP is a simultaneous top-down and bottom-up approach to staff development that includes monthly coaching sessions by the supervisor and six-month formal reviews. Discussions focus on goals attained, modification or amendment of goals, and development of new goals for the coming six-month period. Additionally, supervisors and colleagues identify learning and development goals, which are documented and transferred to the Colleague Development Plan (Item 5.2). Part of each supervisor's performance is determined based on his or her ability to support colleagues in their personal/career goals and operating goals via the PEP. The PEP cycle also includes a review of leadership-management

level competencies via a Nine-Box Matrix “promotability” model and self-assessment system that are used to support succession planning (Area 5.1a[4]). Supervisors at CapStar are evaluated against their ability to support the mentoring, coaching, and development of the colleagues they supervise.

Celebration is a highly visible and frequent component of CapStar’s culture. Quarterly Inspiration Awards reward colleagues who demonstrate the PDV. The award Improvement Team has expanded the award program to include two tiers—colleague awards and team-level awards. Colleagues may be nominated for Inspiration Awards by a supervisor, physician, any colleague, or a patient/customer. Team awards (nominated by Department Vice Presidents, the ELT, SLTs, or an IC) are given to PACTs, improvement teams, and ICs that collectively demonstrate the PDV and CSFs. Nomination forms are available on KIS, on the Web site, and in printed format. The most distinctive recognition occurs annually through the selection of one or two colleagues from each OU who demonstrate role model performance. These special colleagues become CapSTARS and are recognized by the Board at its November meeting. In addition, each OU has an active recognition program unique to that OU. For example, Roseleaf has a “Special Moment” program in which colleagues are recognized on the spot for distinctive efforts. Founders uses a “Founders Best” program that recognizes both individual and team contributions to patient satisfaction. Each year, CapStar leaders honor its volunteers through an awards banquet with 5-, 10-, and 25-year service awards.

5.1a(4) Nearly 80 percent of CapStar senior positions are filled internally by CapStar colleagues. The Succession Planning Team, composed of management and frontline colleagues, is a subcommittee of the HPC IC. It identified and defined key leadership competencies needed at CapStar to be a successful leader, including having vision, having communication skills, being highly respected, being a mentor/teacher, having integrity, and having business acumen. The team adopted a succession planning process modeled after the approach of a former Baldrige Award recipient that uses a Nine-Box Matrix Assessment. Colleagues utilize the matrix to determine where they are in their growth and development and review concerns with their supervisors during a formal six-month PEP. Colleagues who are noted as high performing and high potential on the matrix are reviewed at least annually by the HPC IC in each OU for potential advancement. Each year, the ELT and the Board discuss the succession needs of CapStar. Joe Picardson presents a succession plan for all ELT/SLT positions, and the Board meets in executive session to discuss any succession concerns about the CEO or members of the ELT.

5.1a(5) The Human Resources Department reviews key work and colleague performance measures semiannually to determine the skills and recruitment/retention needs of the organization identified during the Drill Down and subsequent action planning. CapStar uses traditional recruiting approaches (newspaper classifieds, recruiting health fairs, electronic job boards, and job postings). In addition, because of the diverse communities served and the shortages for health professionals (especially nurses and pharmacists), CapStar uses innovative approaches to meet its recruiting and hiring needs and the three-year goal of becoming the employer of choice in the geographic areas served. These include flexible benefits described in Area 5.3b; signing bonuses for new colleagues and bonuses for referrals that result in a hire; and extended recruitment overseas to attract foreign health care professionals, especially in the Philippines and Ireland.

5.2 Staff Education, Training, and Development

CapStar has continued to invest in extensive training and development despite recent and ongoing unfavorable trends in reimbursement throughout the health care industry. The establishment of CapCollege in 1996 is evidence of this commitment. A competent workforce is a cornerstone of the organization’s ability to deliver role model health services. In addition, all ELT and SLT members understand that having an empowered workforce depends upon the continuous nurturing of colleagues’ talents.

5.2a(1) One of the most important functions of the HPC IC is the development of a comprehensive annual plan for staff education, training, and development. The challenge is creating such a plan that can be accommodated by the available budget. Accordingly, this plan must balance the short- and longer-term organizational objectives with individual staff needs. The CapStar Education Plan results from and aligns with the strategic objectives emanating from the Drill Down, annual action plans, and individual Colleague Development Plans from the six-month PEPs. In addition, industry forecasts for staffing needs and expected shortages drove CapStar to include targeted approaches for ensuring that it offers career development opportunities to help retain key talent. In addition, the annual plan must track the requirements for and include education and training opportunities to support CapStar colleagues in meeting their licensing and credentialing requirements.

5.2a(2) The CapStar Education Plan is developed through an interactive exchange among the HPC ICs of the OUs. Input is gathered from colleagues and their supervisors through a variety of mechanisms. These include focus groups conducted by the system-level HPC IC, colleague

Key Area	Training Courses
Health, Safety, Wellness	Basic Safety, First Aid, CPR, Ergonomics at the Bedside, Establishing a Culture of Safety, Preventing Lower Back Injury
Documentation and Reporting	Medication Error Reporting, Computer Training (word processing, spreadsheet, e-mail, database)
Management and Leadership	Supervisory Training (how to coach, mentor, support on-the-job training), Mini-MBA, Time Management
Customer Service	Listening and Learning Skills—How to Hear Your Customer, Conducting Patient/Family Member Focus Groups
Orientation and Organizational Culture	New Colleague Orientation, Ethics in Health Care, SPIRIT Values, Cultural Diversity and Awareness, Teamwork
Quality Improvement	Process Improvement—basic and advanced levels, Baldrige 101
Clinical Excellence	Clinical Excellence Series
Communication and Negotiation	Communication Skills for MDs/MD Executives, Communication Skills (non-MD)

Figure 5.2-1 Sample Training Courses

suggestions submitted via I2, feedback obtained from exit interviews, and specific areas identified in the annual Colleague Opinion Survey. For example, last year’s Education Plan included the broad deployment of training on conflict resolution. This particular need was identified in focus groups with PACTs and residents. A sample of training offerings is presented in Figure 5.2-1.

5.2a(3) For CapStar to achieve its Destiny of “finest talent, knowledge, and science possible,” it must stay abreast of changes in technology. These changes include not only those associated with delivering patient care but those that permit it to be more efficient. The 2002 Education Plan includes detailed course offerings to support increasing capability among colleagues in using the expanding features of KIS. Specific KIS-related training will focus on the POES to reduce medication errors and the Electronic Medical Record, piloted at Founders in March 2002.

Another critical area is management and leadership development. Through the evolution into a less traditional work system with more empowered colleagues and teams, CapStar has an increased need for leaders at all levels and in a variety of functions throughout the organization. Management and leadership development can no longer be reserved for the senior executives or newly promoted first-time supervisors. In partnership with Ohio/Kentucky

University’s (OKU’s) Organizational Development graduate studies program, CapStar has created a curriculum for each colleague segment: nurses, pharmacists, patient support staff, administrative support staff, residents, and independent physicians. Costs have been minimized by OKU, which has assumed the primary responsibility for course development, curricula management/administration, faculty, and training facilities. In turn, CapStar provides OKU’s graduate program with a “living laboratory” for research in Organizational Development.

CapStar’s new colleague orientation includes a presentation of the PDV, an overview of KIS, discussion about the PEC and PIC models, and safety awareness.

The organization has a goal of a minimum of 50 hours of training per year for each colleague. CapCollege currently offers more than 26 courses at no cost to colleagues, independent physicians, and volunteers. CapStar also offers a generous tuition reimbursement package for colleagues who wish to pursue an undergraduate or advanced degree along their career paths. In addition, CapStar is committed to providing as many courses as possible to satisfy continuing education, licensure, and recertification requirements.

5.2a(4) CapCollege provides in-classroom courses, self-study programs, video conferences, and a limited number of computer-based learning opportunities. Additionally, some training programs are provided at OKU campus locations. However, given the number of CapStar facilities and additional complexity of multiple shifts and critical functions, it recognized the need to explore training methods beyond conventional in-classroom delivery. Training occurs every day as each colleague logs onto the Knowledge Today e-mail system to receive a brief message from the ELT. Dialogues, *CapSpirations*, KBs in each facility, and quarterly Patients First fairs also are educational vehicles. In addition, the organization has recently begun to benchmark other “corporate universities” with strong distance learning components. A goal is to launch the first CapCollege course via KIS in early 2003.

Training effectiveness is evaluated as part of the development of the annual Education Plan. Inputs include post-training feedback surveys from participants and results related to training from the Colleague Opinion Survey. In addition, CapStar has begun working with OKU to implement the Kirkpatrick Model, which includes levels of evaluation beyond participant satisfaction. For a limited number of courses, it is defining organizational performance measures that it expects to change as a result of deploying a particular training program. One example following a training program is the monitoring of associated

clinical outcomes on reducing agitation in Alzheimer's patients. This program was provided to the entire staff of the Geriatrics Service/Behavioral Health Services and has shown very positive results (Figure 7.1-5).

5.2a(5) Knowledge and skills are reinforced on the job through various methods. Supervisors and managers are encouraged to work with their colleagues to define not only the training and development they need but how they will apply what they have learned in their jobs. Cross-training is an important component of empowerment and high-performance teams, and it serves to reinforce learning for both parties involved. The PACT approach to inpatient care creates a daily forum for skill-sharing and reinforcement since team members are in constant discussion of clinical processes and patient service needs. An exchange of learning across the team occurs every time a PACT colleague attends an educational program. Finally, there is a natural culture of mentorship that exists within CapStar. More experienced colleagues provide guidance and coaching to less experienced colleagues. Nowhere is this more evident than in CapStar's residency programs, where residents are reinforced in their knowledge and skills through the direction and feedback of the department heads where they are assigned.

5.3 Staff Well-Being and Satisfaction

5.3a Work Environment

Although Eileen Kirks, CapStar EVP, is responsible for the overall safety program throughout the organization, every manager considers colleague safety a fundamental tenet of CapStar's Purpose, "To cherish, preserve, and improve health." All members of management are held to the highest possible standards of workforce safety and communicate their personal commitment throughout the organization. This persistent focus on colleague safety is one of the ways the ELT and SLTs earn colleague loyalty and high performance. Several safety measures, including lost work days and needle stick injuries, are monitored at the highest level on the BSC. Every lost work day is considered a training or process failure and is viewed as preventable.

The Colleague Care Committee (C6), chaired by Ms. Kirks, is a subcommittee of the HPC IC that comprises managers and frontline colleagues from each OU. With the assistance of the Safety Office, this committee closely monitors all aspects of colleague safety, including the measures cited above as well as others such as workers' compensation claims. The centralized Safety Office assigns safety experts to each OU for teaching and monitoring purposes.

In addition, the organization's commitment to colleague safety is further reinforced through the implementation of corrective and preventive actions submitted as suggestions through I2. The following practices promote an ongoing focus on colleague safety:

- **Weekly Safety Rounds**—As part of the weekly rounds, each patient care unit and PACT hold 10- to 15-minute discussions on relevant safety topics selected by team members. The safety expert assigned to the OU provides information on the latest safety and prevention methods related to the topic.
- **New Colleague Orientation**—Safety is first addressed by the ELT/SLT member who presents the PDV and emphasizes the related importance of colleague safety. Then, the most recent trended data from the safety measures are presented for each major job classification. A colleague from the Safety Office facilitates small breakout sessions so new colleagues can discuss potential safety concerns they may face and to identify prevention measures. The amount of time spent on safety in orientation communicates both CapStar's commitment to colleague safety as well as ensures that new colleagues understand their own roles in providing a safe work environment for themselves and others.
- **CapCollege** provides safety courses on site at the request of each OU. Courses include ergonomics, prevention of repetitive motion injuries, lifting techniques to reduce back strains, infectious disease control management, personal self-defense, and needle stick prevention. All courses are taught by certified health and safety professionals, and many qualify for continuing education credits.

5.3b Staff Support and Satisfaction

5.3b(1) As indicated in the HPC CSF, colleague well-being and satisfaction are considered among CapStar's highest priorities. ELT and SLT members, as described in Item 1.1, are selected, in part, as a result of their demonstrated commitment and ability to focus on colleague competency, satisfaction, and safety. Management understands that the BSC measures of clinical, satisfaction, operational, and financial results are the lagging indicators of how well CapStar colleagues perform. Further, management also understands that the performance of colleagues is related to their well-being, satisfaction, and motivation.

Initially, the key factors affecting well-being, satisfaction, and motivation were determined by an organization-wide, multidisciplinary team along with an outside consultant. Over time, focus groups discussing results of the

Colleague Opinion Survey have provided additional insights in order to refine and revise, if needed, these factors. CapStar monitors performance against these factors on a regular basis. Senior leaders keep abreast of the current workplace climate through SLT daily rounds, Dialogues, new colleague orientation, Inspiration Award participation, and the important Open Door Policy at CapStar. In addition, the Colleague Opinion Survey that is administered to all colleagues throughout the year provides quarterly updates. This process is described further in Area 5.3b(3). CapStar also looks for insights and human resource best practices from Baldrige Award recipients.

5.3b(2) CapStar intends to be the employer of choice. As such, it offers a wide array of unique benefits beyond the traditional ones of health and dental insurance, vacation days, and pension plan. Benefits at CapStar include the following:

- long-term care insurance
- tuition reimbursement (including all courses provided by CapCollege and up to \$1500/year for all other approved course/degree programs)
- reimbursement for health club memberships (up to 80 percent covered)
- reimbursement for child care services (up to \$300 per month) where on-site child care is not provided
- health and wellness screening services (e.g., breast cancer screening, cholesterol monitoring, and “Way to Wellness” program)
- colleague health services access
- flexible work week (full- and part-time options of various work days/shifts)
- four-week paid sabbatical following ten years of service with CapStar

CapStar’s diverse workforce includes colleagues from inner-city neighborhoods as well as small farm communities, highly educated and technically trained colleagues as well as those with limited schooling, and single parents as well as colleagues nearing retirement. CapStar makes every effort to provide flexibility in colleague services, benefits, and policies. For example, each OU is permitted to offer other fringe benefits (within a prescribed budget) beyond the standard items listed above to meet the unique needs of its workforce. This tailored approach also enhances CapStar’s ability to attract, recruit, and retain talent since the employment markets differ dramatically across its 13-county region. Wage scales at Excelsior are higher than at CapStar’s other facilities to compensate for

the higher cost of living and extremely competitive job market in Cincinnati. On the other hand, vanpools are offered at some other locations to mitigate the costs and difficulties associated with commuting.

5.3b(3) The Colleague Opinion Survey is administered to each colleague during the quarter of his or her birth date. The 34-question survey can be completed via hard copy or on-line through KIS. All answers are anonymous although respondents are asked to identify themselves by major job classification and location to enable meaningful analysis and corrective actions to occur. This approach to surveying colleagues throughout the year permits the organization to quickly identify potential problem areas and intervene in a timely manner.

The on-line suggestion program, I2, is another source of information regarding colleague well-being, satisfaction, and motivation. Human Resources monitors these suggestions and trends other related measures such as turnover, absences, disciplinary actions, complaints and grievances, and work-related injuries. Other sources of information include exit interviews, focus groups, and participant surveys from the OKU-led management/leadership courses. Although all related data are aggregated and analyzed in depth for use during the TAP Drill Down in May, ad hoc PIC Teams may be formed by the HPC IC at any time throughout the year to address unfavorable trends or emerging issues of colleague dissatisfaction.

5.3b(4) As mentioned previously, senior managers treat results of colleague well-being and satisfaction as early indicators of organizational performance. During the Strategic Planning Process and TAP Drill Down, they establish priorities to address issues that cut across the organization. If they determine that a service, benefit, or policy that would meet the needs of colleagues does not exist, the PIO charters a cross-organizational PEC Team to develop one. The introduction of a paid sabbatical for ten years of service is an example of such an effort. During the 1999 strategic planning cycle, it was identified that CapStar was struggling to retain key talent in a highly competitive job market. In addition, there was a marked increase in dissatisfaction in the colleague segment with seven years or more of service. Using the PEC process, the PEC Team benchmarked with several leading hospital systems (in other geographic areas) that were facing strong competition for talented resources. The paid sabbatical was one of several practices that the team brought back as recommendations to senior management.

6 Process Management

CapStar systematically uses two key processes to manage the design and development of process steps and the efforts required to keep CapStar processes current and effective. The traditional Deming Plan-Do-Study-Act (PDSA) cycle is fundamental to both these processes. Through the efforts of the Physician Distinction IC, physicians—particularly the hospitalists—play substantial roles in the design and improvement of CapStar processes. Although there are differing levels of maturity in the use of these models across the organization, the ELT and the SLTs expect to bring all OUs to systematic deployment by Summer 2002.

6.1 Health Care Service Processes

6.1a Health Care Service Design Processes

6.1a(1) The Process Evolution Cycle (PEC) (Figure 6.1-1) is a customized version of the PDSA cycle. The PEC takes the resulting objectives of the strategic plan (Figure 2.2-1); identifies the need for new operational, business, or support processes; and provides the framework for designing, benchmarking, and pilot testing the new processes so they can be introduced error-free. The PEC integrates the four stages of the PDSA cycle with a focus on the needs of the strategic, business, and action plans; metrics needed to monitor expected progress; results of the pilot project; and full implementation of the tested process. Measures are focused on four key clinical areas: functional health status, satisfaction compared to need, total costs, and clinical outcomes. The first respective area is primarily a patient measure, the second a patient and family measure, the third a payor measure, and the last a patient measure. PEC Teams are assigned by the ELT or SLTs and are composed of medical and support staff and management, as well as frontline colleagues. They are supported by expert staff from the Office of Marketing and Business Development. Their primary goals are to design and deliver the best quality health care at the lowest cost. The results from these teams are delivered to either the appropriate IC or the ELT or SLT, depending on the scope of the service.

6.1a(2) The need for new or significantly modified health care processes is first identified during the 12-part Drill Down and then further explored between the May and October TAP meetings prior to budget approval in October (Figure 2.1-1). Sources for suggested new or improved processes include all OUs, ICs, clinics, patients and customers, and support offices. PEC Teams have access as needed to any of the ICs for their review of these suggestions and to draft a prioritization list for review and approval by the ELT. The financial impact of

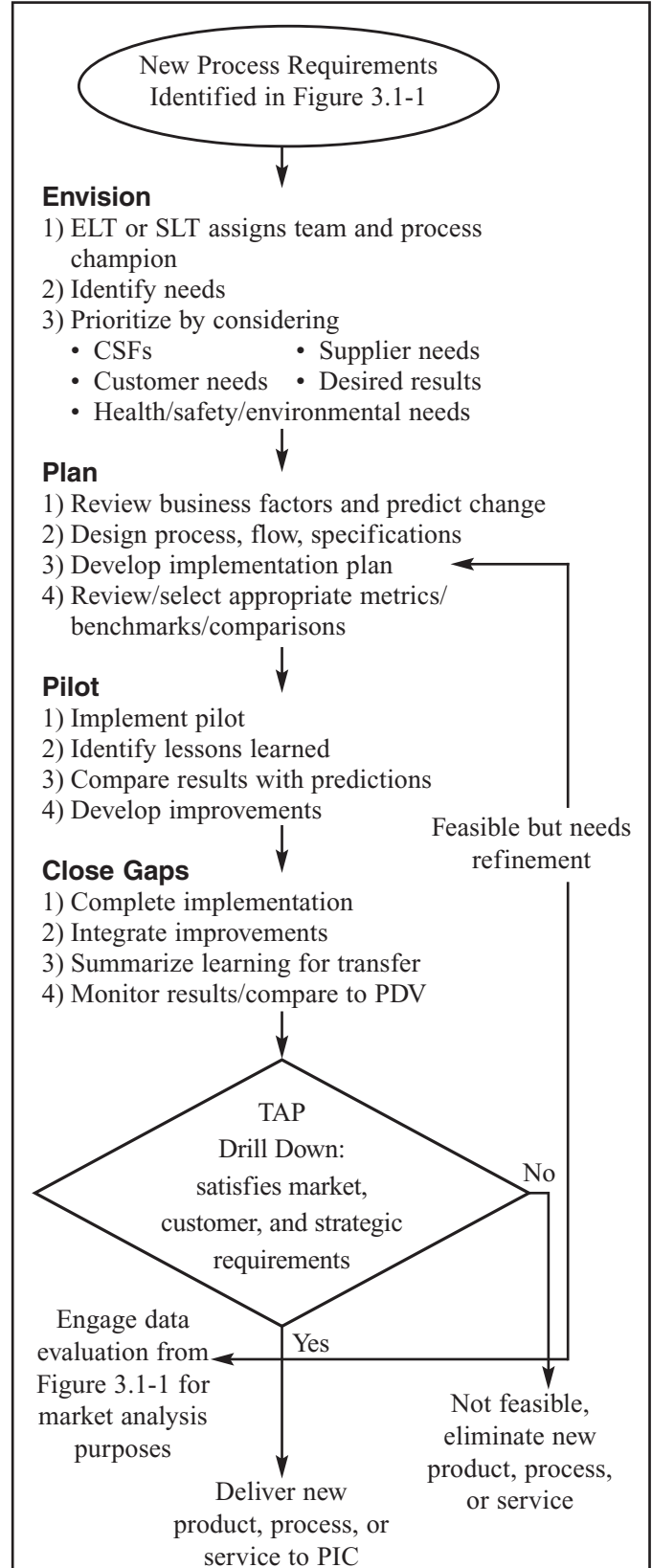


Figure 6.1-1 Process Evolution Cycle (PEC)

these suggestions is considered by the FMS IC and is an important factor in the prioritization and approval of new or modified candidate processes. The FMS IC at the CapStar and/or OU level, depending on the proposed new service, is involved at each of the Envision, Plan, Pilot, and Close Gaps steps of the PEC. This close interaction between the PEC Teams and the FMS IC enables the teams to avoid downstream surprises if the project fails financial performance requirements.

6.1a(3) The PIO identifies best practices, both within and outside medicine, to maintain a leading edge focus on topics such as health outcomes, service, patient safety, and employer coalitions. Since staff assignments to the PIO (under the direction of Dr. Mark Worfman, Chief Quality Officer [CQO]) rotate among the best colleagues from all OUs, the success at keeping up with these changing needs has been high. For instance, the Patients First IC has implemented an institution-wide, Five-Step Safety Audit that is applied by PACTs on a continuous basis to all phases of patient care (Figure 6.1-2). As changing patient/customer needs are identified, solutions are developed through the IC and PACTs, with the PIO serving to coordinate the efforts. A few examples of safety initiatives prompted by this process are the bar coding of medical records and medications (Area 4.1a[1]) and appropriate equipment selection.

6.1a(4) To focus on changing patient needs and to maintain a leading competitive position, the IAA IC assesses requests submitted by staff to adopt new technologies. The IAA IC systematically evaluates requests in relation to the PDV, current strategic priorities, and resource availability. This IC prepares the “State of IT” Strategic Plan during the TAP cycle and an ongoing list of advances that were not acquired for funding reasons in case funds become available during an off-budget cycle. The recent bar coding of medical reports (see Item 4.2) was accomplished as a result of this prioritization process. The IAA IC has created a partnership with CapCollege to keep abreast of emerging technology that may benefit CapStar’s delivery of valued medical care. CapCollege has contracted with an outside vendor whose expertise is evaluation of advances in medical technologies. IAA IC success stories include CapStar’s planned introduction of PDAs to capture patient and staff information in real time. Also, the increasing use of teleconference facilities reduces decision-making cycle time and facilitates telemedicine techniques as part of the strategy to improve relationships with and to increase referrals from rural hospitals.

6.1a(5) The PEC Process is managed through the centralized PIO. The PIO monitors the progress of these teams, provides support as necessary, and researches and identifies best practices and benchmarks applicable to desired

Five-Step Safety Audit Questions
1. What are the ways that this process can fail?
2. If this process fails, how can it harm a patient? Staff?
3. Is there somewhere in CapStar that the safety of this process has been audited already?
4. Can we apply those lessons to this situation?
5. What do we need to do to prevent patient harm?

Figure 6.1-2 Safety Audit Check Sheet

results and improvements. Because the PIO works with all OUs, service on the PIO is considered career enhancing. Efficiency and effectiveness factors are included in the performance monitoring module of KIS. As a rule, benchmarks are set at the top 25 percent of industry performance when comparative information is available. Lessons learned are collected from each PEC Team before it is disbanded. These lessons are catalogued on KIS for review by other teams prior to embarking upon new projects. Benchmarking conducted as part of the PEC provides stretch goals that serve to ensure high-quality products, processes, and services and high value for all stakeholders. Sample measures are listed in Figure 6.1-3. Learning from past projects and other OUs is an inherent feature of the interlocking system. The ICs at the OU level are responsible for learning transfer.

6.1a(6) During the design process, with the assistance of the Compliance Officer, all relevant performance requirements are identified, including regulatory and accreditation standards. If CapStar does not have internal expertise when new or radically different requirements are identified, external consultants are employed to assess the issue and provide appropriate solutions. Performance measures related to compliance are established and assigned to the RAC for periodic review and are also included on the BSC on a regular basis. This ensures that noncompliance is recognized early before a situation becomes too difficult to correct in a timely fashion. These measures are tracked with the Status Green, Yellow, and Red process outlined in Area 4.1b.

6.1a(7) To minimize errors and rework, CapStar has incorporated a test phase into the PEC to coordinate the processes among the OUs. All new programs are pilot tested at a noninitiating site and, when proven successful and adjustments completed, are rolled out in a systematic fashion across the entire organization. Recently, this pilot process has been enhanced. When new processes include workplace or workflow modifications, a mockup with end-user testing is mandatory, even prior to live-site pilot testing. Feedback and performance metrics are included in this step to assess progress before and during full implementation. To promote the SPIRIT Values (particularly “Service”), PACTs provide valuable patient and customer

Factor	Sample Measure	Category 7 Figure
Design Quality	Readmission rates	7.4-5
Cycle Time	Time from inception of new program to implementation	7.4-1
Improved Outcomes	Reduction in # of changes following implementation of new process during systematic roll-out	7.4-1
Efficiency	Number of new design processes	7.4-1
Effectiveness	CSF performance	7.4-6
Safety	Staff safety	7.3-9

Figure 6.1-3 Sample Measures for Assessing Quality of Service Design Processes

feedback for existing and newly designed processes (Area 5.1a[1]).

6.1b Health Care Service Delivery Processes

6.1b(1) While the PEC is focused primarily on new processes and their conformance to strategic objectives, CapStar’s Process Improvement Cycle (PIC) (Figure 6.1-4) is used by individuals and teams to focus on the effectiveness of existing patient care processes and their continuing success in a changing marketplace. Both the PIC and the PEC are designed to support CSFs fully with effective processes that can be employed by virtually any team throughout CapStar. Figure 6.1-5 shows key clinical patient delivery processes, key requirements, and their measures. CapStar is particularly proud of its use of focused Improvement Teams to develop a broad range of clinical pathways that can be tracked on KIS, starting as early in the patient’s course of treatment as the arrival at the physician’s office or the ED. Clinical pathways are evidence-based, scientifically validated clinical process steps used in the diagnosis and treatment of disease. PACTs use them to guide the care of patients and to reduce variation in the care process. Pathways have been developed for most major diseases and procedures. They are a key component of CapStar’s approach to assure that it never again has to deal with the avoidable death of a young child or learn of fragmented or insensitive care of a patient.

6.1b(2) The process to learn of patients’ expectations begins during initial intake, in which the hospital first learns of a clinician’s intent to hospitalize a patient. The Central Intake Office uses a standardized Intake Process to record the patient’s medical condition and evaluate

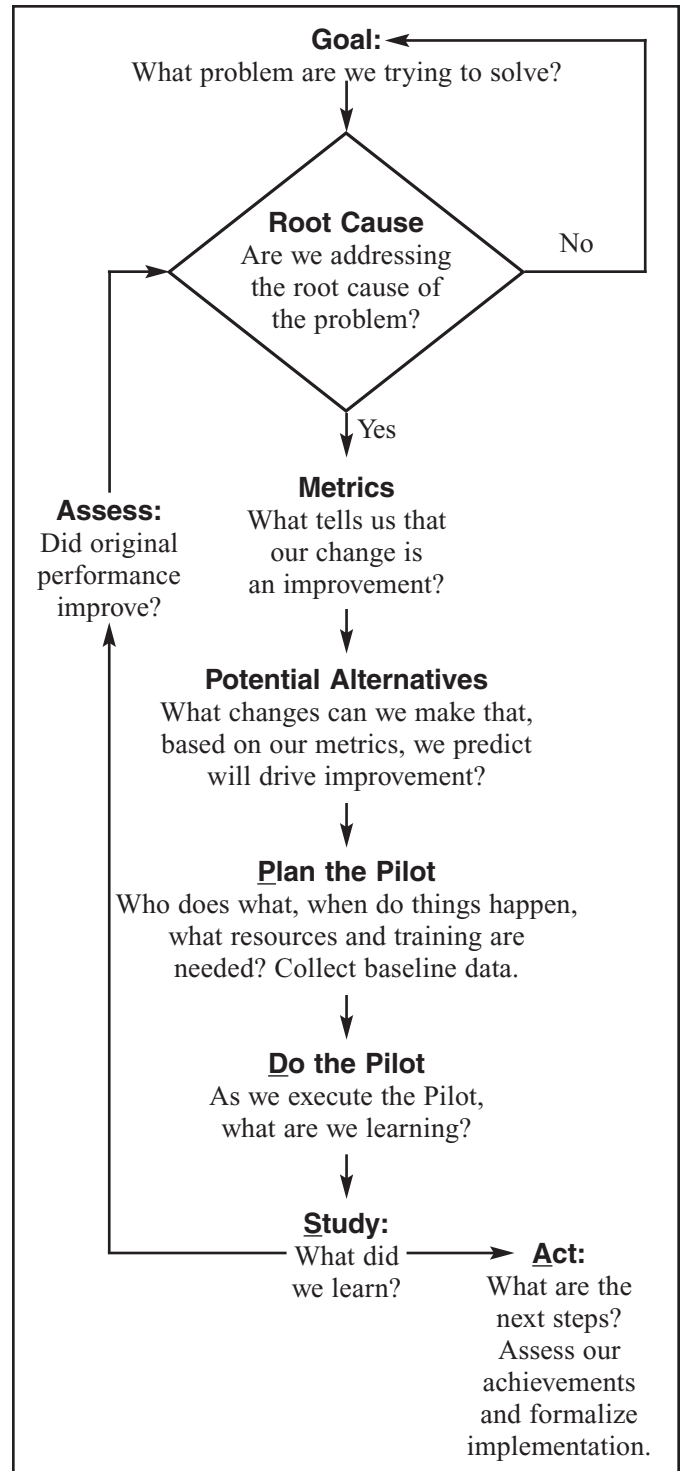


Figure 6.1-4 Process Improvement Cycle (PIC)

social and family circumstances and care expectations. The Intake Record serves as the consistent patient input documentation. Since an increasing number of patients are admitted and cared for via a decentralized PACT, the process to learn and address patient expectations continues as PACT members complete a single care plan that has been designed as part of the clinical pathway for the

Key Health Care Service Processes (Responsible IC)	Key Related Subprocesses	Key Operational Requirements	Key Performance Measures	Related Category 7 Figure
Screening (HPC)	Admitting	Timeliness	Admitting cycle time	7.4-2
Treatment and Therapy (HPC)	Treatment	Appropriate care	Percent of patients on pathways Satisfaction report Readmission rates Medical errors	7.4-7 7.1-9–11 7.4-5 7.1-7
Patient Outreach (Patients First)	Discharge Quality of care Effectiveness	Discharge plan, instructions Follow-up Low costs	Discharge services arranged, understood by patient Percent follow-up Cost per case	7.4-3 7.4-4 7.2-8
Laboratory (COE)	Diagnostic Pathology	Availability Accuracy Cost effectiveness	Wait times Satisfaction report Cost per test	** ** **
Radiology—InsideYou, Inc. (COE)	General Diagnostics Ultrasonography Angiography CT/MRI Radiation Therapy Nuclear Medicine	Availability Accuracy Cost effectiveness	Wait times Physician satisfaction report Cost per service	** ** **
Emergency Services—including ERCare (COE)	Diagnosis Coordination of care	Timeliness Effectiveness	Wait time to be evaluated by MD ED patient satisfaction	** 7.1-12
CapCare Centers (COE)	Medical visits Telephone access	Time with physician Timely appointments Ease of access Staff courtesy	Patient satisfaction	7.1-13
Anesthesiology—Calmstate (COE)	Quality of service	Timeliness Effectiveness	OR delays Pain Index Satisfaction report	** 7.1-4 **
** Note: Due to the limited length of this application, many of these results are not included in Category 7. These data are available upon request.				

Figure 6.1-5 Clinical Patient Delivery Processes, Measures, and Related Results

patient’s condition. By the time the care plan is completed, all caregivers, the patient, and the patient’s family have a complete and common understanding of the care plan based on information known at the time of admission. An integral component of the PACT approach to care is the inclusion of patients and/or family members as caregivers where medically appropriate. Patients and family members as caregivers can view (but not enter information into) their medical record. Since the PACT is an interactive team of colleagues assigned to the care of the patient, any changing needs or expectations are quickly identified and documented. The Electronic Medical Record, piloted at Founders in March 2002, will significantly enhance the ability of caregivers to access a

single record of patient needs, expectations, and plan of care. While the care plan offers real-time understanding of needs and expectations, follow-up phone calls and patient satisfaction surveys provide an after-the-fact perspective of expectations and needs. As previously indicated, these results are analyzed by the PIO and used to identify improvement opportunities.

Each clinical pathway incorporates assessment of patient expectations and understanding at the initiation, mid-course, and completion of the pathway. Colleagues use this information to assess the match between the standardized pathway and the individual patient and to tailor it to individual patient needs and expectations.

6.1b(3) The PACTs are responsible for assuring that the performance expectations in the clinical pathways are met for each patient on a pathway. The hospitalist collaborates with the patient's admitting physician to ensure that the PACT follows the pathway or follows an alternative care plan established for those patients whose pathway is not their best course of care. As described in Area 1.2a(1), the meeting of key regulatory requirements is orchestrated by the RAC and its subcommittees, which prepare regulatory policies with the assistance of the Compliance Officer. Each OU is responsible for implementation of regulatory policies as they relate directly to patient care services. Payor requirements are met at a macro-level and an individual patient level. At the macro level, Chief Financial Officer Sheila Rikert is responsible for assuring that all negotiated contracts with payors have clearly specified requirements. In addition, CapStar differentiates itself in terms of its relationships with insurers by having the Patient Support Partner of the PACT remain in contact with the insurer if situations beyond a typical care process are encountered. For example, the Patient Support Partner will contact the insurer if a patient develops complications and needs to remain in the hospital longer than for a typical case.

6.1b(4) Real-time patient/customer and supplier/partner input is sought by the medical staff, ICs, and PACTs through both a structured interview process and the clinical pathway patient input described before. For instance, at every change of shift, the charge nurse of the PACT stops in each patient's room and asks if there was anything that occurred during the previous shift that was not performed well and could have been performed better. This information is used immediately at the PACT level for in-process service correction and recovery, as well as analyzed longitudinally to see if entire processes need adjustment. If this input involves contract services, a report is provided by the PACT to the administering service. All of this information is collected and provided for review in the KIS, along with the metrics described in Area 6.1b(1) and the CapStar BSC (Figure 2.2-1). The results achieved and reported for these measures are compared to the expectations captured in both the clinical pathway and internal survey methods described in Area 6.1b(2). The clinical process owners, ICs, and PACTs investigate any disparities and may initiate a PIC at their discretion.

6.1b(5) CapStar uses a prevention-based approach to minimize inspection and audit costs. Standardized practices that make up the clinical pathways are used in the processes implemented throughout the organization and in training staff, patients, and customers. This helps raise the awareness level so that mistakes are minimized and accidents are eliminated. These pathways are integrated into KIS, allowing for real-time automated auditing of pathway compliance. This minimizes the costs of inspection and

auditing. Clinical pathways will be loaded into the soon-to-be implemented Electronic Medical Record. Deviations from a pathway will raise a flag and require the clinician to give reasons for the departure from the pathway (e.g., patient age or disease complexity). The clinical department chairs and the MLTs in each OU review quarterly reports on clinical pathway compliance and establish PICs at their discretion. For example, to reduce costs and improve performance, the Five-Step Safety Audit (Figure 6.1-2) probes for existence of prior learning about safety factors for a process, as well as uses a simplified failure mode and effects analysis to prevent future errors. Membership in PHNA maximizes the use of long-term contracts that incorporate minimal incoming and source inspection requirements.

Figure 7.1-1 presents CapStar's improving performance for acute myocardial infarction (AMI), congestive heart failure (CHF), stroke, and pneumonia. These multiyear improvements are the results of PICs that were established by a MLT or the Patients First IC in response to performance targets established in 1999 by the Centers for Medicare and Medicaid Services (CMS) 6th Scope of Work Program.

6.1b(6) Process improvements are achieved through the systematic application of the PIC model and the coordinated activities of the process owners, PIO, ICs, and PACTs. Using real-time patient and process information about performance relative to patient/customer needs, these groups apply the PIC model to continually improve process performance. Additional improvement is achieved through the use of patient satisfaction surveys (Area 3.1a[2]), Colleague Opinion Surveys (Area 5.3b[1]), and supplier and partner surveys and interviews (Areas 6.2a[2] and 6.3a[7]), as well as through direct interventions. As improvements are identified and quantified from all of these sources, they are posted on KIS, on KBs, and in *CapSpirations*. Changes that result in substantial improvement in care or cost savings are highlighted in Dialogues and are used to update training course content at CapCollege. In all cases, potential improvements are cycled through the PIC to ensure that a thorough, cost effective solution is achieved.

6.2 Business Processes

6.2a(1) The key business processes CapStar uses to lead business growth and success are identified in Figure 6.2-1. Responsibility for oversight of the performance of business processes is assigned to the most appropriate IC.

6.2a(2) The focus of business processes is to ensure that CapStar remains close to its fundamental purpose as

Key Business Processes (Responsible IC)	Key Related Subprocesses	Key Operational Requirements	Key Performance Measures
Technology Acquisition (IAA, Patients First)	Technology Research Technology Analysis Contracting	State-of-the-art capabilities Affordable technologies	Return on assets Currency of technologies (age of technology assets) Funds expended (7.4-10)
Knowledge Management (IAA, Patients First)	Information Systems Data Gathering Systems Integration	Integrated information systems Proactive data gathering Pertinent patient and supplier access Data reliability Reliable suppliers	IAA budget (7.4-10) User satisfaction Accuracy of data
Supply Chain Management (COE)	Supplier Selection Supplier Performance	Capable suppliers Low inventory costs	Supplier effectiveness (7.4-8) Inventory accuracy (7.4-8) Order fulfillment (7.4-9)
Supplier Partnering (COE)	Partner Selection	Limited suppliers Minimum inspections	Number of partners Number of inspections
Nonclinical Revenue Activities (FMS)	Investment Income Charitable Gifts	Funding for operational and infrastructure improvements	Investment income per budget Gifts in dollars (7.2-10)
Community Outreach (Community Support)		Admissions by physicians (insurance vs. self-paying)	Physician referral rate (7.2-16, 7.1-21, 7.1-22) Local usage rate Community involvement (7.4-13)
Successful Business Growth (FMS)	Physician Relationship Management	Outreach to physicians	Physician recommendation rate (7.1-21)

Figure 6.2-1 Key Business Processes

a provider of health services and to help the organization avoid distractions of business that are external to the improvement of health. Consequently, requirements for key business processes are established at TAP reviews and during the SPP, and they flow directly from the health services strategies of the organization.

Key providers such as ERCare, InsideYou, and other partners noted in P.1b(2) are integral to CapStar's delivery of health services. Accordingly, they are treated as if they were employed colleagues of CapStar. They participate on PEC and PIC Teams. They are held accountable for achieving 120-day plan targets and attend TAP meetings, including the Drill Down. For example, the contract with Majestic, CapStar's housekeeping partner, requires it to achieve >90 percent on patient satisfaction surveys for cleanliness. Failure to meet this objective means Majestic faces financial penalties. ERCare is held to similar performance standards that deal with patient satisfaction and wait times in the ED. To further integrate key partners into the daily operations of CapStar, their performance is entered into KIS and reported to the ICs and colleagues as described in Item 1.1.

6.2a(3) The PEC is used to design business processes that link to strategic requirements and result in cost effective accomplishment of business goals while providing quality health care services. Like clinical design and delivery processes, performance of each business process is monitored with sets of measures. The processes are improved through a streamlined adaptation of the PIC model.

6.2a(4) The key performance measures used to monitor progress and to control and improve business processes are listed in Figure 6.2-1. In-process measures are entered into KIS; are reported out for TAP performance review by the ELT, SLTs, and ICs in similar fashion to all other operations; and are improved by PEC and PIC Teams as warranted.

6.2a(5) Prior to joining PHNA, Excelsion and Founders each managed a supply base of 750 suppliers and no partners. Through its partnership with PHNA, CapStar has reduced its supply base to 530 suppliers and has developed 16 partners. These initiatives have led to reductions in incoming inspections, product testing, and performance audits. CapStar expects to have a supply base of only 150 suppliers and 75 partners by the start of FY 2004.

6.2a(6) The PIO monitors business trends in the health care industry and compares CapStar business process performance with market leaders. Additionally, the TAP reviews provide benchmark and best practice information to the PIO for use in comparative analysis. The PIO uses these comparisons to present the ELT and SLTs with business processes that might benefit from PEC or PIC Team actions. Resulting improvements are posted on KIS, on KBs, and in *CapSpirations*.

6.3 Support Processes

6.3a(1) Key support processes used by CapStar to support daily operations and the delivery of health care services are described in Figure 6.3-1. Responsibility for oversight of the performance of support processes is assigned to the most appropriate IC.

Key Support Processes (Responsible IC)	Key Related Subprocesses	Key Operational Requirements	Key Performance Measures
Human Resources (HPC)	Labor relations Recruitment Hiring Rewards Incentives Productivity Assessments Retention	Accuracy Processing time Compliance with federal and state regulations (health, safety, and environment) Readiness for productivity/safety audits	Cycle times Regulatory compliance Turnover (7.3-12) Safety (7.3-7, 7.3-9) Grievances Union contract completion
Education/Training (HPC)	Learning opportunities PEC/PIC training Resident education programs	Competence Timeliness Compliance with federal and state regulations Equity among staff Resident training and education	Training per employee (7.3-8) Regulatory compliance Effectiveness Resident board certification rate
Knowledge Information System (KIS) (IAA)	Identification of hardware/software needs Evaluation of options Medical records Information library Data analysis	Accurate, available patient information Computer reliability Access to best practice/benchmark research Accessibility to staff Regulatory requirements Availability to customers and suppliers as necessary	Computer up-time Data validation Data security Help Desk cycle time IT user satisfaction IT budget support (7.4-10)
Facilities Management (COE)	Security Maintenance Renovation Housekeeping Patient transport	Safe, clean work environment Privacy for patients Environmentally compliant	Regulatory compliance Environmental findings Facilities-related injuries Compliance with safety standards Isolation of patients
Billing and Payment (FMS)	Service cost capture Revenue cycle collections	Accuracy Timeliness	Cost per case (7.2-8) Cash flow (7.2-1) Net revenue (7.2-9)
Corporate Compliance (FMS, COE)	Ethical compliance Regulatory/legal compliance	Training Compliance assessments	Safety training **
** Note: Due to the limited length of this application, many of these results are not included in Category 7. These data are available upon request.			

Figure 6.3-1 Key Support Processes

6.3a(2) Like key business processes, requirements for key support processes cascade from TAP reviews, strategic objectives, and action plans. These requirements are identified through daily interactions among the clinical and administrative staffs, surveys of internal customers and key suppliers and partners, and information gained by PACTs. For example, the COE and FMS ICs worked together to reduce the cost per case when severe reimbursement reductions hit due to the Balanced Budget Act that lowered Medicare payments. These two ICs closely monitor this performance measure and have been able to keep the cost per case below 1997 levels in support of the strategic objective to achieve an A+ rating. The key metrics involved with support processes, including key operational requirements, are described in Figure 6.3-1.

6.3a(3) The same PEC Process used to design health care and business processes is used to design support processes. Similarly, a system of metrics accompanies each support process (Figure 6.3-1), and the PIO and the appropriate IC monitor progress.

6.3a(4) The combination of continuous staff interaction and the ease of obtaining real-time data from KIS ensures that the day-to-day operations of support processes satisfy key performance requirements.

6.3a(5) Key performance measures used to monitor the progress of and control and improve support processes are listed in Figure 6.3-1. A high level of interaction among participants of these processes, plus the Colleague Opinion Survey—a proactive survey system that is used

to systematically assess expectations versus results—provides CapStar with internal customer feedback necessary to manage the success of these processes. The Colleague Opinion Survey includes questions on satisfaction with support services such as KIS, medical records, and patient transport.

6.3a(6, 7) Oversight by the PIO ensures that support processes satisfy performance requirements. This oversight further minimizes the need for additional inspections, tests, and process audits. Individual support departments also are encouraged to reduce auditing and inspection costs. The PIO monitors cost per patient data through KIS to identify opportunities for improvement. One report demonstrated a high rate of reimaging of portable films in the ICU, especially at Founders. The Radiology Department created a PIC Team, which reported directly to the COE IC. Further investigation by this team revealed the problem to be one of poor radiological technique due to inconsistent standards. An Improvement Team examined Excelsion's methodology, which had a significantly lower rate of reimaging. The PIC Team adopted clear parameters for a technique based upon both the patient's body size and the type of portable X-ray machine. The team then developed a standardized imaging approach that resulted in a dramatic reduction in reimaging at Founders. This improvement cycle was extended over the next year throughout CapStar, including an additional cycle of improvement at Excelsion. Significant improvements resulted throughout CapStar in both quality of X-rays and costs associated with obtaining portable ICU X-rays.

7 Organizational Performance Results

7.1 Patient- and Other Customer-Focused Results

7.1a Health Care Service Results

Recognizing that health care service delivery processes drive outcomes, CapStar has focused on efforts addressing the CMS 6th Scope initiative. To this end, CapStar has participated over the last three years in a number of regional and Medicare collaboratives, including the Medicare Heart Council Acute Myocardial Infarction Process of Care Program and Congestive Heart Failure Program, the Diabetes Association Screening Program, and the Ohio Immunization Project, and has integrated their findings into its pathways program. CapStar has shown steady improvement in all cardiac care, pneumonia, and

stroke management measures (Figure 7.1-1). Founder's Women's Health Center developed a mammogram screening program in 1998 that has been rolled out to the rest of CapStar, resulting in mammogram rates exceeding the 90th percentile of the Greater Cincinnati Employers Coalition Healthcare Scorecard (Figure 7.1-2). In 2000 and 2001, CapStar scored in the top tier for all 6th Scope measures used in this scorecard.

In addition to the 6th Scope measures, CapStar follows a number of other outcomes measurements. Figure 7.1-3 demonstrates selected results for functional outcomes for specialized programs in rehabilitation, sports medicine, and trauma care. An increased emphasis on pain control,

Initiative	1999	2000	2001	Benchmarks (National/Regional)
AMI Treatment				
• Beta-blocker Rx	65%	72%	83%	81%/63%
• Smoking cessation counseling	30%	42%	52%	65%/39%
CHF Treatment				
• Angiotensin Rx	64%	72%	78%	85%/63%
• LVEF measured	70%	76%	80%	84%/66%
Stroke Treatment				
• Antiplatelet Rx	57%	61%	68%	67%/53%
• Anticoagulation with atrial fibrillation	80%	84%	88%	91%/82%
Pneumonia				
• Timely antibiotics	84%	88%	94%	99%/82%
• Patient screened for flu vaccine	16%	20%	23%	23%/20%
NOTES: All measures—higher is better. Benchmarks, as reported in medical literature: • National = mean of all state averages + 2 SD (~97th percentile level) • Regional = mean of Ohio, Indiana, and Kentucky averages AMI = Acute Myocardial Infarction (Beta-blocker therapy when appropriate) CHF = Congestive Heart Failure (Angiotensin prescribed when appropriate) LVEF = Left Ventricular Ejection Fraction (a critical measure of cardiac function)				

Figure 7.1-1 Representative Treatment Results

	C-Section Rate (lower better until 15% minimum safe)			Mammography Rate (higher is better)			PAP Smear Rates (higher is better)		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
CapStar	21%	18%	17%	63%	68%	72%	85%	84%	88%
Greater Cincinnati Employers Coalition Healthcare Scorecard (90th percentile)	18%	18%	19%	53%	53%	53%	78%	81%	82%
C-section rate = % of total deliveries Mammography rate = % of women (aged 40 or older) with biannual mammograms performed at CapStar, who KIS identifies as having a primary care MD associated with CapStar PAP screening rate = mean U.S. rate of % of women aged 18 or older with screening within three years									

Figure 7.1-2 C-Section, Mammography, and PAP Smear Rates

stimulated by the JCAHO focus, has led to several initiatives to improve both the recognition and treatment of pain in Oncology and Trauma Services (Figure 7.1-4). The number of annual pain service consults increased from 254 in 1999 to 605 in 2001. Geriatric Services has made a major effort to reduce falls in the geriatric population and to improve the treatment of memory loss in the elderly with the establishment of a comprehensive Memory Loss Clinic (Figure 7.1-5). Behavioral Health Services also has made major improvements in its use of restraints and seclusion (Figure 7.1-5). Roseleaf has established a specialization in orthopedic surgery, specifically joint replacement, along with rheumatology, which has had outstanding outcomes in both inpatient and outpatient management of disease (Figure 7.1-6).

A program of cultural change has been put in place, spearheaded by the CQO, to increase reporting of patient-related incidents. To this end, reports of incidents have dramatically increased over the last three years (Figure 7.1-7). This should not be interpreted as an increase in the number of actual events occurring but rather an improvement in the culture of reporting. CapStar is now analyzing these incident reports to identify areas of focus to reduce the frequency of events. A significant increase in the recognition of potential problems has resulted in changes in ordering, transcription, dispensing, and administration that, in turn, have resulted in a decrease in completed adverse drug events. The computerized POES, which will be activated in 2002, should reduce these events even further. Oncology Services has also dramatically improved the quality of its clinical services as demonstrated by the number of patients included in experimental protocols for treatment (Figure 7.1-8).

Comparative benchmark performance is presented where available. However, except for Figure 7.1-1, which makes use of Medicare data, no local or regional competitor data are available on the other measures since hospitals are not required to release them.

7.1b Patient/Customer Results

7.1b(1) Figure 7.1-9 shows overall inpatient satisfaction scores for CapStar's four hospitals. The percentile bands on the right-hand axis permit comparison of CapStar hospital performance to a national group of hospitals providing similar services as reported by Loyalty Finders, Inc. Both Excelsion and Founders have improved performance over the last five years, with satisfaction in the top quartile of comparison hospitals for the last two years. Excelsion leads the system, with overall inpatient satisfaction scoring at the 85th percentile for two years. With new executive leadership at Hergh since 2000, results show a return to improving performance in 2001.

Listening and learning methods have identified satisfaction with physician care as the second most important influence on overall satisfaction. Results for three of the four CapStar hospitals are shown in Figure 7.1-10. Excelsion is known for the clinical and service quality of its heart and oncology programs. Figure 7.1-10 shows satisfaction with physician care in these programs consistently superior for six years, with performance in the past two years improving to well above the 75th percentile.

The most important influence on overall satisfaction is the patient's perception of the quality and caring of the nursing

	Stroke (higher is better)			Arthroscopy (lower is better)			Trauma (lower is better)		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
CapStar	55	67	72	17	14	12	4.8	4.5	4.2
Top 25th percentile of Best (National) Results	64	67	68	15	15	14	4.4	4.2	4.2
Stroke = % of patients who have complete recovery or require minimal assistance									
Arthroscopy (Common Sports Medicine Surgical Procedure) = average days to full ambulation without assistance following arthroscopic surgery									
Trauma = average number of months to return to pre-injury occupational status for all patients who suffered major trauma (Injury Severity Score >15)									

Figure 7.1-3 Selected Results of Functional Outcomes—Rehabilitation after Stroke, Arthroscopy, and Trauma

Percent of Patients Whose Pain Was Self-Characterized as Well Controlled	1999	2000	2001
Oncology (Top 10th Percentile = 79% in 2001)	67%	78%	81%
Trauma (Top 10th Percentile = 85% in 2001)	78%	87%	89%
NOTE: All measures—higher is better.			

Figure 7.1-4 Satisfaction with Pain Control—Oncology/Trauma Services Patients

Selected Measures	1999	2000	2001
In-Hospital Falls, Aged 65 or older (Falls/100 Patient Days)	0.4 (N.B.= 0.3)	0.3 (N.B. = 0.28)	0.28 (N.B. = 0.3)
% Patients Referred to Memory Loss Clinic after Diagnosis of Alzheimer's Disease	17%	38%	75%
Restraint Use (Events/1000 Discharges)	68 (N.B. = 62)	41 (N.B. = 43)	40 (N.B. = 45)
Seclusion (Events/1000 Discharges)	53 (N.B. = 51)	40 (N.B. = 41)	30 (N.B. = 38)
Top Benchmark = (Top 25th% Percentile)			

Figure 7.1-5 Geriatrics/Behavioral Health Services

N.B. = National Benchmark Top 25th Percentile. Eastern U.S. Indicators, Inc.

Sample Results	1999	2000	2001
Return to Unassisted Ambulation Following Hip Replacement (days) (lower is better)	42 days (42 days)	35 days (40 days)	32 days (38 days)
Rheumatoid Arthritis Patients—% Days Rated As Well-Functioning (higher is better)	89% (82%)	92% (85%)	92% (85%)

Figure 7.1-6 Orthopedic and Rheumatology—Top 10th Percentile from Eastern U.S. Indicators, Inc. shown in ()

	1999			2000			2001		
	Incident Reports/ 100 Patient Days	Potential ADE/ 100 Admis	ADE Events/ 100 Admis	Incident Reports/ 100 Patient Days	Potential ADE/ 100 Admis	ADE Events/ 100 Admis	Incident Reports/ 100 Patient Days	Potential ADE/ 100 Admis	ADE Events/ 100 Admis
CapStar	15	2	3	52	4	2	110	6	1.5
Expected	—	6	2	—	6	2	—	6	2

Incident Reports = All incident reports submitted
 Potential ADE = Potential events intercepted by physician, nursing, or pharmacy staff before incident led to complication
 ADE event = Actual completed event that led to prolonged hospitalization, patient injury, or death
 Expected = As reported in medical literature

Figure 7.1-7 Incident Reports, Adverse Drug Event (ADE) Reports

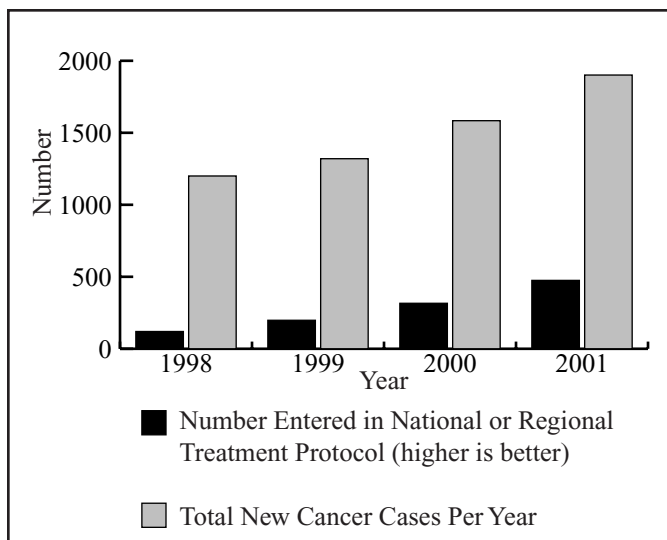


Figure 7.1-8 Patients Enrolled in Regional or Mid-America Cancer Treatment Trials

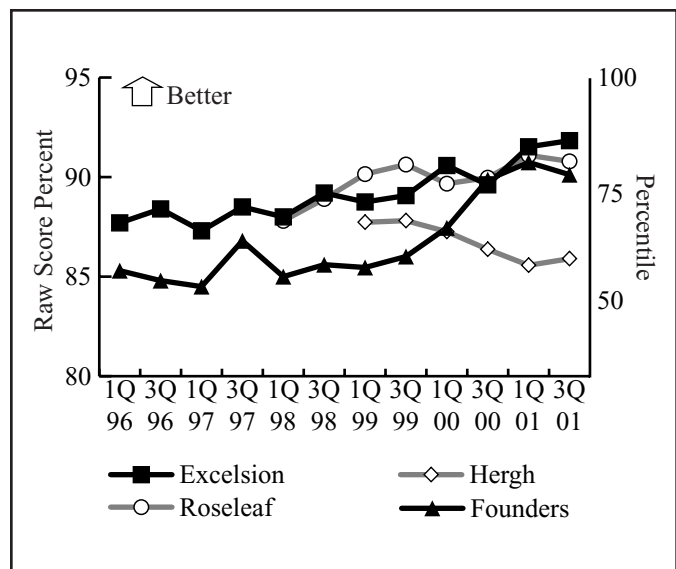


Figure 7.1-9 Inpatient Satisfaction—Overall

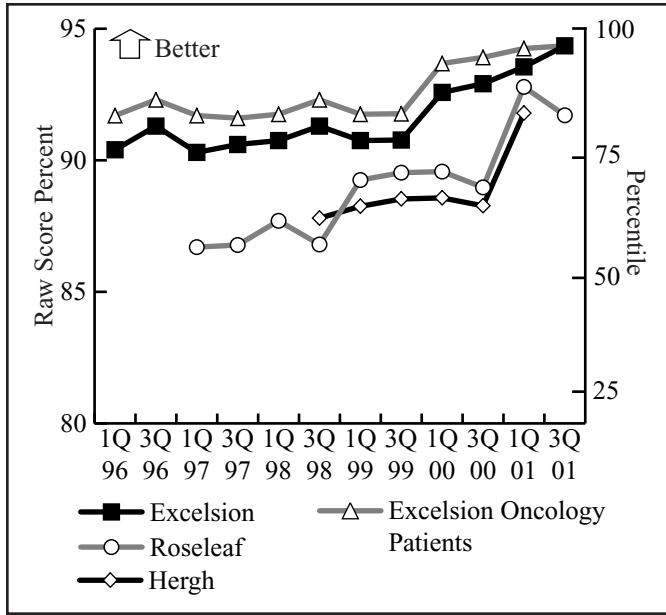


Figure 7.1-10 Inpatient Satisfaction—Physician Care

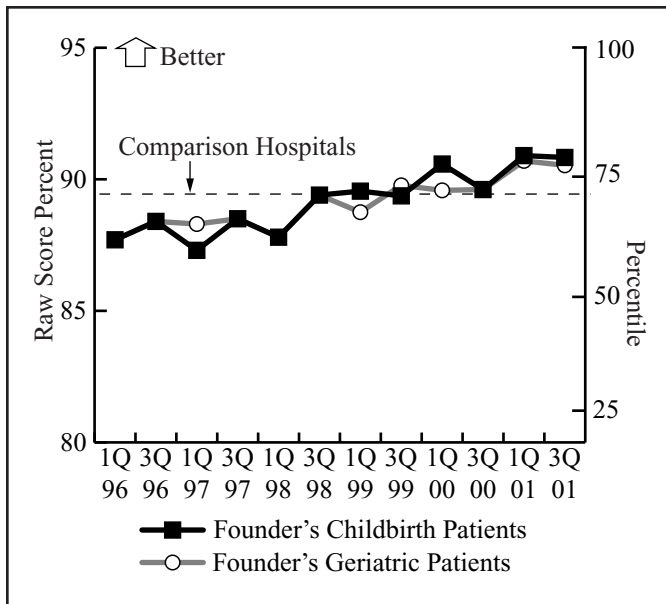


Figure 7.1-11 Inpatient Satisfaction—Nursing Care

staff. Founders leads the system for satisfaction with nursing care. Figure 7.1-11 shows patient satisfaction with nursing care for two key patient segments at Founders—childbirth patients and geriatric patients. In both cases, Founders outperforms comparison hospitals, with satisfaction scores above the 75th percentile, and it continues to improve.

Improvement of CapStar's ED processes is an ongoing high priority because the ED is a main portal of entry for CapStar patients—about 40 percent of admissions at

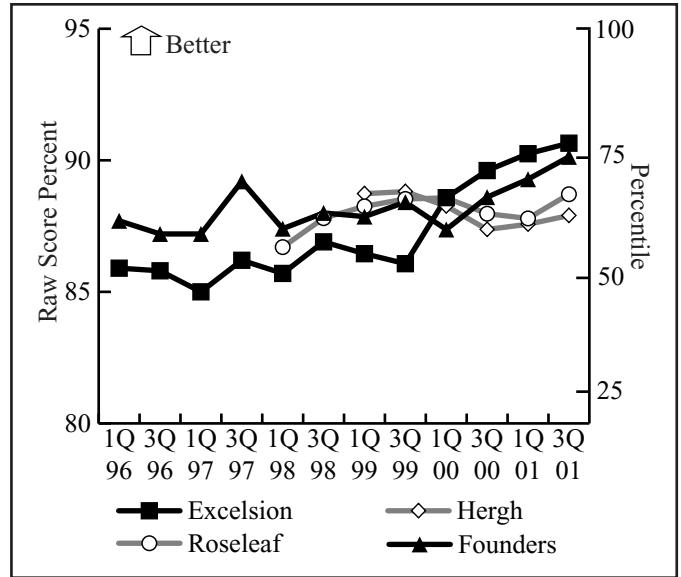


Figure 7.1-12 ED Satisfaction—Overall

Excelsion and Founders and 32 percent at Roseleaf and Hergh come through the ED. Patients admitted through the ED typically rate their satisfaction lower than patients admitted on an elective basis or directly from a physician office. Figure 7.1-12 shows Excelsion performing near or at the 75th percentile for two years with Founders reaching a similar level in 2001. Performance during the past year also shows improvement at Roseleaf and Hergh.

Figure 7.1-13 shows improved patient satisfaction at the CapCare Centers. Significant improvements in all measures were obtained upon implementation of newly designed open access systems that enable all patients to get a same-day appointment. Although valid comparative

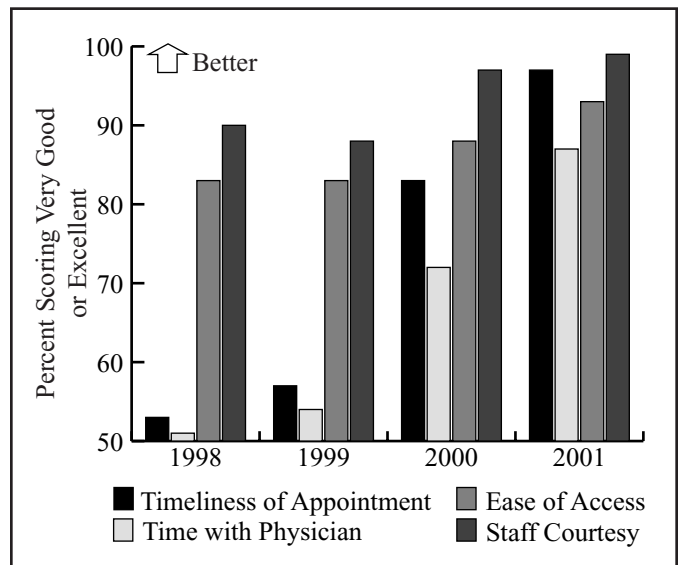


Figure 7.1-13 Patient Satisfaction with CapCare Centers

Hospital	Teaching Status	Child-birth	Medical Care	Surgical Care
Goldenrod A	major	***	**	**
Goldenrod B	minor	NA	**	**
Excelsion	major	**	***	**
Founders	major	***	**	**
Hergh	none	**	**	NA
Roseleaf	minor	***	**	***
RUH	major	**	**	**
VHA network	major	NA	**	***
Patient satisfaction with seven dimensions:		Scores compared with national norm:		
<ul style="list-style-type: none"> • respect • care coordination • information and education • pain management • emotional support • preparation for discharge • involvement of family and friends 		*** Better than ** Same as * Worse than Major Large training programs for new doctors Minor Small training programs for new doctors None No teaching		
NOTE: CNT and Zefram declined to participate.				

Figure 7.1-14 Greater Cincinnati Hospital Profiles: A Consumer Guide—Patient Satisfaction

data for outpatient satisfaction are difficult to find, these satisfaction results place CapCare in the top quartile compared to hospitals providing similar services. Figure 7.1-14 shows patient satisfaction with marketplace competitors as reported in the Greater Cincinnati Hospital Profiles. Published by a coalition of businesses and their health care partners, the hospital “report card” reaches 350,000 area residents with a marketplace comparison based on data that participating hospitals agree to report. Founders and Roseleaf are market leaders in patient satisfaction with childbirth care, while Excelsion is the only hospital in the market to earn the highest rating for medical care. Roseleaf is also top rated for surgical care, in particular because of its orthopedic service, which is recognized throughout the region.

Figure 7.1-15 shows sustained superior performance in independent physician satisfaction by Excelsion, Founders, and Roseleaf, which demonstrates the effectiveness of the Physician Distinction strategies. Under new leadership since 2000, Hergh shows steady and significant improvement in independent physician satisfaction from third quarter 2000 through 2001.

7.1b(2) Figure 7.1-16 shows dramatic increases in patient concerns captured as a result of efforts to surface and resolve customer concerns, with a steady decrease in the

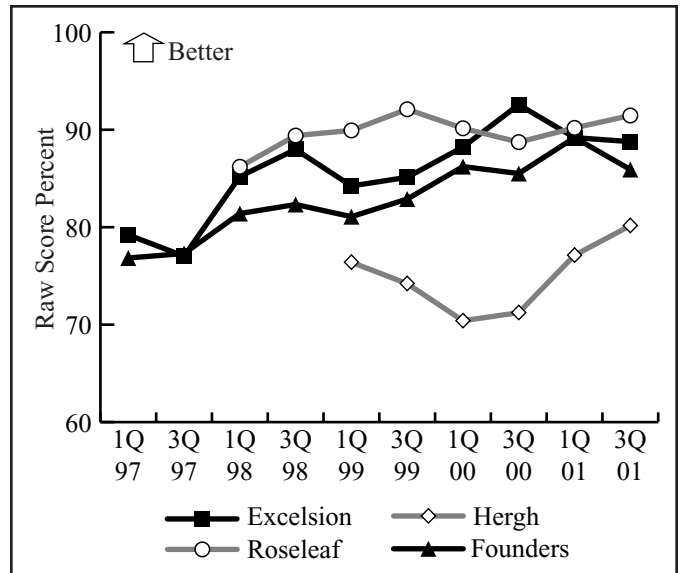


Figure 7.1-15 Independent Physician Satisfaction

number of concerns that could not be resolved immediately at the point of first contact. Figures 7.1-17, 7.1-18, and 7.1-19 show CapStar’s quality image in the minds of community residents compared with marketplace competitors. Figure 7.1-17 shows steady progress against RUH, CapStar’s principal competitor, as the best hospital overall. Figure 7.1-18 shows continuing superiority over RUH, as does Figure 7.1-19 showing market leadership for “best nurses.” However, in both cases, CapStar’s performance has experienced slight declines over the past three years.

Figure 7.1-20 demonstrates CapStar’s success in meeting the needs of the independent physicians and strengthening their loyalty to the system. In 2001, more than 90 percent of independent physicians at Excelsion, Founders, and

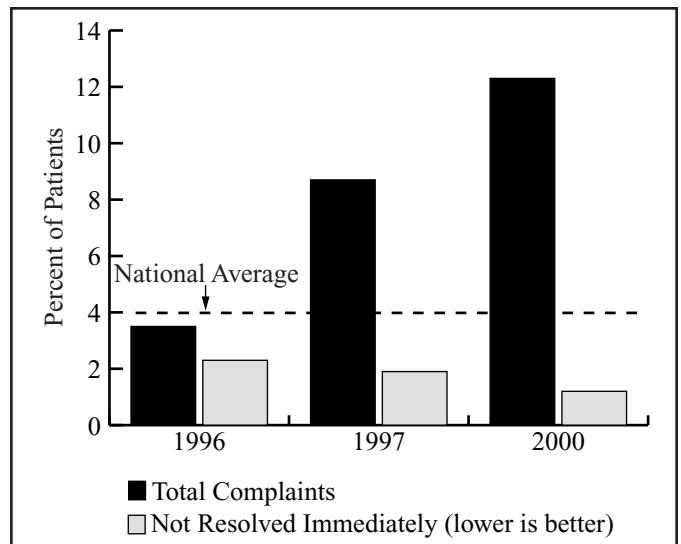


Figure 7.1-16 Patient Complaint and Resolution Rate

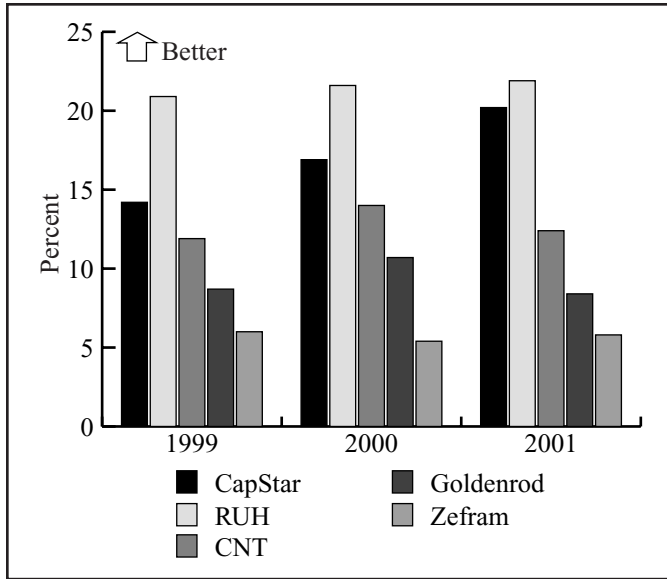


Figure 7.1-17 Community Quality Image—Best Hospital Overall

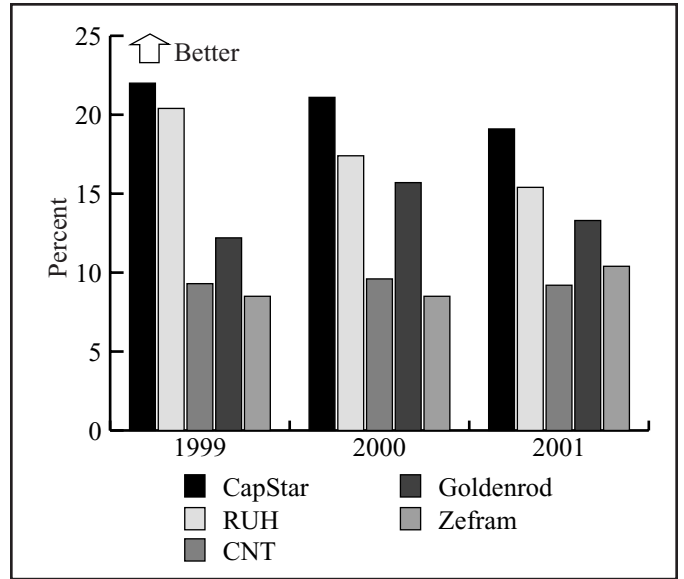


Figure 7.1-19 Community Quality Image—Best Nurses

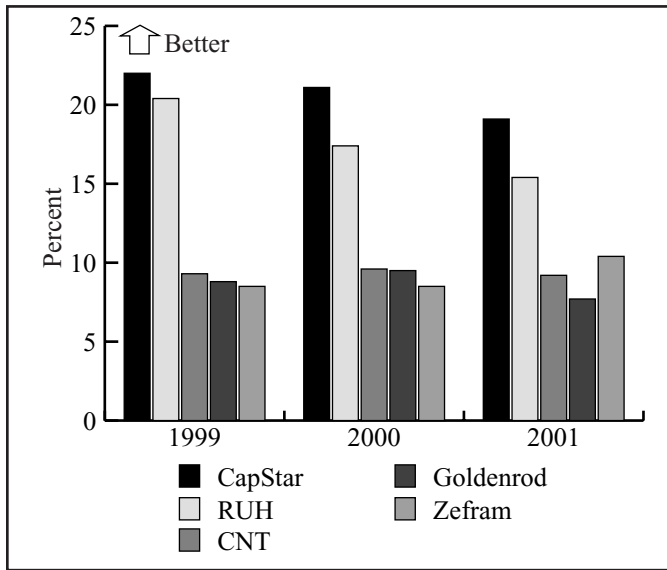


Figure 7.1-18 Community Quality Image—Best Doctors

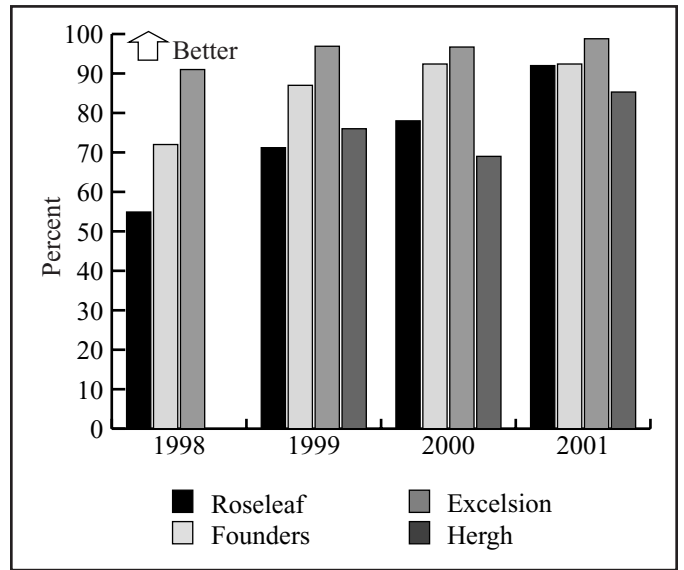


Figure 7.1-20 Independent Physician Satisfaction—Would Recommend as Place to Practice

Roseleaf would recommend their hospital to a colleague seeking a good place to practice. Hergh physicians rate their hospital better since 2000. Figures 7.1-21 and 7.1-22 show similarly positive ratings from referring physicians in their willingness to recommend and likelihood to refer again (given similar patient requirements).

7.2 Financial and Market Results

7.2a(1) CapStar uses a variety of measures/indicators of financial performance, based largely on the requirements

to retain a Standard and Poor's (S&P) "A" rating to demonstrate current levels and trends of consolidated financial performance. In addition to using the S&P as a benchmark, CapStar benchmarks with comparable hospitals/health systems identified as best in class and for which data are available. CapStar has received an S&P "A" bond rating. It has maintained this rating in the presence of a continued decline in basic measures of financial health seen across the industry. Overall, CapStar demonstrates strong financial performance as evidenced by its "healthy" ratio of cash flow/current liabilities, shown in Figure 7.2-1. Figures 7.2-2 and 7.2-3 indicate that

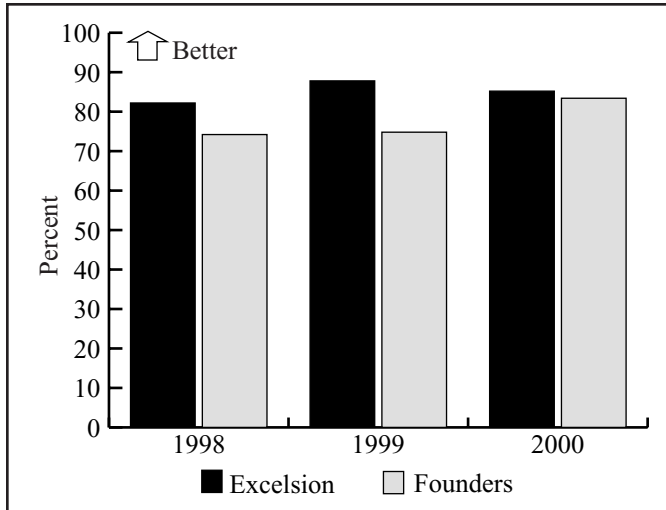


Figure 7.1-21 Referring Physicians' Willingness to Recommend to Colleagues

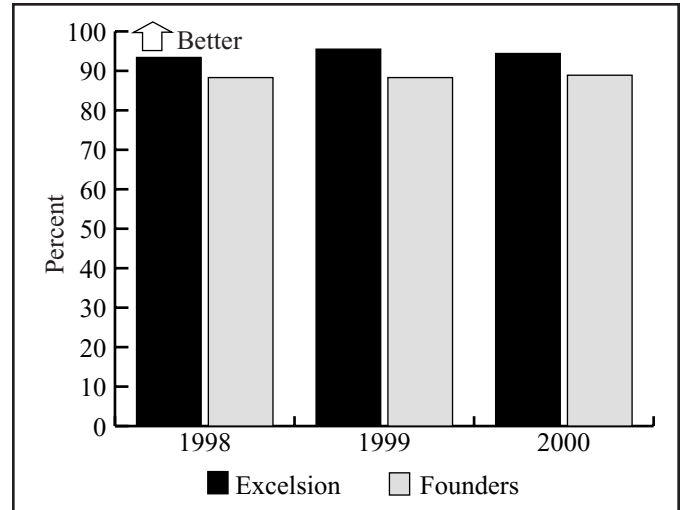


Figure 7.1-22 Referring Physicians' Likelihood to Recommend Again to Patients

CapStar's Days Cash on Hand is strong and has exceeded the S&P target for two years.

Figure 7.2-4 illustrates trends in long-term debt and capitalization for CapStar. It has avoided increasing debt in recent years despite severe pressures on earnings and the need to preserve cash flow and liquidity. Strong financial control is shown in Figure 7.2-5, which depicts reduced days in accounts receivable.

CapStar's ability to, with agility, recover from the severe Medicare cutbacks imposed on health care providers and continued downward pricing pressure from payors is demonstrated by its operating margin shown in Figures 7.2-6 and 7.2-7. CapStar has recovered through astute cost management expansion to a stable financial position. In addition, Figure 7.2-8 shows CapStar's return to controlled budget versus actual expense in line with revenues, reflected in cost per case.

Figure 7.2-9 shows the revenue trends over four years, noting the negative impact of the BBA of 1997.

Over five of the past six years, CapStar's investment performance exceeded the S&P average. A modest portion of the endowment was invested in a stock fund composed of high-performing companies. More recently, funds have been placed in more conservative instruments and have been shielded from most of the downturn in the investment market. In 2003, CapStar plans to kick off a major capital campaign to raise funds for upgrading or replacing the Excelsion and Hergh facilities. This goal should be achievable based on the history of increasing gifts to the CapStar Charitable Trust (Figure 7.2-10).

7.2a(2) Several indicators of volume and market share show stable to improving trends. Figure 7.2-11 shows that market share at Excelsion, Founders, and Roseleaf has

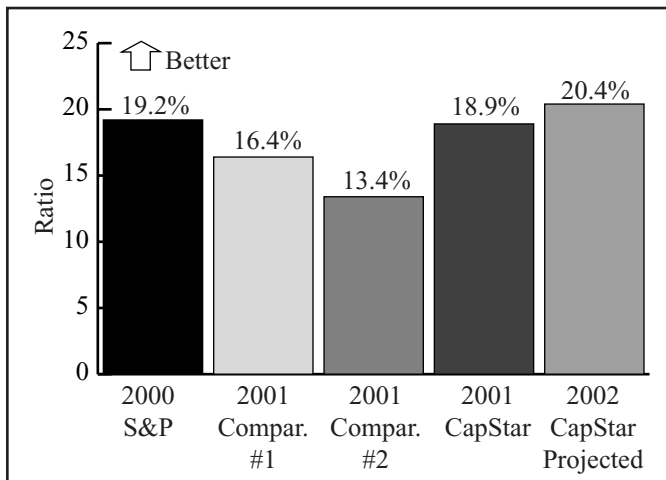


Figure 7.2-1 Cash Flow/Current Liabilities

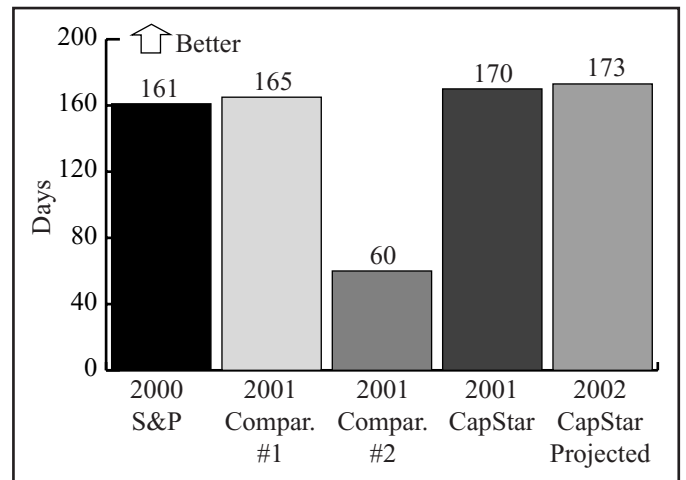


Figure 7.2-2 Days Cash on Hand

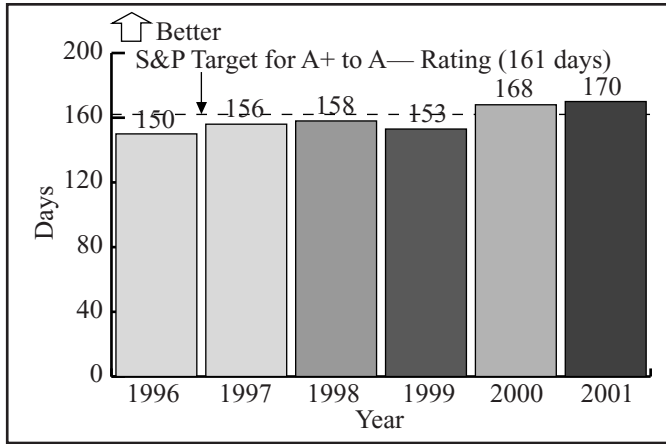


Figure 7.2-3 Days Cash on Hand, 1996–2001

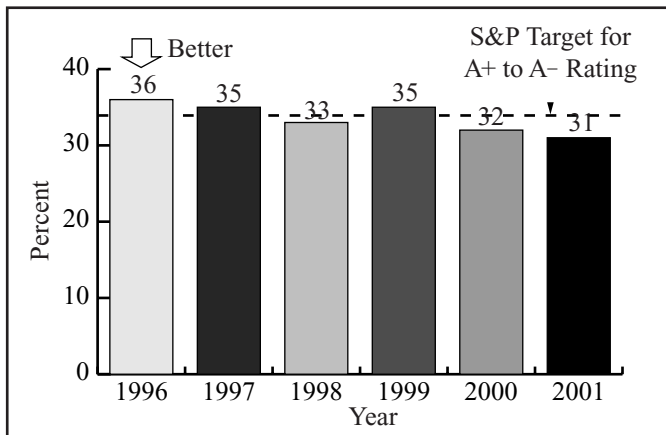


Figure 7.2-4 Long-term Debt and Capitalization

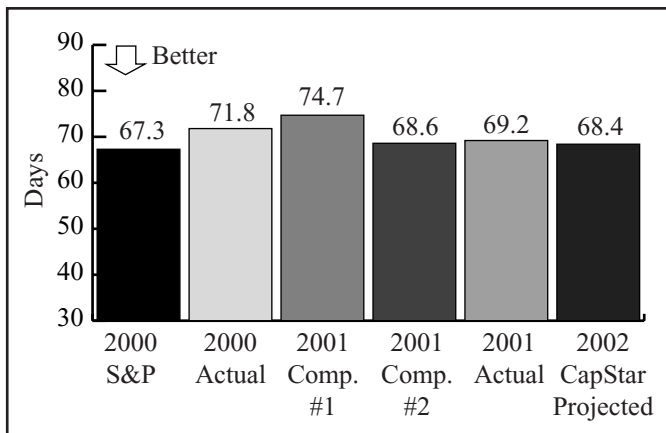


Figure 7.2-5 Days in Accounts Receivable

increased and that Hergh has reversed earlier declines with three years of increased market share. Figure 7.2-12 reveals that the number of ED visits has increased in three of the four hospitals since 1996.

Two key measures presented in Figure 7.2-13 are evidence of CapStar's success with the CapCare Centers. The number of visits to CapCare Centers has grown to almost

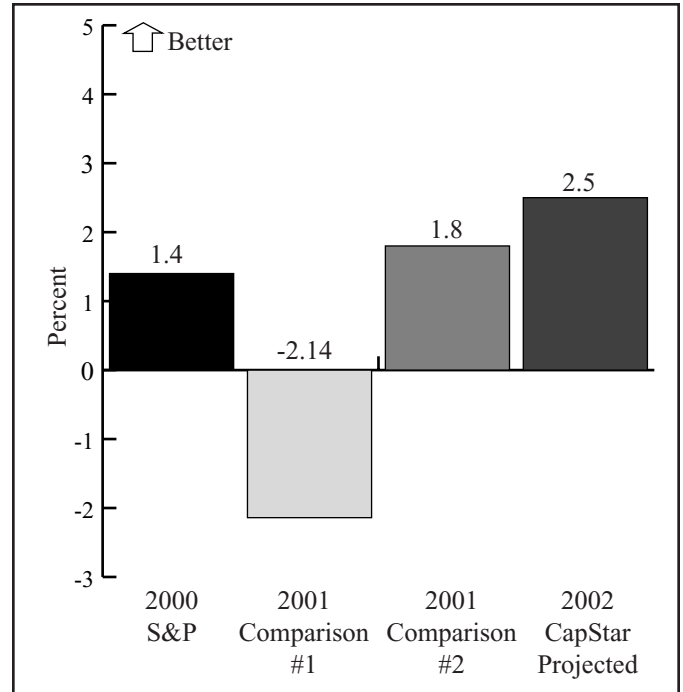


Figure 7.2-6 Operating Margin

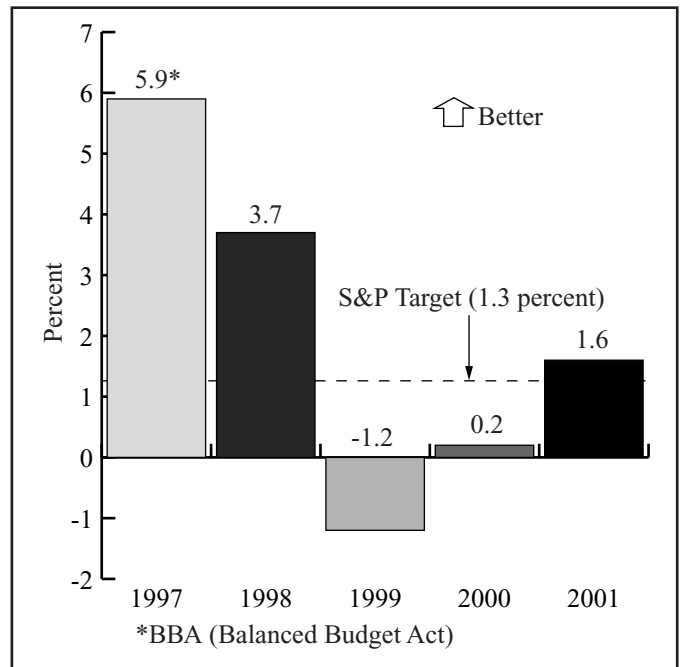


Figure 7.2-7 Operating Margin, 1997–2001

20,000 per year. With the increased access by new patients, the number of hospital admissions for Founders and Excelsion has increased to almost 900.

In CapStar's market share areas of emphasis, Excelsion is the market leader in open heart surgery, with a significant increase in 2001 (Figure 7.2-14). Roseleaf has successfully implemented its strategy as a regional orthopedic and

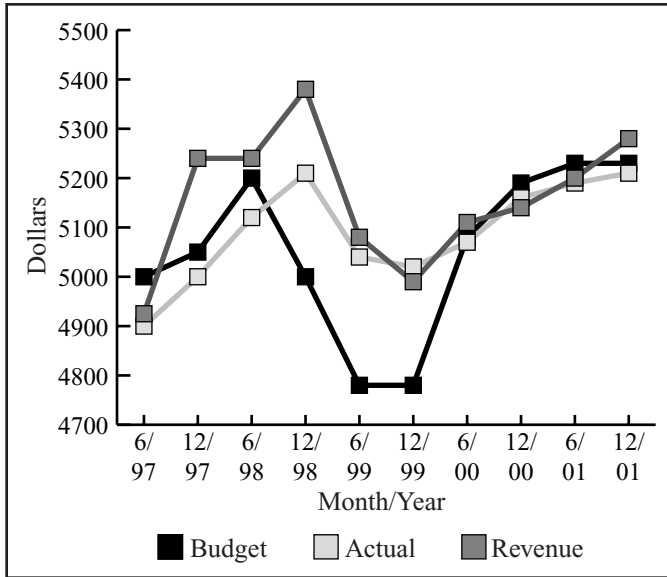


Figure 7.2-8 Cost per Case-Mix Adjusted Discharge

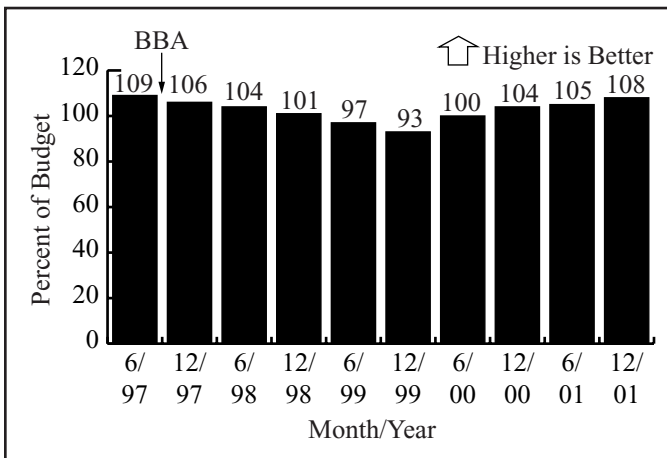


Figure 7.2-9 Net Patient Revenue as Percent of Budget

arthritis center, with increased admissions since 1997 and recent volume in excess of target (Figure 7.2-15). A key source of tertiary care cases and a measure of the Physician Distinction strategy as it relates to physicians in rural areas is the number of referrals from outside the PSA. As shown in Figure 7.2-16, Excelsion has increased the number of referred cardiac and oncologic cases since 1999, and the total number of referred cases for all diseases has increased, with results in the past two years exceeding aggressive growth targets.

7.3 Staff and Work System Results

7.3a(1) Figures 7.3-1 through 7.3-5 show results of the Colleague Opinion Survey for key indicators of colleague satisfaction that lead to higher performance and retention. (Positive results reflect “very satisfied” and “mostly satis-

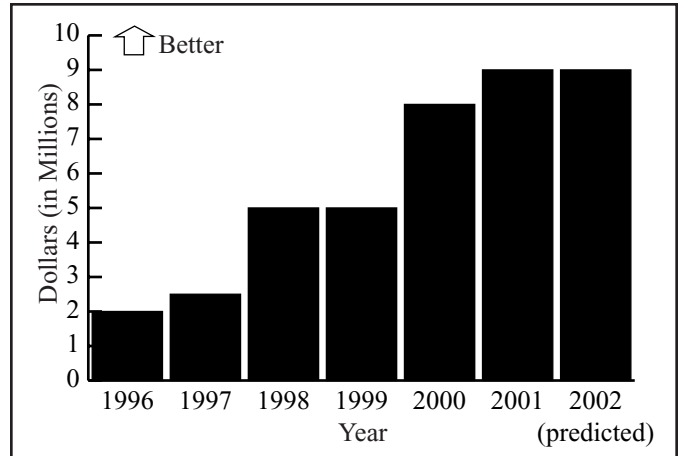


Figure 7.2-10 Annual Gifts to CapStar Charitable Trust

fied” responses. Negative results reflect “mostly dissatisfied” and “very dissatisfied” responses.) Data are segmented by applicable OU and reported to the CapStar HPC IC or to the OU HPC IC for performance review and action as described in Items 1.1 and 4.1. However, since no statistically significant differences have been observed among OU results, only CapStar overall results are presented in this application. The comparative normal negative mean is obtained from the Peoplego Institute.

Figure 7.3-1 shows an increase over three years in colleague satisfaction with CapStar as a place to work. Dissatisfaction has been consistently less than the average of the national comparison group of similar organizations. Figures 7.3-2 and 7.3-3 show similar results for

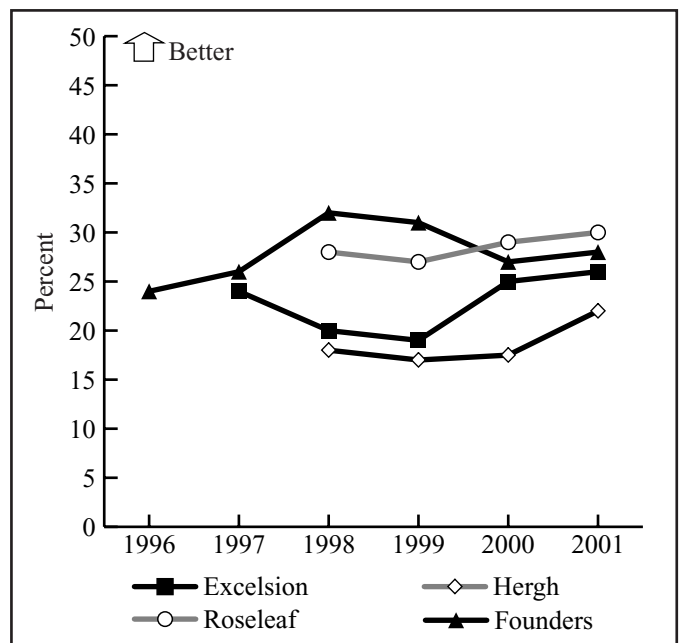


Figure 7.2-11 Overall Market Share by OU

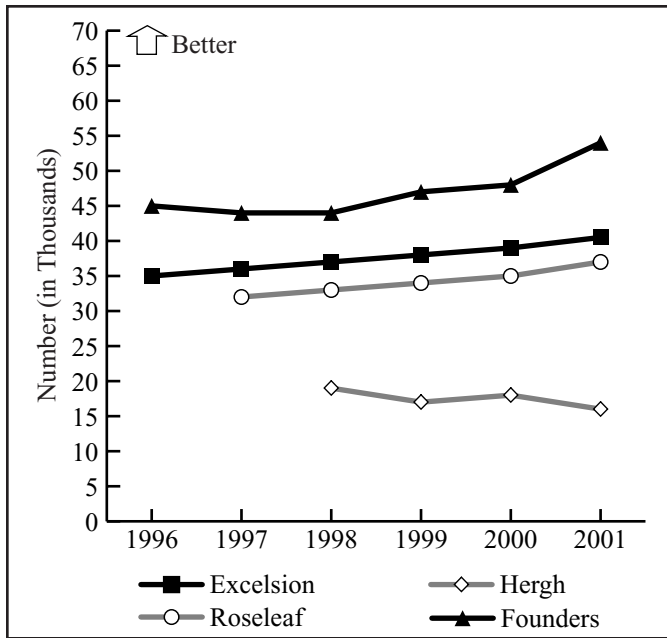


Figure 7.2-12 Number of ED Visits

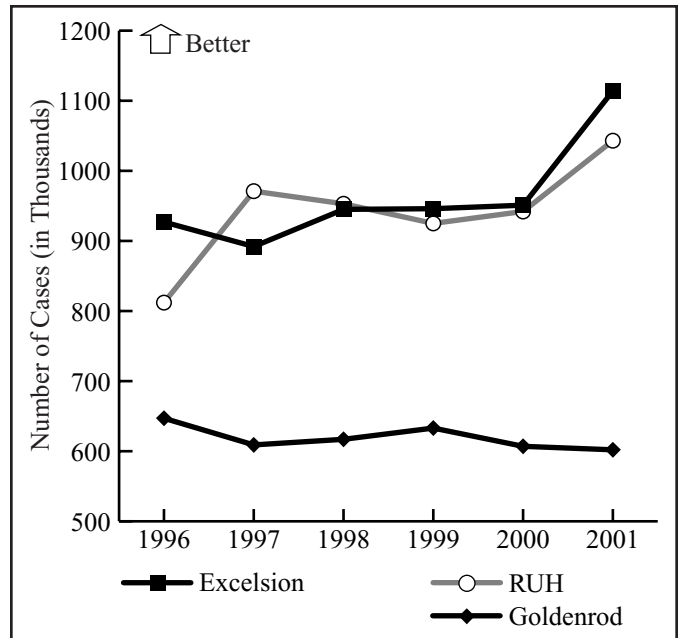


Figure 7.2-14 Open Heart Surgery Cases: Excelsion Versus Primary Competitors

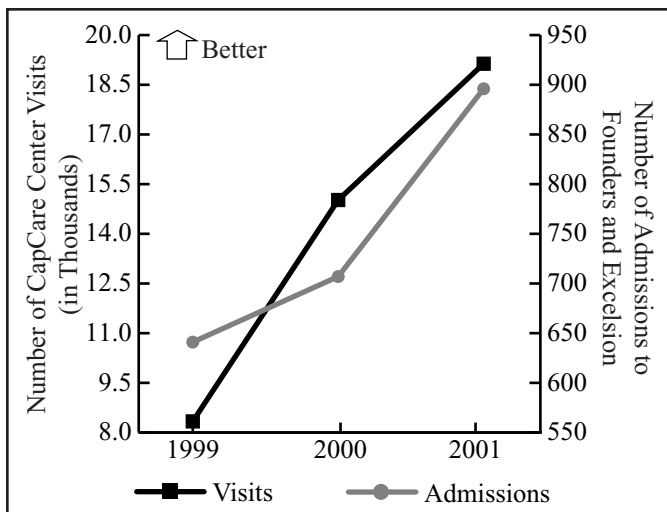


Figure 7.2-13 Hospital Admissions, Not Including Obstetrics, Resulting from Increased Patient Access

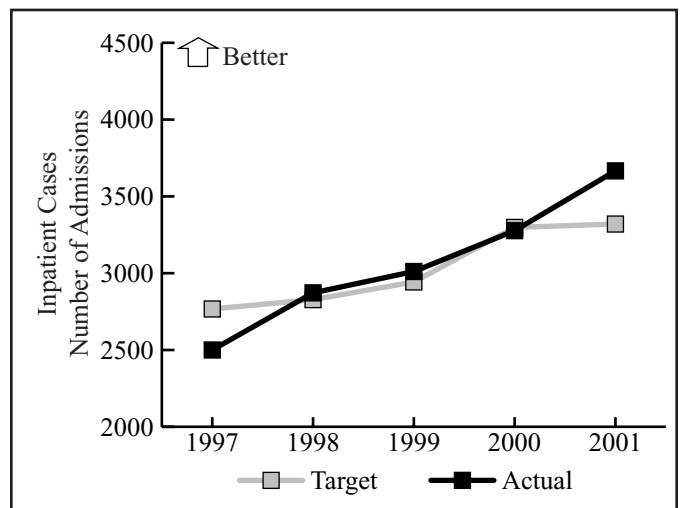


Figure 7.2-15 Roseleaf Orthopedic/Rheumatology Volume

dissatisfaction with the work group and type of work. Particularly important is CapStar's superior performance on the positive side, with 70 to 80 percent of colleagues expressing satisfaction with their work group and type of work. Figure 7.3-4 shows a three-year record of increasing satisfaction and decreasing dissatisfaction with colleague recognition. This result correlates with the increase in colleagues receiving Inspiration Awards over the same period. The percentage of colleagues receiving Inspiration Awards has increased steadily since 1999 from 8 percent to 14 percent in 2001. Colleagues are increasingly more satisfied (and less dissatisfied) with the quality of services provided for the CapStar workforce, illustrated in

Figure 7.3-5. CapStar recognizes the industry challenge to recruit and retain top nurses and tracks multiple measures of its performance with respect to this key colleague segment. Figure 7.3-6 shows that CapStar nurses are slightly more satisfied than the overall workforce with the organization as a place to work, and the dissatisfaction among nurses is lower than the comparison.

CapStar's six-week "Way to Wellness" program includes a personal health risk profile, appropriate preventive care, and a variety of educational and behavioral supports. Figure 7.3-7 shows the improvement made in all five standard health risk factors.

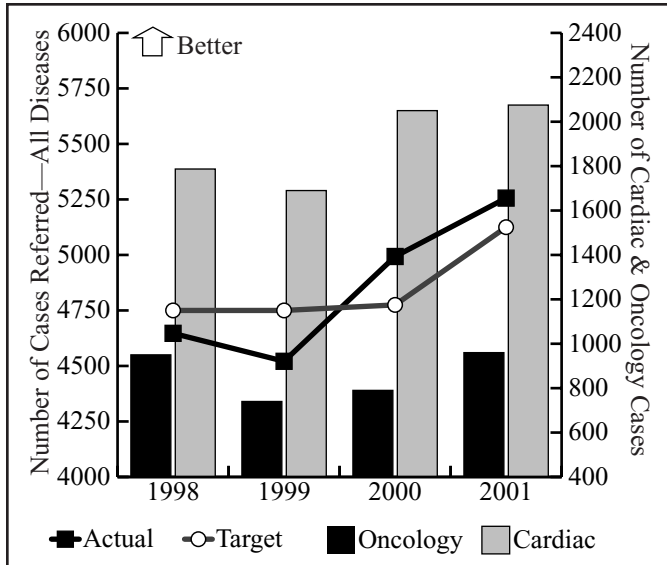


Figure 7.2-16 Tertiary Care Referrals to Excelsion from Outside PSA

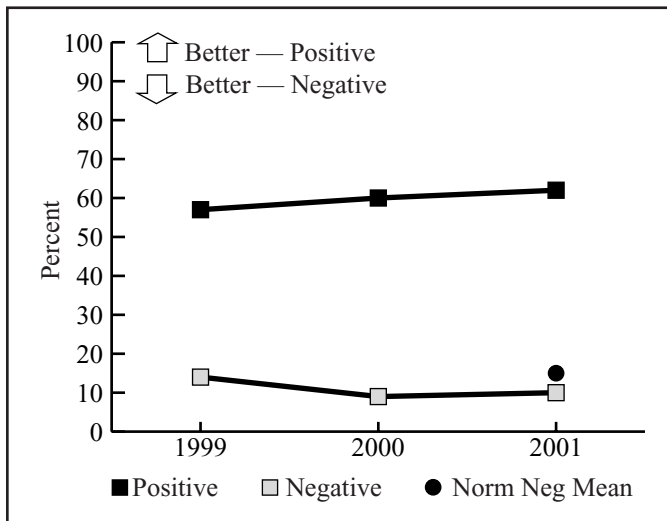


Figure 7.3-1 Colleague Satisfaction with Place to Work

7.3a(2) Figure 7.3-8 shows CapStar’s training investment per FTE over the past three years. Although CapStar’s investment does not match other industries, it far exceeds the health care industry average. This level of investment is particularly significant in the face of financial pressures in 1999 and demonstrates the depth of CapStar leaders’ commitment to colleague development and competency.

CapStar’s focus on safety extends to colleagues as well as patients, as shown in Figure 7.3-9. Needle stick injuries have decreased steadily over three years, with results consistently lower than the national average. The amount of workers’ compensation claims has dropped 38 percent since 1997 to \$94,000, compared to the Soranez Institute amount of \$185,000.

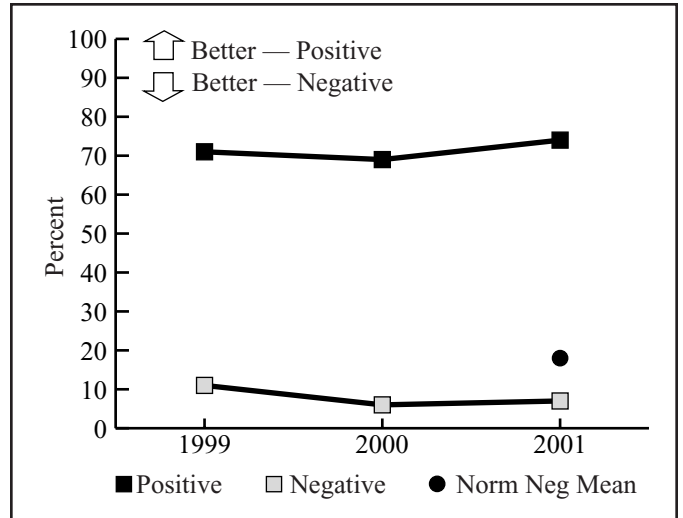


Figure 7.3-2 Colleague Satisfaction with Work Group

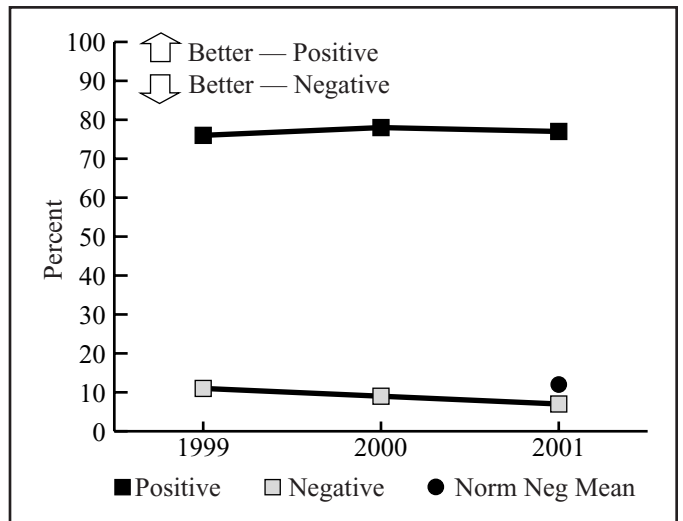


Figure 7.3-3 Colleague Satisfaction with Type of Work

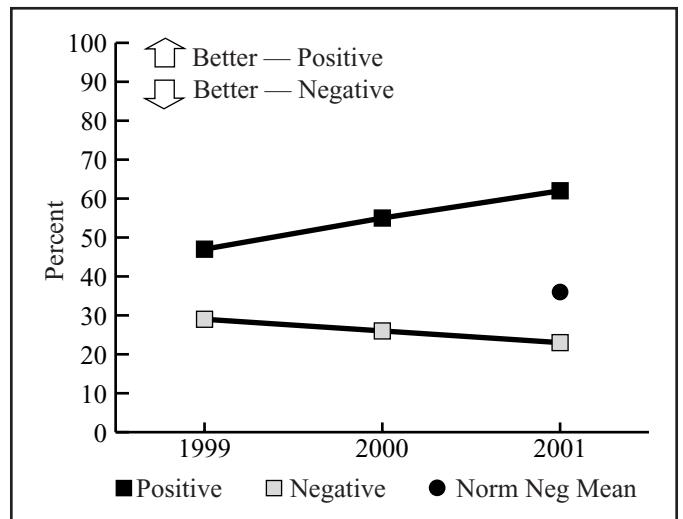


Figure 7.3-4 Colleague Satisfaction with Recognition

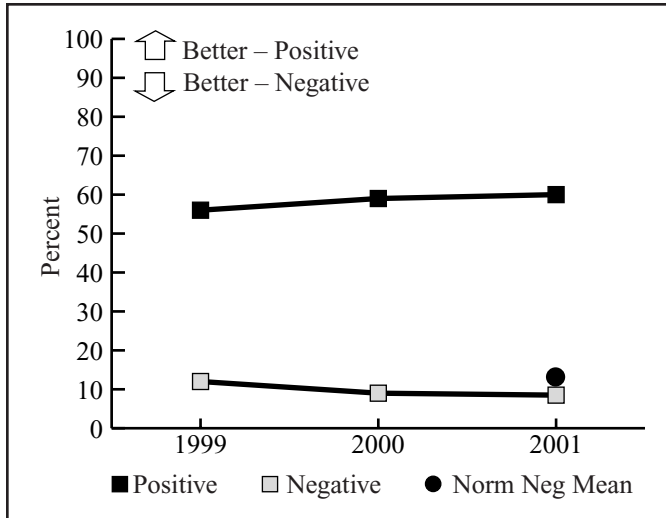


Figure 7.3-5 Colleague Satisfaction with Quality of Services

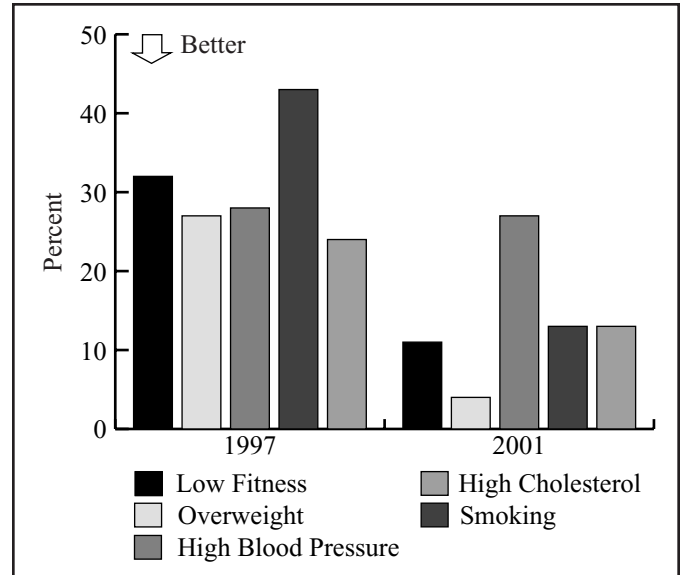


Figure 7.3-7 Health Risk Factors in CapStar Colleagues

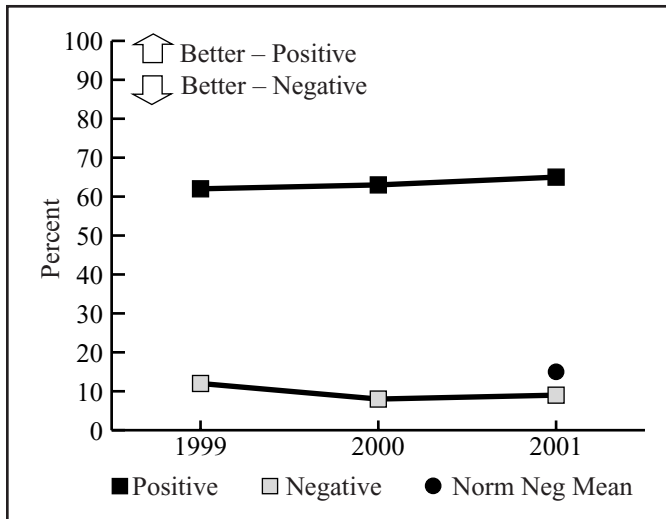


Figure 7.3-6 Nurse Satisfaction with Place to Work

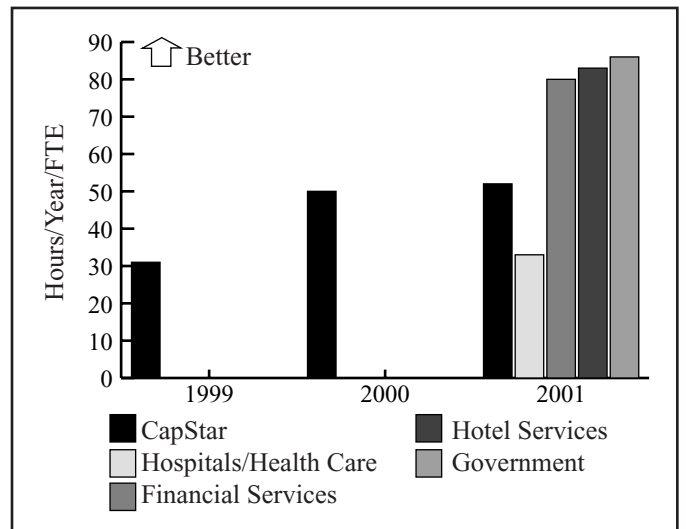


Figure 7.3-8 Training Investment per FTE

Redeployment of inpatient basic laboratory and ancillary services from central locations is an essential feature of work system and job redesign to implement PACTs. Figure 7.3-10 shows that redeployment, with process changes reducing the number of steps, results in substantial reduction in the time required to perform a complete blood count, chest X-ray, electrocardiogram, and physical therapy. Results are from Excelsion in 2000. Excelsion's independent physician satisfaction with these procedures increased after service redeployment to PACTs, as shown in Figure 7.3-11.

Figure 7.3-12 illustrates that although nurse turnover has increased dramatically throughout the health care industry, CapStar earns loyalty. CapStar pharmacists are deployed to the patient care units as essential members of

each PACT. There is a growing national shortage of pharmacists. Although vacancies in approved pharmacist positions have increased in the last three years, CapStar's performance is substantially better than the industry average.

The success of any sound business strategy depends substantially on leadership continuity. The percentage of management vacancies filled by internal candidates increased from under 50 percent in 1997 to a remarkable 79 percent in 2001 as the ELT focused on investing in colleague development and offering colleagues promotional transfers within the system into other OUs as a way to strengthen collaboration within CapStar.

7.4 Organizational Effectiveness Results

7.4a Operational Results

7.4a(1) Operational performance outcomes achieved for key design and service delivery processes and business and support processes are demonstrated in Figures 7.4-1 through 7.4-10.

One effect of the implementation of the PEC and PIC processes is the substantial decrease in cycle time necessary to pilot and deploy a tested process change. Figure 7.4-1 shows, among other things, that the cycle time necessary to implement a conceptual idea for an improvement decreased from about ten months in 1997 to three months in 2001 from idea generation to implementation.

Figure 7.4-2 depicts how patient check-in time has decreased over the past five years due to standardization

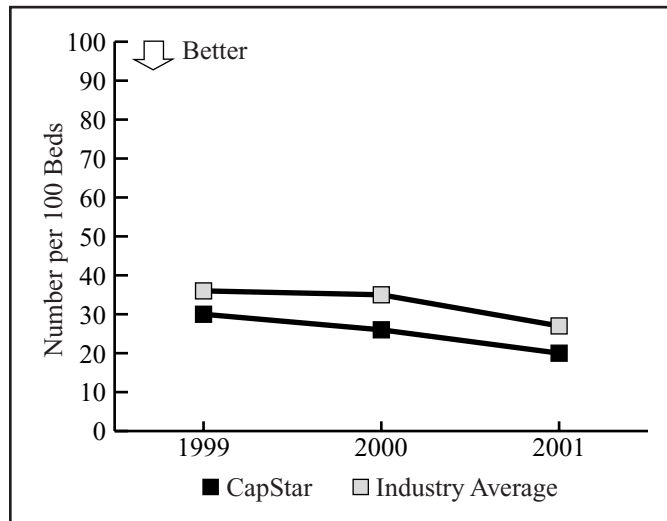


Figure 7.3-9 Needle Stick Injuries

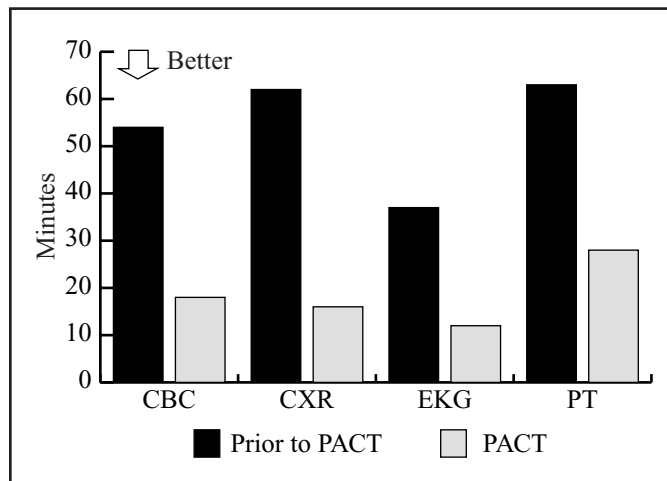


Figure 7.3-10 Work Time Reduction Resulting from Implementation of PACT

of the check-in process and the implementation of PACTs. The total time for a PACT to check in an emergency patient from the time of his or her arrival in the ED to arrival in an assigned inpatient room decreased from almost 4 hours to about 45 minutes. As the check-in cycles have improved, so has the process for patient discharge. Figure 7.4-3 shows the improved satisfaction levels achieved through the increasing use of a standardized process.

One of the key measures for operational effectiveness is patient follow-up. CapStar follows up with patients three to five days after discharge. This practice enables the staff to obtain feedback affecting medical and administrative care and to assess various value-related issues. Figure 7.4-4 reports the percentage of discharged patients who have been contacted in these follow-ups.

As a measure of clinical effectiveness, CapStar tracks the percentage of patients who return to the hospital with secondary effects from procedures. Figure 7.4-5 shows CapStar compared to the national average for similarly sized hospitals.

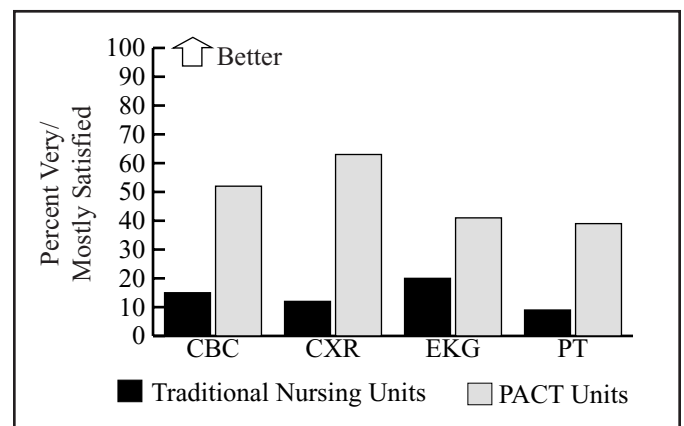


Figure 7.3-11 Physician Satisfaction with Services

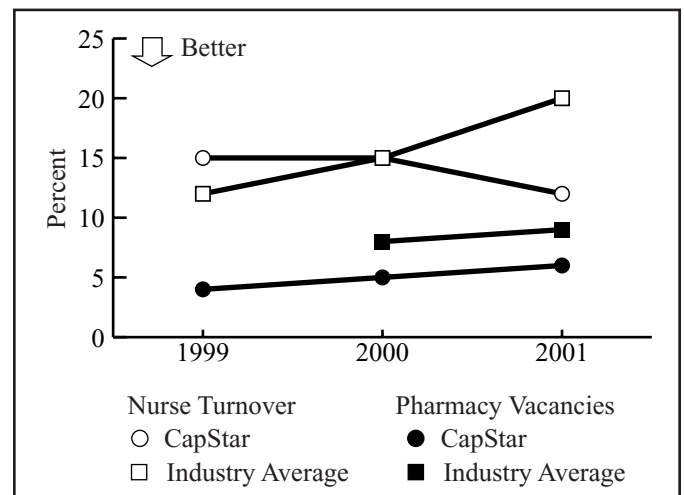


Figure 7.3-12 Nurse Turnover/Pharmacy Vacancies

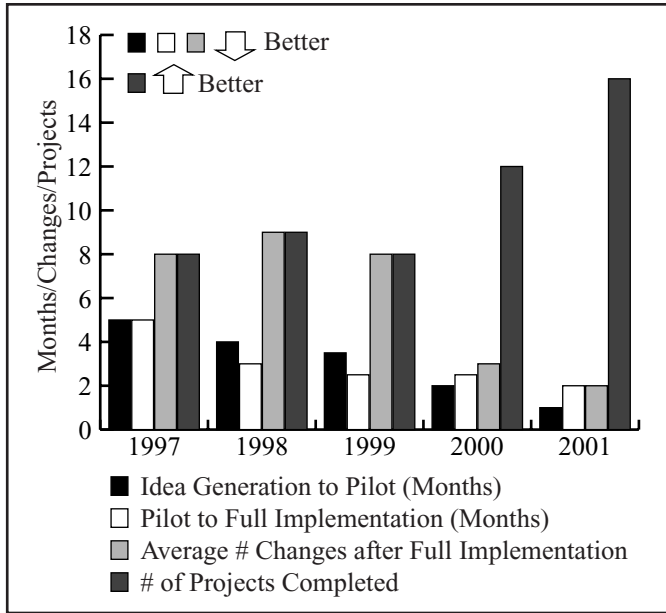


Figure 7.4-1 New Service Delivery Process

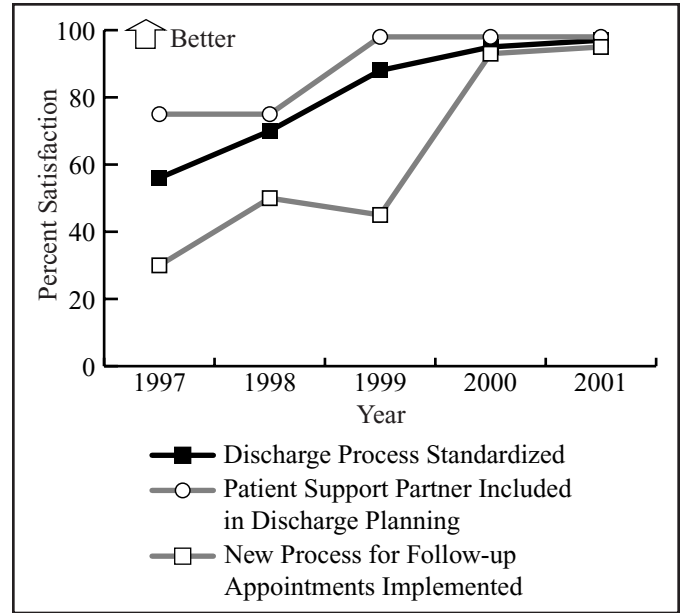


Figure 7.4-3 Discharge Process Improvements

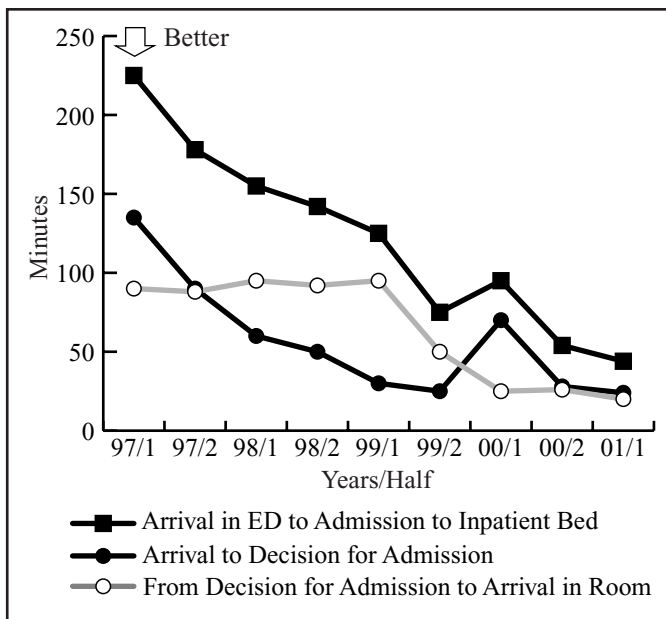


Figure 7.4-2 ED to Inpatient Room Time

Figure 7.4-6 reports that, within three years of adopting the current CSFs, all have achieved “Status Green,” which means that all CSFs are satisfying current goals. Both “Red” CSFs existing in 1998 were improved to “Status Green” by 2001.

Figure 7.4-7 demonstrates CapStar’s commitment to pathway management success with admitting patients into CapStar’s clinical pathways.

Figures 7.4-8 through 7.4-10 report outcomes for key service delivery processes. CapStar has a very active

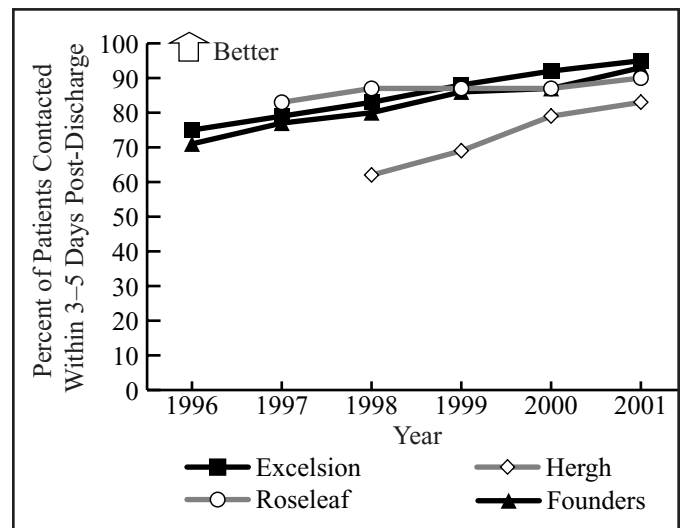


Figure 7.4-4 Follow-up Practice Effectiveness

program for promoting supplier involvement, supplier partnerships, and linkage between supply chain and operational effectiveness. Figure 7.4-8 demonstrates CapStar’s success at increasing supply effectiveness (the right supplies for the procedure), inventory accuracy (an internal measure for reporting accuracy of inventory reports), and the amount of supplies being procured from partners (38 percent in 2001).

Order fulfillment is CapStar’s key indicator for overall supply chain performance. CapStar’s success at fulfilling orders across the entire network is reported in Figure 7.4-9. Improving supply chain performance for its clients is an important part of PHNA’s strategic objectives. PHNA

is working with CapStar to develop a benchmark for this measure. CapStar also is reviewing factors involving lower-than-expected fill rates, a process measure, to enhance improved order fulfillment.

Consistent with the IAA CSF, CapStar allocates 4.4 percent of the operating budget for information systems operations and improvements. As shown in Figure 7.4-10, CapStar is in the top 13 percent of health care organizations in terms of financial commitment to information systems capability.

7.4a(2) Key results that reflect CapStar's success at deploying its organizational strategies are the number of returning (loyal) and referred patients. These results are shown in Figure 7.4-11.

The results of CapStar's Baldrige-based self-assessments have shown substantial progress toward incorporating the

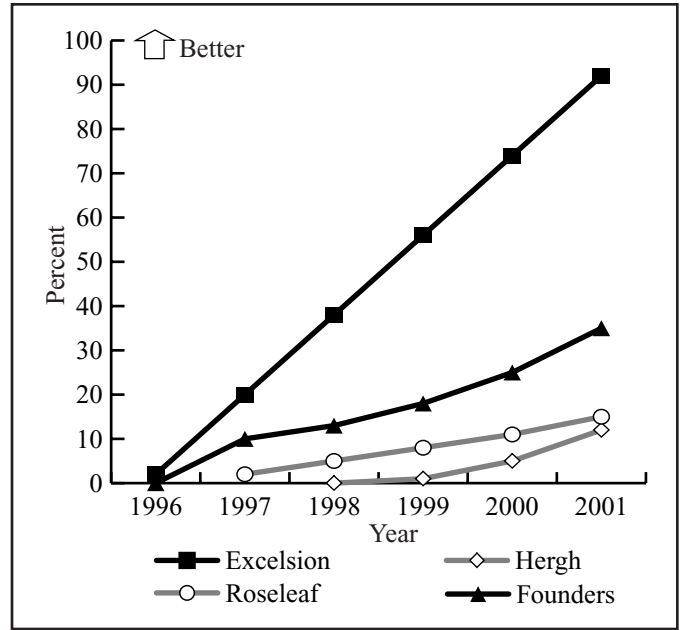


Figure 7.4-7 Appropriate Patients on Pathways

Health Care Criteria for Performance Excellence into CapStar's short- and long-term directions. Due to the length restriction of this application, results from these self-assessments will be available upon request.

7.4b Public Responsibility and Citizenship Results

7.4b(1) All CapStar inpatient OUs were surveyed by the JCAHO in 1999 and compared favorably to the Ohio average (Figure 7.4-12). All regulatory and legal goals noted in Figure 1.2-1 have been met since 1998. In addition, CapStar has received no findings from OSHA, the

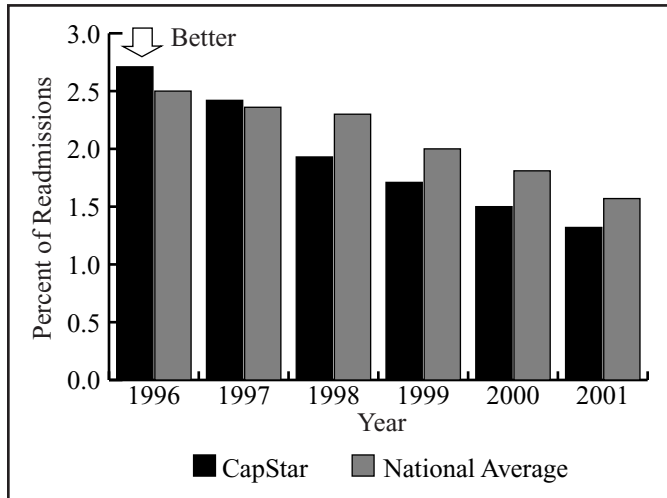


Figure 7.4-5 Readmission Rates

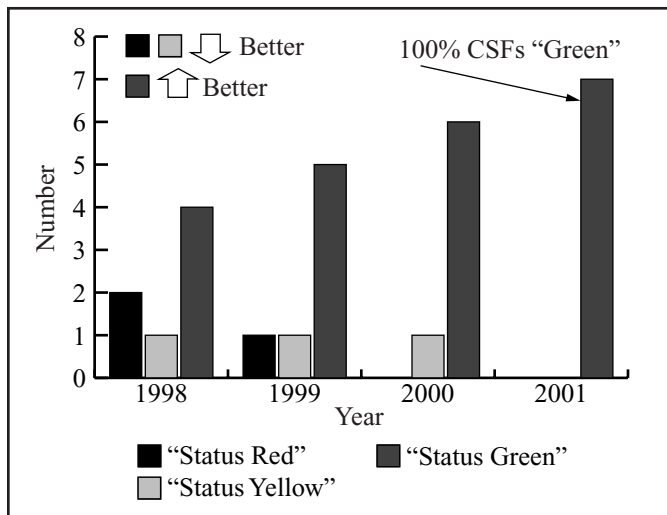


Figure 7.4-6 CSF Performance

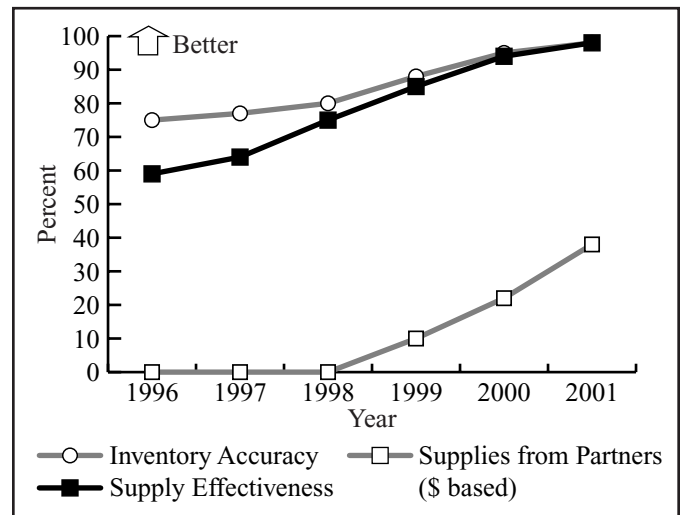


Figure 7.4-8 Supply Chain Performance

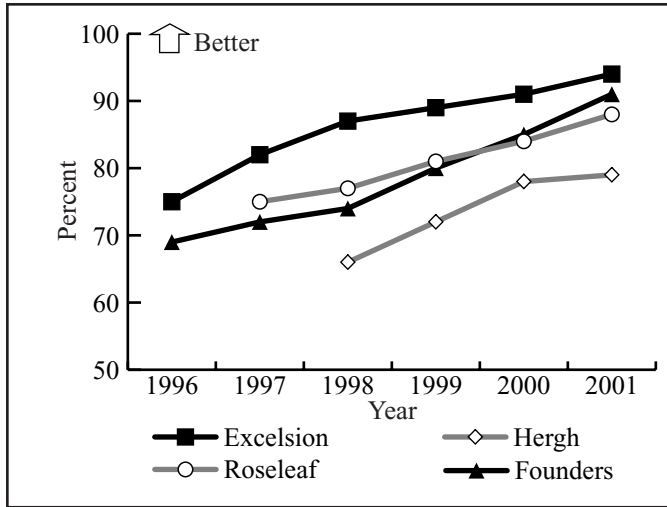


Figure 7.4-9 Order Fulfillment

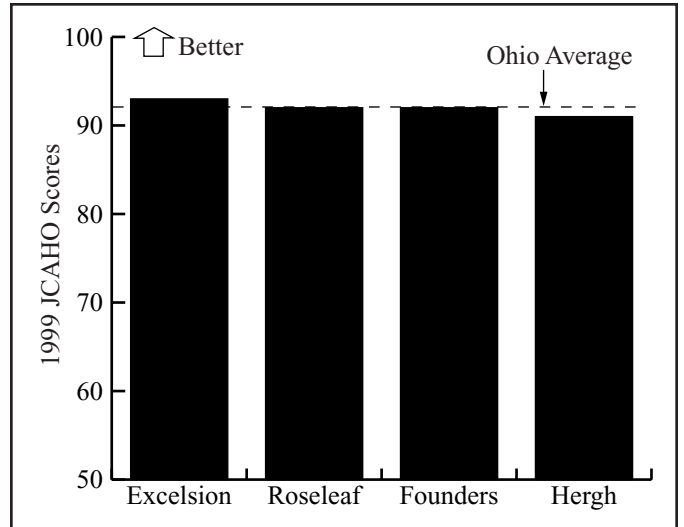


Figure 7.4-12 Results of 1999 JCAHO Assessment

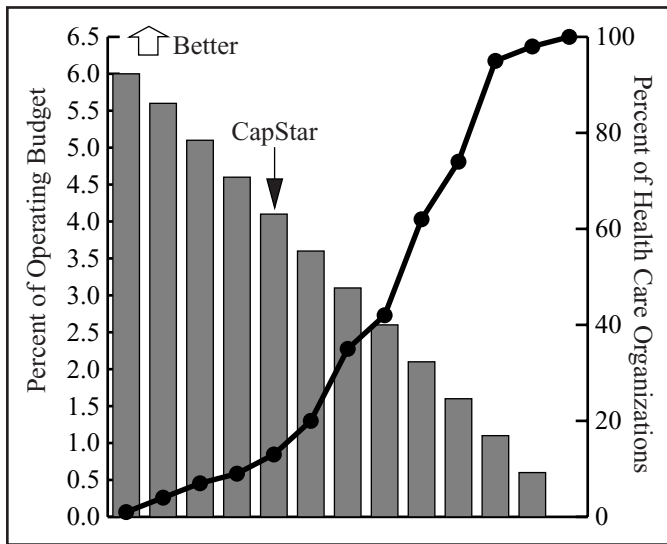


Figure 7.4-10 Percent of Budget Devoted to Information Systems

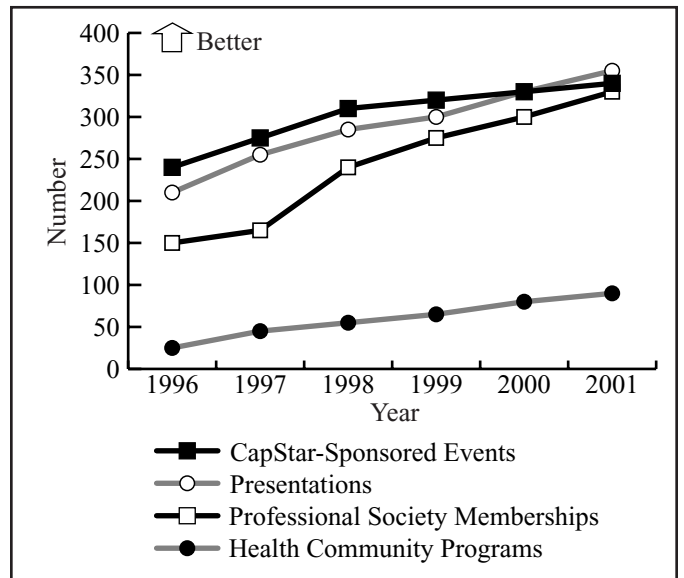


Figure 7.4-13 Community Involvement

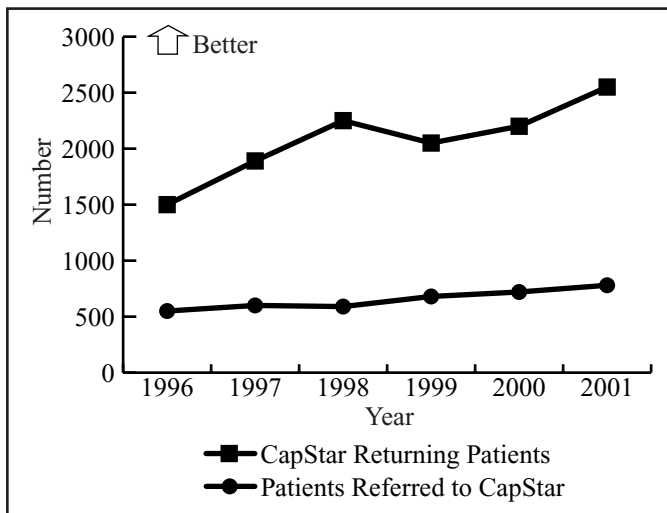


Figure 7.4-11 Returning and Referred Patients

EPA, or state and regional environmental and safety agencies over the past five years.

7.4b(2) CapStar enjoys a high level of colleague participation in professional associations and community events. Figure 7.4-13 summarizes key avenues of participation. CapStar's current community health initiatives were listed in Area 1.2b.

Baldrige National Quality Program

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