

EXECUTIVE SUMMARY

MANDATE AND PURPOSE

In late spring 1999, the General Assembly passed Special Act 99-10, which included a mandate for the Office of Health Care Access (OHCA) to conduct a study of the health of the Connecticut hospital system and the factors that influence the financial condition of hospitals. This mandate was based on the premise that hospitals in Connecticut were facing increasing financial challenges during the late 1990s. Most visibly, operating income dropped to the point that by the end of the decade half of the state's hospitals realized negative operating margins. Hospital efforts to reduce internal costs and broaden corporate alliances were partially successful, but many turned to the government for financial relief. This request put policy makers in a quandary given the policy of deregulation legislated in 1994. If intervention was somehow necessary, what would best justify and determine the type of relief, the amount, and the recipient? This study provides a detailed analysis of the financial health of Connecticut's hospitals in terms of the past, present and future drivers that determine financial outcome.

APPROACH

As the Office of Health Care Access considered its mandate, the first consideration was to ensure a comprehensive and balanced result. To this end, OHCA met with key stakeholders including government policy makers in the Executive and Legislative branches, and hospital executives as it crafted its study approach.

Through these discussions, OHCA determined that the study must produce an analysis of the health of the hospital system in Connecticut in terms of measures and indicators of "financial distress" for

individual hospitals and the system as a whole. To support this analysis, the study would require background on how hospitals have evolved over time, and a description of the different forces that have led to the hospitals' current financial status.

The study consisted of five primary activities.

1. Define, extract and analyze Connecticut hospital financial and utilization data.
2. Conduct focus group meetings with stakeholders to define and discuss the major influencing forces.
3. Develop a series of papers to describe the evolution of hospitals, the current state of hospitals today, and major forces affecting hospitals' financial condition.
4. Conduct on-site interviews with each hospital in the state.
5. Conduct interviews with non-hospital stakeholders.

OHCA used both internal and external resources to conduct the above activities. Internal resources were used to develop some of the initial products, such as extracting and analyzing the individual hospital data and developing the papers. Independent consultants were also retained to assist the agency. OHCA contracted with The Lewin Group, Inc. to analyze data, conduct the focus group discussions, the hospital site visits, and the interviews with hospital stakeholders, and to provide written products of the results. OHCA then reviewed all of their work products and assimilated them, with the other materials, into this report. Although The Lewin Group, Inc. contributed to the study, the findings and conclusions reached are those of the Office of Health Care Access.

ORGANIZATION

This report is organized into three substantive sections. The first provides a history of Connecticut hospitals, a description of hospitals as they are organized today, and a compilation of the seven papers profiling the forces affecting Connecticut's hospital industry. The second presents analytic profiles for each of the state's hospitals. The third develops the analysis of Connecticut's hospital system and study recommendations. The remainder of this executive summary presents key findings from the papers on the forces affecting hospitals, the hospital system analysis, and recommendations.

MAJOR FORCES AFFECTING HOSPITALS

Competition

The regulatory movement towards a competitive market for health care services in 1994 radically changed Connecticut's acute care hospital marketplace. While market forces and the development of managed care helped to slow the growth of health care costs, they also provided an environment in which hospitals assumed greater financial risk, which proved difficult to manage. From FY 1996 to FY 1998, the statewide gain from operations fell from \$105 million to \$13 million and as a result, the financial stability of Connecticut's hospitals decreased. Hospitals also began to face intense competition from independent freestanding facilities and physician offices that offered ambulatory care, sometimes including surgery and diagnostic services such as radiology and imaging. These competitors are in a strong position relative to the hospitals because they can concentrate on offering the most lucrative services, they are not as stringently regulated as hospitals, and unlike hospitals, they have considerable discretion in choosing whether to treat indigent or low-reimbursement patients.

Hospitals responded to the new competitive environment through a combination of cost reduction, "vertical integration"—expanding the range of their services, and "horizontal integration"—negotiating affiliations and mergers between themselves and other health care institutions. In pursuit of vertical integration, hospitals have expanded their behavioral health facilities, constructed or acquired convalescent homes and skilled nursing facilities, established outpatient and primary and preventative care clinics, and added home health services. Although Connecticut's hospitals remain non-profit institutions, there are now many for-profit units within their parent corporations. Horizontal integration also took place as four distinct integrated health care systems were formed, and a fifth one may be emerging. Affiliations allowed hospitals to pool and consolidate their resources and to create economies of scale for their services.

The empirical effects of affiliations and integrated health systems upon hospital finances and the quality of care have yet to be determined. However, it is clear that the movement towards integration, particularly with physicians, has been costly and thus by no means universally successful. Yet the changes that occurred in Connecticut in the 1990s, and even more so in the rest of the U.S., suggest that the health care industry is experiencing a transformation and acute care hospitals are increasingly becoming components of "integrated health systems," networks of health care institutions that offer extensive arrays of services from primary to hospice care.

Payment Mechanisms

Payment for hospital services is made by various means, public and private, direct and indirect. In the past, private payments have compensated for lower public

reimbursements and charity care. Private payers, who are largely employers, have recently sought to contain increasing health care costs, as have public payers. This has an impact on hospitals' flexibility to shift costs from public to private payers and more generally to recover their costs. As a result, the statewide annual growth of hospital revenues has slowed to 1 percent while hospital input costs have increased at a growth rate of roughly 3 percent.

Following the deregulation of the Connecticut health care market, the number of managed care enrollees has grown to 1.14 million, or 43 percent of the state's total population. At the same time, acute care hospitals have become increasingly dependent upon government reimbursement, nearly 60 percent of their total revenue in FY 1999. Hospital dependence upon government revenues weakens their financial stability because Medicare and Medicaid reimbursements currently cover 95 percent and 71 percent respectively of their costs of care.

If patient care payment to cost ratios decline consistent with current federal and state policy and market expectations, then hospital operating losses are likely to increase, placing additional pressure on private payers to offset public payer shortfalls. This dynamic, as much as any other, will shape the future of hospital finances.

Regulation

All aspects of hospital operations are affected by government regulations including physical plant maintenance and construction, waste disposal, staffing levels, and patient care. An industry focus group, held during the summer of 2000 to discuss hospital regulations, considered a list of seventy-five regulatory areas that affect Connecticut's acute care hospitals. Within these areas, regulations set specific

requirements that hospitals must understand, monitor for changes, include in operational policies, and oftentimes, report back to the regulatory body.

Health care regulations are developed for a variety of purposes including ensuring access to care, establishing standards for care, containing cost, and protecting the safety of patients and staff. Whatever their intent, regulations create financial, structural, and procedural requirements for hospitals. Some regulations also govern non-hospital operations and profitability; hospitals thus must address these requirements as well.

As the Connecticut regulatory environment was reformed to create a more competitive health care market, hospitals gained more flexibility and autonomy to respond to the new market forces, yet they also confronted more financial risk. Several regulatory areas, especially CON and licensing, could be improved through modernization, elimination, and in some cases, expansion. A broader look at the entire health care regulatory environment is recommended to ensure adaptation to a rapidly changing marketplace.

The Nursing Workforce

The most significant workforce issue affecting America's acute care hospitals is the shortage of nurses. Hospitals are finding it more difficult to recruit and retain nurses and, as the average age of registered nurses climbs and enrollments in nursing school programs fall, the shortage will only worsen. This is particularly troubling, for as baby boomers age there will be an increased need for bedside nursing. Changes in the delivery and financing of health care, along with increased negative perceptions of nursing, are factors of the shortage. Surveys of nurses and the general public reveal a

widespread concern with the effects of the nursing shortage upon the quality of patient care at understaffed facilities. Clinical data supports these concerns, illuminating the importance of nursing to the quality of patient care.

Nursing executives interviewed for this report indicated that it is unclear how they will continue to staff their hospitals as the nursing shortage intensifies and the patient population continues to age. In addition, there is a concern that the availability of nurses from outside and traveling agencies may also be reduced due to the aggregate shortage of experienced nurses.

Initial experiments with reducing the nurse staff ratio have not been uniformly successful. Nursing executives also know that closing unit beds as a solution to the nursing shortage will only exacerbate their budget dilemma. The overhead costs of keeping a unit open will remain essentially the same but revenue streams will decrease as beds are closed. The staffing challenges over the next several years will call for some creative interventions from all concerned stakeholders.

Information Technology and HIPAA

Financial pressures on hospitals brought about by different forces have encouraged the automation of hospital business functions and, to a lesser extent, clinical data management. Vertical and horizontal integration among providers has resulted in the need for integrated information systems that work across organizational entities. These changes, coupled with the rapid evolution of technology, have created both opportunities and challenges for hospitals in Connecticut and nationwide.

New technologies have:

- ◆ Helped automate billing and other administrative transactions;

- ◆ Enabled the storage and transmission of increasing volumes of data among payers, hospitals, and clinicians; and
- ◆ Generally made financial, administrative and clinical information more readily available to various parties involved in patient care.

The benefit of automation and connectivity in an information-intensive industry such as health care is tempered by the risk that confidentiality of personal health care information can be more easily breached. The privacy rule proposed by the federal government attempts to address this concern. The “Administrative Simplification” provisions of the federal Health Insurance Portability and Accountability Act (HIPAA) of 1996 attempt to take advantage of new possibilities afforded by information technology while ensuring the protection of personally identifiable health information.

There is a general agreement on the goals and long-term benefits of the HIPAA regulations, particularly regarding standardization of formats, code sets, and identifiers for health care transactions, which are expected to simplify administration and reduce costs over time. Compliance with the regulations may ultimately provide the synergy needed for the health care industry to achieve the level of automation other industries have already achieved. However, short-term costs of implementation of standard formats are a concern for providers and, although some controversy and uncertainty surrounds the privacy rule, all parties agree that implementation of privacy provisions will be costly, perhaps two to three times the cost of Y2K compliance.

In sum, health care providers now face regulatory and market driven demands to examine their day-to-day operations and

modify them as needed. The goals are to improve administrative efficiencies and patient quality of care, continue to protect patient confidentiality and ultimately, survive financially in a constantly changing environment. Information technology can enable these efforts.

Medical Technology

High demand for continued technological advances is deeply embedded in the American health care system. For the last 30 years, medical technology has been identified as one of the major drivers of increasing health care costs. More informed and better equipped to make knowledgeable health care decisions, patients and other consumers expect unfettered access to new, safe, and effective drugs, medical devices and equipment, and medical and surgical procedures. Superior health care is no longer considered a luxury but the benchmark by which health care has come to be defined. For hospitals, the ongoing need to remain cutting edge is essential for maintaining a competitive edge.

From gene therapy to tissue engineering to telepresence medicine, the proliferation of new technology promises even greater improvement in patient care, health status, and quality of life. The institution and utilization of those types of emerging technologies in the hospital setting have dramatically influenced the way in which hospitals function as health care providers. Minimally invasive surgical procedures, highly advanced medical equipment and breakthrough prescription medications are particularly significant in the evolving role of hospitals as they have contributed to shorter, and oftentimes costlier, hospital stays.

Tight budgets make capital outlays for new purchases problematic. Addressing the needs of competing interests, including purchasing costly new equipment, financing the high cost of specialized physical plants and maintaining a skilled workforce within the constraints of a limited budget makes setting priorities a continuing challenge to hospital administrators.

Of key importance to technology management, particularly for newer advanced technologies, are discrepancies between technology costs and third-party payment to hospitals. When reimbursement fails to keep pace with these new procedures and technologies, hospital budgets and reserves that are already at risk are further compromised. As health care payment mechanisms using prospective payment structures expand hospital outpatient care, long-term care, and other settings, it will be increasingly important to monitor the impact of payment mechanisms on health care budgets and technology use.

Consumerism

Health care consumerism has only recently gained momentum in Connecticut but is a force that providers have had to respond to over the last decade. As it continues to gain momentum, consumerism could become one of the most important factors shaping the state's health care system.

Consumerism developed in the 1990s as a result of the combination of a number of factors. The first of these factors was the deregulation of the hospital industry in 1994 and the creation of a competitive market. Next were changes in the delivery of care, particularly the replacement of the traditional doctor-patient relationship with managed care. Despite the promise of managed care to coordinate care, patients

have had to act as the coordinators of their care in an increasingly fragmented health care system. Third, the financial difficulties of hospitals and managed care pressures to limit costs led to staff and service reductions; this affected consumers' perceptions of the quality of care. Fourth, increased co-payments created a financial incentive for people to play a more significant role in their health care decisions. Fifth, consumer demand for health care information has dramatically expanded and, in response, the amount of medical information that is now accessible to the layperson has grown. One out of every two persons will draw information from among the 25,000 health sites on the World Wide Web. Finally, the combination of advances in medical technology and therapies and direct-to-consumer advertising has stimulated consumer demand for cutting edge treatment.

As a result of these developments, there are increasing numbers of people now acting as discerning consumers of health care services. A negative aspect of this trend is that there are no content validation standards for information available on the World Wide Web, and more people are prescribing therapies for themselves based upon the information they find, which may not be correct. However, consumerism has put the focus in health care back upon the patient at a time when managed care and the competitive health care market have concentrated upon finances. Providers have responded by:

- ◆ Supplying more health care information to consumers;
- ◆ Increasing the amount of outpatient care;
- ◆ Locating ambulatory and preventative care centers in more convenient suburban locations;

- ◆ Responding to patient demands of new drugs and the most advanced therapies; and
- ◆ Advertising to consumers.

While health care providers have begun to respond to consumerism, the substantial growth in the number of people using alternative medicine reflects in part their dissatisfaction with traditional medicine as well as their desire for providers to treat them as a whole person. People choose alternative therapies because they are holistic and patient-centered. The added element of paying for such care gives consumers more control over their treatment. The issue of consumer choice in an era of managed care is difficult to resolve. The question remains: Can providers such as hospitals meet consumer expectations of quality and convenience as financial pressures intensify, thus constricting their flexibility to respond to a changing health care market?

FINANCIAL PERFORMANCE OVERVIEW

1999 was a challenging year for most of Connecticut's 31 acute care hospitals. Several hospitals demonstrated signs of financial weakness and distress. Combined operating income for the state's hospitals was negative in hospital fiscal year 1999 resulting in operating margins falling to a negative 0.7 percent. Due to positive investment gains and other non-operating income, total margins remained positive at just over 2 percent in 1999.

Twenty of Connecticut hospitals are financially strong. Seven are showing some signs of financial challenges but are likely to be more stable for the next few years. Four Connecticut hospitals appear to be financially distressed.

The primary characteristics of financially distressed hospitals are operating losses,

low cash or endowment reserves, small size, relatively low commercial payment (compared to cost), higher than average Medicaid utilization, declining patient volume, and higher than average cost growth in the last three fiscal years. Default on loan covenants is a visible sign of distress, as lenders implement measures to obtain compliance.

PERFORMANCE DRIVERS AND ISSUES

The site visits, focus groups, stakeholder interviews, and data analysis conducted during OHCA's hospital study identified a series of drivers and issues affecting the performance of Connecticut's hospitals.

Performance Drivers and Issues

Hospital Utilization and Services

- ◆ Inpatient Volume
- ◆ Outpatient Services
- ◆ Health Insurance Benefits
- ◆ Hospital Formation and Closure
- ◆ Behavioral Health Programs
- ◆ Community Benefit Services

Government and Commercial Payment

- ◆ Commercial Payment and the Deregulation of Hospital Rates
- ◆ Balanced Budget Act
- ◆ Medicaid Reimbursement
- ◆ Connecticut's Uncompensated Care Program

Hospital Operating Costs

- ◆ Growing Nursing Shortage
- ◆ Medical Technology and Supplies Costs
- ◆ Pharmaceutical Expenditures
- ◆ Cost Containment and Patient Care Redesign Initiatives
- ◆ Medical Education and Research
- ◆ Other Cost Drivers

Competition

- ◆ Hospital Competition
- ◆ Freestanding Centers

Integrated Delivery System Strategies

- ◆ IDS Structures and Rationale
- ◆ Hospital Affiliates

Information Technology

- ◆ Hospital Systems Needs
- ◆ Y2K and HIPAA
- ◆ Hospital Affiliates

Federal and State Hospital Regulation

- ◆ Connecticut's CON Laws
- ◆ Other Regulations Affecting Performance

Hospital Management and Leadership

- ◆ Effective Management
- ◆ Medical Staff Relationships

Local Demographics and Economy

- ◆ Local Economy on Hospitals
- ◆ Connecticut's Demographics

Role of Non-Operating Income

- ◆ Investment Returns
- ◆ Philanthropy

Capital Expenditures and Capital Formation

- ◆ Funds for Hospital Projects
- ◆ Capital Needs of Connecticut's Hospitals
- ◆ Hospital Working Capital

The following summarizes key findings from the analysis of performance drivers.

HOSPITAL UTILIZATION AND SERVICES

Inpatient hospital census declined by 50 percent between 1980 and 1996 in Connecticut. The rate of decline slowed between 1996 and 1998, and patient census increased thereafter. Hospital utilization has continued to increase in fiscal year 2000, due to the aging of Connecticut's population, growth of less restrictive PPO (versus HMO) insurance products, the strong economy, and other variables. It is uncertain if the growth in volume over the summer of 2000 will continue.

One important challenge in conjunction with recent census increases is the increase in psychiatric census. Inpatient psychiatric daily census has grown in Connecticut's general acute care hospitals to an average of 400 patients. Hospitals report several challenges in meeting the needs of Connecticut's mental health consumers, including poor reimbursement levels for these services, strained capacity of community-based and adolescent services, and a lack of coordination within the state's behavioral health system of care.

GOVERNMENT AND COMMERCIAL PAYMENT

Hospital revenue is generated from multiple sources. Approximately 45 percent of Connecticut's hospital revenues come from Medicare, 40 percent come from commercial payers, 10 percent come from Medicaid, and the remaining 5 percent come from other sources (e.g., the Uncompensated Care Program). Other than Medicaid, which pays about 70 percent of its costs, these ratios are all declining.

Medicare

Medicare payment to cost ratios have fallen from .99 in 1997 to .92 in 1999. The Balanced Budget Act of 1997 significantly reduced Medicare revenue compared to prior policy. Connecticut's hospitals have been affected by more than \$250 million annually. The Balanced Budget Refinement Act restored only a small amount of funding, though additional Congressional action may provide further assistance. Growth of managed care within Medicare has been problematic for Connecticut's hospitals and for health insurance companies. Medicare HMOs pay hospitals based on negotiated rates that seldom recognize new technology or medical education costs. The Medicare HMOs and hospitals also developed risk-sharing arrangements that led to significant losses for most facil-

ities. Managed care enrollment likely has peaked and will decline as health insurers exit the Medicare managed care market.

Medicaid

Hospital Medicaid payments in Connecticut, at approximately 70 percent of cost, are among the lowest in the nation. Total losses from serving Medicaid patients are approximately \$140 million annually compared to an overall operating loss of \$33 million in 1999. The losses result in part from technical problems with the State's fee-for-service reimbursement methodologies. Medicaid underpayment was more manageable when the State set commercial payment rates to cover public payer losses; however, now that commercial payments are determined through market forces, the Medicaid losses are more problematic as the cost shift is less effective in covering public sector losses.

As TANF beneficiaries enrolled in managed care plans, the fee-for-service system became dominated by higher cost disabled, mentally ill, and adult patients. These patients have higher acuity levels, requiring more procedures and longer stays. The average fee-for-service Medicaid inpatient case therefore was more costly, but payment rates remained the same. The acuity of patient care reimbursed under TEFRA thus increased dramatically, though the TEFRA payment system left payments per inpatient discharge essentially unchanged. The impact of this transition was that by 1999 the cost per case was \$6,926, payment per case was \$4,877, resulting in a loss per case of \$2,049, or 30 percent.

Other

The payment to cost ratio for other payments has declined to approximately 50 percent. Connecticut's Uncompensated Care Program attracts federal

Disproportionate Share matching funds to the State and redistributes significant resources from hospitals with limited indigent care responsibilities to those with substantial uncompensated care levels. Hospitals expressed concerns regarding the formulas used to allocate these funds.

The Governor's repeal of the Gross Earnings Tax provides significant budgetary assistance to the state's hospitals, and is a primary reason why overall hospital financial performance has improved in fiscal year 2000.

Commercial

Commercial payment to cost ratios have fallen in recent years, due to deregulation of hospital reimbursement, growth of managed care, and the outcome of rate negotiations between hospitals and health insurers. Future payment levels depend on premium rates negotiated between health insurers and Connecticut employers, health insurer profit requirements, growth of non-hospital expenditures such as pharmaceuticals, and other variables. Some hospitals indicated that they are renegotiating managed care contracts, presumably on more favorable terms. The margins that hospitals achieve with commercial payments allow them to subsidize payments by other payers, and are therefore crucial to financial stability and service delivery.

A recently issued bulletin from the Department of Insurance regarding the prompt-payment statute should help to reduce payment delays by managed care organizations. These delays have been problematic for the state's hospitals as accounts receivable balances have increased dramatically, lowering cash flow. Improvements in hospital billing systems and practices also would provide helpful benefits.

HOSPITAL OPERATING COSTS

Hospital operating costs increased at relatively modest levels throughout the 1990s, but are showing signs of acceleration. There are several categories of expenses that are growing most significantly, including nursing salaries, medical technology and supplies, pharmaceuticals, utilities, and others.

Connecticut's hospitals and health care system are facing a growing shortage of nurses and other health care professionals. While shortages have occurred in the past, several conditions complicate solutions to the current challenges. The nursing shortage already is affecting hospital capacity and care in the state, and is leading to inflation in hospital salaries. Creative solutions are needed, but these are not readily apparent. Hospitals also are struggling to contain costs from new medical technology advances, pharmaceuticals, utilities, and regulatory requirements. While hospitals incur large expenses acquiring technologies for patient care, they do not capture the full benefits of these technology developments (such as reduced lengths of stay and improved quality of life for patients).

Connecticut has a high concentration of medical education, and hospitals and physicians are very committed to these programs. The ratio of interns and residents to beds is the third highest in the nation. Graduate medical education programs are associated with higher hospital operating cost, thus this commitment increases the average cost of hospital care in the state. Graduate medical education and clinical research programs provide many benefits to the state's consumers, such as improved quality of care, additional federal funding, playing an

incubator role for other high tech industries and access to the latest technological innovations.

Connecticut hospitals have implemented sophisticated information systems for billing, accounting, and clinical management, and additional investments are planned across the state. Y2K remediation was costly, but most hospitals believe that complying with the patient confidentiality requirements of HIPAA will require even more resources. New systems innovations will include Internet web sites to communicate with payers, patients, and consumers, and clinical systems increasingly will incorporate “decision rules” to help reduce medical errors and variation in medical practice, and thus improve the quality of care. A major problem with hospital information technology systems is that “best of breed” purchasing results in a series of incompatible systems that do not easily interface across levels of care and between clinical and non-clinical areas.

Costs have been increasing at 3 percent annually as compared to revenues increasing at about 1 percent annually; this means that hospitals have to absorb about 2 percentage points of cost increases per year. To reduce operating costs by that amount and to improve the efficiency and effectiveness of care, virtually all hospitals in Connecticut have engaged in patient care redesign initiatives. Hospitals are benchmarking their staffing levels to established norms, implementing patient-centered care models, and introducing hospitalist physicians to improve care management.

COMPETITION

Hospital competition in Connecticut takes two forms, competition between the hospitals themselves, and an escalating

competition between hospitals and other health providers. High levels of hospital-to-hospital competition in limited market areas result in relatively low commercial payment to cost ratios (good for payers, challenging for hospitals), and affects service offerings.

Competition from non-hospital providers is also increasing. Physician incomes have been affected by government payment policies and by managed care, and many are sponsoring competing diagnostic and treatment facilities to earn facility fees. Hospitals are concerned about this development, and indicate that while they accept indigent patients, are required to treat all emergency room patients, and must comply with Certificate of Need laws, freestanding centers are not subjected to these requirements.

FEDERAL AND STATE HOSPITAL REGULATION

Federal and State regulations affect hospital operations, performance, and cost while also providing important health and safety benefits. Hospitals believe that Connecticut’s CON laws are beneficial, but should be updated and applied to non-hospital providers that develop competing services. Connecticut’s business and health insurance communities prefer to allow competition and market forces to prevail.

HOSPITAL MANAGEMENT AND LEADERSHIP

Management is important to hospital performance. Hospital management teams develop and implement strategy and cost containment initiatives, establish important relationships with physicians and the State, monitor and seek to improve patient satisfaction, negotiate with managed care organizations for payment rates, and set the tone for competition among facilities. Several hospitals have experienced

management turnover, leading to special challenges in addressing the changing reimbursement environment. The change from operating in a regulated environment to a competitive environment is particularly challenging. The following are two examples of important endeavors that Connecticut hospital management has undertaken during the past decade.

Integrated Delivery Systems: Many of Connecticut's hospitals implemented Integrated Delivery System strategies and structures during the last few years. The strategies were established based on generally accepted views regarding how the health care system would evolve and adopt risk-sharing between health insurers and hospitals and their medical staffs. Unfortunately, many of these initiatives failed, and hospitals incurred substantial losses and now are divesting acquired physician practices.

Hospital Affiliates: Connecticut's hospitals also have established and operate a wide range of affiliate entities. These enterprises share the same parent corporation as their affiliated hospital, and include foundations, home health agencies, collection agencies, real estate firms, other patient care programs including rehabilitation and skilled nursing, self-insurance and malpractice firms, and physician/hospital organizations established for joint managed care contracting. The state's hospitals transferred more than \$50 million to these affiliates in 1998 and 1999.

LOCAL DEMOGRAPHICS AND ECONOMY

Many of the smaller hospitals in Connecticut are located in towns and communities in relatively close proximity to one another. Residents of these towns view the communities as distinctly separate, and have strong affinities and demonstrate support for their local

hospitals. Wealthier communities in Connecticut provide significant amounts of financial support to their hospitals.

ROLE OF NON-OPERATING INCOME

Non-operating income has become a particularly important resource for Connecticut and other U.S. hospitals. This income, derived primarily from investment gains and philanthropy, offset operating losses in 1999, allowing the state's hospitals to report a small positive total margin that year. Six hospitals in the state have cash and endowment reserves exceeding six months' of total operating expenses. Investment returns may fall in the future as the capital markets retreat from the high returns provided in recent years. This would place Connecticut's hospitals under even more financial pressure.

CAPITAL EXPENDITURES AND CAPITAL FORMATION

Hospitals are capital-intensive, requiring constant investment in buildings, equipment, and information systems. These investments are required for hospitals to comply with licensing standards, to remain competitive, and to bring new services to their communities. Three of the four primary sources of capital for the state's hospitals increasingly are constrained: operating income, debt, and investment gains. Philanthropy continues to be provided particularly for hospitals located in wealthier communities. The Connecticut Health and Education Facilities Authority has expressed concern about the impact of declining financial performance on current bond indebtedness. Unless financial performance improves, future capital formation will be at risk.

EFFICIENCY AND VALUE PROVIDED BY CONNECTICUT'S HOSPITALS

Capacity in Connecticut is well below the U.S. average in terms of hospitals, beds, admissions, and inpatient days per 1,000 population. The data on the rate of admissions and beds per population suggest that Connecticut does not have an excess capacity of hospital beds. It does rank higher on the number of hospitals per square miles. Qualitative observations gathered through site visits, focus groups, and stakeholder interviews in Connecticut reveal general satisfaction with both the number and distribution of hospitals in Connecticut. Some hospitals in less populated areas may only be 15 to 20 miles apart, yet Connecticut residents view these hospitals as being in completely separate communities. However, other aspects of this study have demonstrated the relationship between several hospitals in a cluster and low commercial rates, and between low commercial rates and poor financial health. Traditional measures of hospital capacity may not be sufficient to judge the adequacy of the supply of Connecticut's hospitals.

COMPARATIVE EFFICIENCY OF CONNECTICUT'S HOSPITALS

The Lewin Group's hospital efficiency model indicates that Connecticut hospitals appear to be relatively efficient, after adjusting for patient acuity, prevailing wage levels, medical education costs, and other variables that influence hospital costs. Comparative efficiency improved significantly between 1995 and 1997. Without adjusting for medical education, Connecticut hospitals are more expensive than those of other states, reflecting Connecticut's significant degree of teaching and research.

FUTURE FINANCIAL PERFORMANCE OF CONNECTICUT'S HOSPITALS

Connecticut's hospitals all are non-profit, mission-oriented organizations. Many have developed a wide range of programs that meet important community needs and supplement state and local public health services. Many of these hospital sponsored programs are at risk of termination during periods of financial distress if these services are not profitable, a problem for mission-based community hospitals.

Future financial performance of Connecticut's hospitals will depend on how the performance drivers discussed in this report unfold over the next several years. The Lewin Group financial projection model includes assumptions regarding future payment rates, inflation in hospital expenses, utilization trends and payer mix, and changes in the Gross Earnings Tax. The model also integrates year-to-date financial performance information made available by the Connecticut Health and Educational Facilities Authority.

With the repeal of the Gross Earnings Tax, Connecticut hospitals appear able to achieve break-even operating margins during fiscal year 2001. This level of margin would not allow for Connecticut hospitals to refurbish and stay current with technology. Restoring operating margins to the 2.0 to 3.0 percent level would require successful negotiation with health insurers, increased Medicaid payment, and continued cost containment. This level of performance will be important to maintaining access to capital. In addition, the future of Connecticut's hospitals will be determined by several "turning point" issues, including a resurgence of hospital utilization, possible refinements to Medicare payment policy, the ability of hospitals to negotiate managed care payments that exceed cost

inflation, the nursing shortage, medical technology and pharmaceutical developments, and the evolving role of consumers in the health care system.

POLICY RECOMMENDATIONS

The study analyses suggest the following recommendations.

1. The State should consider new hospital licensure categories so that distressed facilities can be licensed without meeting the full requirements of general acute care hospitals.
2. The Certificate of Need standards and processes require adjustment, but not elimination. OHCA should concentrate on establishing demand, supply, and utilization benchmarks for specific service areas affected by emerging technologies. OHCA also should establish standards for freestanding facilities performing services that currently also are performed in hospitals.
3. OHCA should evaluate additional data elements as it measures hospital performance and access issues, including ambulatory care statistics and public health indicators. Monitoring ambulatory care-sensitive discharges, for example, can identify potential access issues for the state's residents.
4. Medicaid payment policies should be adjusted to decrease the differential between costs and payments for Medicaid patients. Rebasement TEFRA rates or replacing them with a DRG-based system would improve their alignment with current hospital acuity levels.
5. The nursing shortage creates risks for Connecticut's health care system. The State should play a role in ensuring an adequate supply of nurses for Connecticut's hospitals.
6. The State should develop mechanisms to improve coordination of health care policy, regulation, and payment. OHCA, the Department of Public Health, the Department of Social Services, the Office of Policy and Management, the Department of Mental Health and Addiction Services, and the Department of Children and Families all play critical roles within the state health system.
7. OHCA and the State should develop an updated regional health care plan that identifies long term goals and priorities for hospital and other services capacity.
8. The State should consider hospital reporting of community benefit services (similar to S.B. 697 in California) to monitor provision of essential community programs.
9. Based on variables identified in this study, OHCA should establish criteria and benchmarks that can be utilized to monitor hospital performance, and identify those hospitals in serious financial distress that may require State intervention and regional planning. Hospitals should report when they are in technical default of loan covenants to provide an "early warning system" for regional planning.
10. Connecticut has a relatively high commitment to physician education, providing many benefits but also adding to hospital operating costs. Studies of Connecticut's hospital costs should adjust for these expenses.

11. The Department of Insurance recently issued new guidelines regarding the timeliness of payments by health insurers to health care providers. In its role to monitor hospital performance, OHCA should monitor the implementation and results of these guidelines.
 12. The State should undertake a comprehensive evaluation of hospital health and safety regulation, evaluating areas of duplication, excessive cost, and other problems.
 13. Many Connecticut hospitals have established systems with numerous affiliate entities. OHCA should study further the role of hospital affiliates in the performance of health care systems and hospitals.
 14. OHCA should study recent hospital closures to understand potential impacts on adjacent communities.
- The study should evaluate patient migration patterns and consumer satisfaction to learn helpful insights for reviewing potential future closures.
15. Many hospitals do not have the capacity to evaluate and make prudent judgments regarding purchases of new technologies. The State or Connecticut Hospital Association should play a role in assisting hospitals with this endeavor.
 16. OHCA should evaluate the new patient care delivery models that have been implemented in the state to understand their effects on patient care access and quality.
 17. The State should consider refining the Uncompensated Care Program to improve its equity among hospitals, and to simplify and update its process.