

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**YEAR 3 REPORT**  
**October 1, 1996 – September 30, 1999**

*Prepared for:*

*Office of the Attorney General  
Commonwealth of Massachusetts*

*August, 2003*



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**EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

This is the final installment in a series of four reports that examines the provision of health services to general and vulnerable populations by Saint Vincent Hospital, LLC, in Worcester Massachusetts over a five-year period. In 1996, the Saint Vincent Hospital, then part of Fallon Healthcare System, was acquired by OrNda HealthCorp, which subsequently was acquired by Tenet HealthSystem. Tenet is a national, for-profit hospital management company with over 130 facilities nationwide. The Massachusetts Office of the Attorney General Public Charities Division scrutinized the proposed sale of a non-profit organization to a for-profit organization, and set several conditions for the purchase. One condition was that the hospital fund the retention of an independent consultant to assess the level of access and community benefits available to area residents after the sale of the hospital. The Attorney General, in consultation with Saint Vincent Hospital and members of the Central Massachusetts Community Health Coalition, a Worcester based health care advocacy group, selected Dougherty Management Associates, Inc. (DMA), to serve as the independent analyst. DMA is responsible for monitoring and reporting, as a matter of public record, the community health care and access afforded by Saint Vincent Hospital before and after its sale.

DMA has used a variety of techniques and approaches to assess whether Saint Vincent Hospital fulfilled its commitment to maintain access to services, provision of free care and provision of community benefits. The Baseline Report, issued in August 1998, reported on a two-year baseline period, October 1994 through September 1996, the final two years of the hospital's operation as a non-profit facility. A second report, released in August 1999, presented the analysis of the hospital's operation during the period October 1996 through September 1997, the hospital's first year as a for-profit organization (Year 1). A third report released in December 2000 presented data on Year 2, October 1997 through September 1998. This final report covers the results of the hospital's third year of for-profit operations and summarizes the entire three-year assessment period. Issuance of this final report was delayed significantly to await one of our key sources of data, the final figures from the hospital's cost report to the state for FY1999, which were supplied to us early in 2002.

### A. METHODOLOGY

To compare baseline provision of care with Years 1, 2, and 3, DMA used Saint Vincent Hospital data on access, utilization, quality and community benefits. Some of these data are from hospital internal reports, and a great deal are from cost reports and uncompensated care reports that all Massachusetts acute care hospitals submit to the Division of Health Care Finance and Policy. DMA has included parallel information from these reports for a set of comparison hospitals to help identify health care trends that are due to changes in the external health care environment that may impact hospitals' provision of care. At the end of Year 1, DMA consultants conducted phone and in-person semi-structured interviews with a number of hospital

staff who were asked about their units' operations during the baseline period and the year following the sale. These interviews were repeated at the end of Years 2 and 3 to provide similar information.

DMA collected data on perceptions of Saint Vincent Hospital's provision of services to several vulnerable populations of significance in the Worcester community. Community health providers and advocates were surveyed by telephone, and Saint Vincent Hospital patients representing the identified vulnerable populations were interviewed or participated in focus groups. This data collection process was conducted early in Year 2 to address perceptions of the baseline period and changes occurring since then. The process was repeated as similarly as possible shortly after Year 3 to address perceptions of changes occurring since the middle of Year 2.

DMA has also reviewed relevant data on significant trends likely to affect hospital operations. We have noted when changes at Saint Vincent Hospital are consistent with the expected effects of these significant industry trends. However, we have not attempted to explain the reasons for all changes experienced by the hospital.

## **B. OVERVIEW OF THE SERVICE AREA**

Saint Vincent Hospital serves a catchment area comprising the city and towns in Worcester County. The largest number of the hospital's patients live in the City of Worcester and the hospital's primary service area also includes the city and the ring of towns immediately surrounding it.

The characteristics of the service area did not change markedly during the analysis period. It continued to have a significant elderly population as well as a large Hispanic community, a significant African-American community, and smaller communities of Southeast Asians and Eastern Europeans. There have been some improvements in indicators of public health in recent years, but more indicators varied up and down or worsened somewhat.

Several significant changes in the hospital's external environment occurred toward the end of Year 1. First, all hospitals faced reductions in Medicare reimbursement from the first year of implementation of the Balanced Budget Act of 1997, with teaching hospitals and those with a high proportion of Medicare patients affected most. In addition, financing of the Massachusetts hospital uncompensated care pool was changed, reducing the required financial contributions for most hospitals. Expansion of Medicaid eligibility in the Worcester region increased during the baseline period and continued in Years 1 and 2, with a particularly dramatic increase in Medicaid enrollment into Fallon Community Health Plan, an HMO accounting for the majority of Saint Vincent Hospital's managed care business. However, this increased Medicaid enrollment cannot be accounted for in our analysis of hospital data, because the hospital has no way to know which Fallon members are Medicaid recipients.

Analysis of data on inpatient services at all three Worcester hospitals showed that payor mix remained relatively stable, with slight increases in the Medicare and managed care shares, while Medicaid held constant. Nursing homes continued to increase in importance as a discharge disposition, consistent with a national trend for hospitals to serve older and sicker patients. However, lengths of stay continued to decline slightly.

### **C. ASSESSMENT**

In its first three years of operation as a for-profit entity, Saint Vincent Hospital continued to provide valuable services to Worcester County. It also expanded by developing a Skilled Nursing Unit, a Cardiac Rehabilitation Program and temporarily expanded its psychiatric services by adding a Geriatric Psychiatry Inpatient Unit, and a Partial Hospitalization Program for adults and elders.

There were no dramatic changes in the hospital's overall payor mix, with Medicare and managed care continuing to account for over 80% of revenues in both the baseline and analysis periods. However, the share of managed care increased and the share of self-pay decreased from baseline levels. The share of Medicaid remained quite stable at or above baseline levels. This contrasts to some comparison hospitals that experienced increases in Medicaid share, and was contrary to the overall Massachusetts trend of increasing Medicaid coverage due to health reform. The implications of these trends in Medicaid and self-pay are further discussed below.

Saint Vincent Hospital received accreditation with commendation from JCAHO at the beginning of Year 2, a higher level of accreditation than it had received in the immediately prior accreditation period. The number and pattern of complaints shifted over the five-year study period, increasing in number, primarily due to increases in minor complaints. It is reasonable to explain some share of this increase by the implementation of a process beginning in Year 2 to actively solicit and document patient feedback. Serious complaints also increased, remaining at higher levels than baseline for two years, but declined to baseline levels in Year 3. Severe complaints varied between none and three per year and showed no clear trend.

The sale of the hospital resulted in relatively few changes among senior managers or department heads, providing considerable continuity of leadership during the transition. However, by Year 3, there had been several changes among department heads. Other aspects of hospital personnel showed more change. The number of admitting physicians varied considerably, jumping to a high of 500 in Year 2 and dropping to a low of 325 in Year 3. We have little information to understand the reasons for or implications of this change. Other hospital staffing also changed from the baseline, ending 3% smaller and with somewhat fewer nurses, but considerably more, 25%, non-nursing clinical staff. In Year 2, Saint Vincent nurses voted to unionize, and the hospital was engaged in increasingly difficult negotiations during years 2 and 3. While the number of African-American direct service staff increased and the hospital hired its first African-American staff physician, there were

decreases in the number of Hispanic and Asian direct service staff. Comparison of non-physician inpatient staffing levels to inpatient volume showed little change in productivity expected for inpatient staff, while similar comparisons for non-physician outpatient staff showed variation, with higher levels of productivity expected in two of the three assessment years.

These changes in staff composition and in the number of admitting physicians suggest that the hospital reorganized its work processes to some degree. This, together with contentious union negotiations, may have been related to the low ratings by consumers of employee communication and teamwork during Year 2 and Year 3. In addition, the decreases in the number of Hispanic and Asian direct service staff have the potential to affect service quality and the perception of the hospital by its Hispanic and Asian patients.

## **1. Inpatient Services**

Despite Saint Vincent Hospital's addition of a Skilled Nursing Unit and other inpatient programs, overall inpatient services dropped, as evidenced by a 7% decrease in inpatient days and a 4% decrease in discharges from the baseline to Year 3. Decreases in psychiatric acute and medical/surgical acute days accounted for the greatest share of the loss. Occupancy rates and average length of stay also dropped somewhat. These trends are consistent with changing industry practice and the influence of managed care.

- The payor profile for Saint Vincent Hospital inpatient services changed over the study period. The most notable change was the increase of Medicare Managed Care as a payor source, offset somewhat by decreases in fee-for-service Medicare. Though self-pay discharges dropped slightly, Saint Vincent Hospital increased its share of Worcester self-pay discharges, suggesting continued access for uninsured individuals in need of inpatient services.
- Saint Vincent Hospital's percentage of regular Medicaid discharges slowly decreased over the study period, as did its percentage of Medicaid days. This decreasing trend contrasted with the increases in Medicaid days experienced by the other Worcester hospitals and the return of two comparison hospitals to their baseline levels. However, since other indications show Saint Vincent Hospital serving a stable (overall payer mix) or increasing (outpatient visits) share of Medicaid patients, this decrease in Medicaid inpatient share suggests that Saint Vincent Hospital may be serving a healthier group of Medicaid recipients with relatively less need for inpatient care than the other hospitals.
- Trends in discharge disposition of Saint Vincent Hospital inpatient stays experienced over the study period appeared to moderate in Year 3. The most frequent discharge destination, home, declined slowly over the period, while an increasing number of the home discharges received home health services, and discharges to skilled nursing facilities also increased.

Saint Vincent Hospital's involvement in the provision of skilled nursing services may have contributed to this trend.

- Few changes in the demographic mix of Saint Vincent Hospital inpatients occurred over the five-year period, though the percentage of patients ages 45 and over continued to increase. The ethnic distribution of patients held steady.
- Over the five year period, the hospital slowly increased the share of patients served from its secondary service area and slowly decreased the share of the city of Worcester and its primary service area.
- It is difficult to monitor client satisfaction throughout the study period, because the survey and method of administration changed. However, more measures of hospital care showed declining levels of satisfaction than held steady or increased. Rooms, meals, and employee communication/team work were aspects of care showing the lowest ratings. The lack of consumer satisfaction information in some areas important to vulnerable populations is a limitation of this report.
- Psychiatric inpatient services eroded considerably from baseline averages, perhaps due to dramatic changes in the market for psychiatric inpatient services. Psychiatric days and discharges dropped to approximately three-quarters of baseline levels, despite the department's active pursuit of managed care contracts. In addition, while a new geriatric psychiatry unit and a partial hospitalization program were added, the geriatric unit was discontinued during Year 3.
- The largest reduction in psychiatric discharges was experienced by patients residing in the City of Worcester, resulting in an increased percentage of discharges of people residing farther from the City. The unit continued to experience large increases in Medicare Managed Care and Managed Care, offset by a decline in regular Medicare psychiatric discharges. The department did not meet its access standards as consistently as other hospital departments that reported to us.
- Obstetric discharges also continued a gradual decrease, amounting to 11% from the baseline average, but payor mix, client residence and demographics changed minimally. There was some increase in non-Caucasian patients, with obstetric discharges for Asian women more than doubling since the baseline-reporting year. The measures associated with good obstetric practice changed slightly but did not show a clear trend. They remained better than the state average.

## **2. Outpatient Services**

The provision of outpatient services showed a slow increase from baseline levels. The number of Medicaid outpatient visits showed a somewhat greater rate of increase from the baseline thereby increasing its share.

Clinic/ambulatory services increased steadily from the baseline, emergency

visits were stable, and ambulatory surgery increased considerably in Years 1 and 2, but fell to baseline level in Year 3. Saint Vincent Hospital increasingly served outpatients residing outside of the City of Worcester and its primary service area, but the racial and language distribution of its outpatient clientele were quite stable.

- Apparent errors in reporting payors for Medicare and Managed Care clinic services make it difficult to compare the payor mix in Years 2 and 3 to that in earlier years. However, it is clear that Medicaid visits increased from the baseline. Saint Vincent Hospital's increase was similar to the trend experienced by UMass Memorial. The other comparison hospitals experienced slight decreases or stable Medicaid share.
- Self-pay visits have decreased each year.<sup>1</sup> While this is consistent with expanded Medicaid eligibility and a strong economy, the difference was larger than the increase in Medicaid (but not larger than Managed Care, which includes an unknown number of Medicaid enrollees in managed care plans). However, a number of indications suggest that uninsured clients continue to be well served by Saint Vincent Hospital. Community informants praised the hospital's service to those without insurance and their effectiveness in assisting them to enroll in insurance plans for which they are eligible. This is consistent with the description of the activities of the ambulatory clinic as described by its administrator, the expansion in the number of free care prescriptions, and increases in the number of Medicaid recipients choosing the Ambulatory Clinic as their PCP.
- Overall emergency visits remained quite stable over the four-year period, as did the demographics of emergency clientele. However, payor mix showed some significant changes. Managed care visits increased and self-pay visits decreased though not as precipitously as self-pay ambulatory visits, suggesting that uninsured patients can still get served when they need urgent care. In Year 2, Medicaid emergency visits dropped to the level of the first baseline year, but remained above baseline levels in Years 1 and 3. This contrasted with the increasing trend experienced by the other Worcester hospital. Given the information from internal and external informants, the decrease in self-pay emergency visits is most likely due to desirable changes such as the hospital's policy of sending emergency department patients to the ambulatory clinics for follow-up visits, and increased levels of insurance coverage among its clientele.
- Our overall conclusion is that the decline in service to self-insured is probably due to the hospital's efforts to enroll free care clients into Medicaid. It is likely that many of those who enroll in Medicaid select a Medicaid HMO – consistent with the doubling of Fallon Health Plan's Medicaid enrollment over the analysis period - and are no longer identified to the hospital as Medicaid enrollees, providing a possible

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<sup>1</sup> These data were revised in the Year 2 report and carried forward to reflect audit corrections to Saint Vincent Hospital's Fiscal Year 1996 and Fiscal Year FY 1997 cost reports.



explanation of why Medicaid did not increase as much as self-pay dropped.

### **3. Selected Specialties**

Saint Vincent Hospital invested in the enhancement and expansion of its Cardiology Department during Years 1 through 3, with the addition of a comprehensive outpatient cardiac rehabilitation program, a new electrophysiology lab, staff training and quality improvement initiatives. Cardiology discharges increased by almost 8% from the baseline period and represent 23% of total discharges at Saint Vincent Hospital.

Despite the Neurology Department's change from an admitting department to a consulting service in the first post-transfer year, the number of neurology discharges rebounded to baseline levels by Year 2 and increased again in Year 3.

### **4. Services of Importance to Vulnerable Populations**

Over the three-year assessment period, Saint Vincent Hospital considerably expanded a number of services that are of special importance to vulnerable populations from their baseline levels.

- Over the three years, twelve new elderly outreach sites were added, and the number of contacts increased by more than 4,000 to reach a Year 2 high. Contacts dropped in Year 3, but remained above the average in the baseline.
- Interpreter service encounters continued a general pattern of increase in all five years of the period. The most significant change was a large increase in services for Vietnamese speakers. However, both community informants and the Interpreters' Department acknowledged problems in Year 3 in effectively coordinating interpretation services. The Department had taken a number of steps to address these problems.
- The free pharmacy program exceeded baseline levels in two of the three analysis years. The department reduced use of free samples and increased prescriptions provided through free care.

However, other services of significance to vulnerable populations decreased from Year 1 levels, declining in at least some dimensions to levels below those provided during the baseline.

- Staffing in the outpatient substance abuse program was reduced, and this was reflected in the termination of the day treatment program, a decrease in units of service provided and the number of clients served by the department, and a decrease in service to uninsured and publicly insured clients. In Year 3, service provision fell below the baseline period.

However, the hospital's subsidy for these services remained above baseline levels. Community informants reported that other community agencies did not hear of these changes with sufficient prior notice.

- The Hospital reduced the number of staff and hours worked in the social service area in every year after the baseline period, eroding capacity to assist vulnerable clients. However, these cuts may have been partially offset; one department reported improved access to social workers through better coordination.

## **5. Provision of Free Care and Community Benefits**

Saint Vincent Hospital's provision of free care and community benefits changed markedly after Year 1. Most notably, gross free care dropped considerably, the number of free-care accounts dropped by two-thirds, and the hospital became a net receiver from the uncompensated care pool. However, Saint Vincent Hospital was not alone; almost all other comparison hospitals exhibited decreases in gross free care, likely due to changes in Medicaid eligibility and the financing of the free care pool. In contrast, the value of write-offs of bad debt as a percent of net and gross patient service revenue was higher than in previous years, as was the number of emergency bad debt accounts written off, suggesting that uninsured individuals continued to receive emergency services.

In all three years of the assessment period, Saint Vincent Hospital's discretionary contributions (contributions other than Community Linkage commitments) to community-based programs were higher level than the baseline average, reaching a high of \$471,000 in Year 3. There was a shift in donations from provision of subsidized services to general donations to community organizations for purposes not necessarily related to health care. In Fiscal Year 1999, the hospital had almost completed disbursement of its combined commitment for community linkage and building and renovations to the City of Worcester of \$6.8 million. A Community Benefit subcommittee, responsible for guiding the hospital's contributions, one component of its community benefit plan, was slow to be established and was still in its formative stages during Year 3.

The hospital's contributions to research significantly exceeded baseline levels in Years 1 and 2, but dropped by over 50% to a level below baseline levels in Year 3. The residency program was similar in size throughout the assessment period, slightly exceeding baseline levels in Years 1 and 2, and dropping slightly below them in Year 3. As a for-profit organization, the hospital became subject to certain taxes totaling more than \$33 million over the three-year period. The city of Worcester received almost \$1.5 million in real estate taxes. The hospital paid \$4.7 million in unemployment taxes and almost \$27 million in federal taxes in Years 1 through 3.

## D. CONCLUSION

This assessment process has provided an independent analysis of certain aspects of the provision of care by Saint Vincent Hospital in its first three years as a for-profit organization. This analysis has limitations; it could not feasibly encompass all hospital services nor collect all data necessary to reach definitive conclusions on all topics analyzed. In addition, it does not account for the effect of significant events that have occurred since the assessment period, and which may significantly affect the hospital's overall provision of service, and its service of vulnerable client groups.

However, this report synthesizes information from multiple sources on the hospital's overall provision of services and on its provision of services of special importance to Worcester's vulnerable populations, as identified by the Office of the Attorney General and the Central Massachusetts Community Health Coalition. The available information has been sufficient to identify areas of expansion and improvement, services that have been maintained, and a few areas where service provision has been eroded or cut back. Data on comparison hospitals has been helpful in identifying changes likely due to industry-wide trends.

Overall, Saint Vincent Hospital continued to provide and enhance its services to Worcester County during its first three years as a for-profit organization. Areas of strength and improvement in comparison to baseline operations include:

- Achieving a higher level of accreditation
- Increase in clinical staff who are African-American
- Expanded cardiology services with high compliance with access standards
- New nursing level beds
- Increase in overall outpatient services
- Increases in provision of interpretation
- Increases in levels of elderly outreach and effectiveness in assisting those who are uninsured to access coverage
- Increases in value of discretionary community benefit donations
- Plans to exceed Community Linkage commitments
- Slight staffing expansion in ambulatory clinic and a well coordinated process for assisting uninsured clients to apply for Medicaid and free care
- Payment of taxes not assessed on non-profit organizations.

Other aspects of hospital operations were maintained at similar levels to the baseline period or changed in ways similar to changes at comparison hospitals:

- Overall inpatient services declined somewhat, but did so in proportion to industry trends for more use of ambulatory surgery and shorter stays
- Obstetric services declined somewhat, but increased the already significant level of service to ethnic minorities
- Maintenance of overall emergency visit volume and access for uninsured clients, often however, with long wait times

- The Residency program continued at a similar level throughout the three year period
- Research that exceeded baseline levels for two out of the three years, but was significantly reduced in the third year.

Aspects of hospital operations that did not maintain baseline levels include:

- Psychiatric inpatient services remained substantially below baseline levels throughout the period, despite attempts to address changes in the psychiatric market and add new services
- Substance abuse treatment services were significantly cut to below baseline levels in the third assessment year.
- Social services staff were cut throughout the period.
- Reduction in Hispanic and Asian clinical staff
- More reductions in client satisfaction with hospital performance than increases.

The hospital's provision of free care and service to Medicaid recipients were more difficult to interpret. However, information from a number of sources leads us to conclude that declines in gross free care were shared by comparison hospitals and were likely due to changes in Medicaid eligibility, the financing of the free care pool, and the hospital's efforts to assist uninsured individuals to enroll in Medicaid or other coverage. Cost reports show that Saint Vincent Hospital Medicaid inpatient share declined somewhat while Medicaid outpatient share increased and Medicaid emergency share remained constant. Several other hospitals showed Medicaid increases for all these services. Our interpretation is that Saint Vincent Hospital continued to serve Medicaid recipients at a similar level as in the baseline, but serves a healthier mix of Medicaid recipients than it did in the baseline and than those hospitals which showed overall increases in Medicaid share. While we believe that this is the most likely explanation of this pattern of Medicaid service provision, other explanations are possible and we do not have sufficient information to definitively determine the cause.

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**I. INTRODUCTION**

## I. INTRODUCTION

This is the third final installment in a series of four reports that will compare the provision of health services for general and vulnerable populations by Saint Vincent Hospital, LLC in Worcester Massachusetts over a five-year period. In 1996, the Saint Vincent Hospital, then part of Fallon Healthcare System, was acquired by OrNda HealthCorp, which subsequently was acquired by Tenet HealthSystem. Tenet is a national, for-profit hospital management company with over 130 facilities nationwide. The Massachusetts Office of the Attorney General, Public Charities Division, as a part of its approval of the proposed sale of a non-profit organization to a for-profit organization, set several conditions for the purchase. One such condition was that the hospital fund the retention of an independent consultant to assess the level of access and community benefits available to area residents after the sale of the hospital. The Attorney General, in consultation with Saint Vincent Hospital and members of the Central Massachusetts Community Health Coalition, a Worcester based health care advocacy group, selected Dougherty Management Associates, Inc. (DMA) to serve as the independent analyst.

DMA is charged with responsibility for monitoring and reporting as a matter of public record, the community health care and access afforded by Saint Vincent Hospital before and after its sale. The first, or Baseline, report, issued in September 1998, reported on a two-year baseline period, the final two years of the Hospital's operation as a non-profit facility. The second report (the Year 1 report), issued September 2, 1999, presented an analysis of the hospital's operation during the period October 1996 through September 1997, the hospital's first year as a for-profit organization. This third report (the Year 2 report), issued December 4, 2000, provides a detailed description of hospital functions in its second year as a for-profit organization, covering the period October 1997 through September 1998. This final report covers the results of the hospital's third year of for-profit operations and summarizes the entire three year assessment period. However, readers may want to refer to the Baseline Report for a more complete description of the staffing, policies, and organization of the hospital as they existed during the baseline period.

The report uses a variety of techniques and approaches to assess whether Saint Vincent Hospital fulfilled its commitment to maintain provision of free care and agreements for provision of community benefits. This report compares quantitative and survey information about hospital activities during the baseline period of October 1995 through September 1996 (the hospital's fiscal years 1995 and 1996) to the two years following the sale, October 1996 through September 1998, identifying any significant changes between the two periods. The data are presented in table and chart form as much as possible in order to provide a visual basis for comparison.

Chapter II of this report notes any revisions to the methodology and data that were necessary in Year 3. See Appendix A for a full description of the methodology used in the Baseline and as consistently as possible thereafter. Chapter III provides a description of significant changes that occurred in the Worcester health care market during the period,

since they may very well influence or explain some of the changes that the hospital experienced. Chapter IV contains our analysis of the hospital during Year 23 and the entire three-year assessment period, including an analysis of services provided at the hospital, measures of utilization, and an examination of services of special importance to certain vulnerable populations. Chapter V summarizes Saint Vincent Hospital's activities related to free care and community benefits. The final chapter, VI, summarizes findings from the comparison of Years 1, and 2, and 3 to the Baseline period.

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**II. METHODOLOGY**



## **II. METHODOLOGY**

Chapter II of the Baseline Report is included as Appendix A to this report. It contains a full description of the methodology used in all reports, including the period of analysis, sources of data, criteria for selection of comparison hospitals, criteria for selecting indicators of access and quality, and the process used to collect data.

The methods used in the baseline were repeated as consistently as possible, using the same data sources in order to provide reliable comparisons between Saint Vincent Hospital's operation as a for-profit entity and its final two years as a non-profit organization. In this chapter, we identify any changes or additions made in the methodology and the reason why the same method could not be followed in the Year 3.

### **A. PERIOD OF ANALYSIS**

Though the hospital changed its fiscal year to match the fiscal year of its parent corporation upon its sale, this analysis continues to use the October through September period as its period of analysis. We have been able to obtain data for October through September for our report because Massachusetts requires hospitals to submit utilization and cost reports for this period and the hospital can easily provide much of the additional data for this period. The advantage of maintaining this period for our analysis and reporting is that it makes the periods directly comparable.

Several significant events, such as the hospital's move to its new facility, occurred shortly after the end of the assessment period, and community respondents frequently commented on these landmark events. We have addressed these events briefly to help readers relate this project to the timing of these events, and because they were announced during the assessment period or continued important trends that began during the assessment period. However, our summaries and conclusions relate to the three-year assessment period ending September 30, 1999.

Data collection for Year 3 began in January of 2000 with requests to Saint Vincent Hospital, Massachusetts State agencies, and other data sources previously mentioned, such as the Massachusetts Health Data Consortium. Our analysis of the hospital's RSC 430, our core data source, identified a number of apparent discrepancies requiring clarification, and the hospital indicated that the FY99 RSC 403 report had been audited, and would be revised. Because we had received revisions of FY 1998 data that changed some conclusions, we elected to wait for final FY 1999 figures. Unfortunately for the progress of this project, a number of other financial reporting obligations of Saint Vincent Hospital took priority including the submission of the FY 2000 RSC 403 report, responding to Division of Health Care Finance and Policy questions about the FY 2000 report, and ongoing reporting

responsibilities. For these reasons, the revised data were not available to us until early in 2002. This has delayed the release of the final report.

Wherever possible during the collection process, the analysis confirmed and verified comparable data from different sources to ensure accuracy.<sup>2</sup> Interviews addressing the Year 3 period were conducted with hospital personnel early in 2000, shortly after the end of the Year 3 period of analysis. In general, DMA requested verification and/or documentation of information collected during interviews.

## **B. DATA SOURCES**

This report incorporates data from the public domain, data gathered by Saint Vincent Hospital, LLC, and data gathered from members of the community. Appendix A briefly describes each of these sources of data. In early 2000, we repeated a process first conducted early during Year 2 to collect data from community informants. The methods we used are described below, as are the few changes in sources of data that we have made from what we described in the Baseline Report. We have made every attempt to use the same sources, since consistency in methodology is paramount for an accurate comparison between years.

### **6. Community Survey**

DMA conducted telephone interviews with a sample of about 20 agencies that serve vulnerable populations in the Worcester area. These organizations included Community Health Centers, agencies that provide services to elders, and agencies that serve people with mental health or physical disabilities. This survey was conducted during August and early September of 1998, and was repeated between March and May of 2000. The survey addressed perceptions of access to health services at Saint Vincent Hospital in a number of areas, including mental health, substance abuse, services for people with disabilities, and others. The original interview tool is included as Appendix C to this report.

### **7. Consumer Focus Groups**

In October of 1998 and again in November of 1999, DMA conducted a focus group with interpreters. Four to five medical interpreters participated in the focus groups and discussed their observations of services for non-English speaking clients. Also in October 1998, seven individuals with physical disabilities met as a focus group to discuss their own experiences at the hospital. The 1998 groups were held at the Worcester Center for Independent Living and the 1999 group was held at Language Link. The original guide for focus groups is included as Appendix D to this report.

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<sup>2</sup> Data sources are listed on all exhibits in order to explain any discrepancies that may result from utilizing various sources.

In November of 1999, DMA contacted the same organizations and individuals that had recruited participants for a focus group of people with disabilities held during 1998. However, we did not identify any disabled individuals who had used Saint Vincent Hospital services and were interested in participating in an interview or a focus group. However, organizations serving disabled individuals were included in the community survey described above.

To reach Spanish-speaking consumers of Saint Vincent Hospital services, the community interview tool was adapted for individual consumers, translated into Spanish and reviewed by a medical interpreter for accuracy. The hospital sought consent to be interviewed from several Spanish-speaking clients, and Pernet Family Health Services sought interviews with its clients who had recently used Saint Vincent Hospital. In December of 1998 seven and again in 1999 six structured phone interviews were conducted with Spanish speaking consumers. Approximately half the interviews were conducted over the phone by medical interpreters, and the remainder were conducted in person by bi-lingual outreach staff of the Pernet Family Health Services.

DMA was unable to convene a sufficient number of individuals and family members of patients who use psychiatric services to hold focus groups, though invitations were issued by the Club House, a consumer operated recreation and rehabilitation program serving Worcester, and to two consumer/family member groups in both years. Instead, in late 1998, a consultant interviewed five individuals with mental illness, three family members, and one mental health worker. Individuals with mental illness were interviewed in person by a DMA consultant. Family members were interviewed in person and over the telephone. In August of 2000, a consultant interviewed a representative from the case management unit of the Department of Mental Health Worcester Area Office, who summarized the opinions and concerns of DMH case management clients who had used Saint Vincent Hospital psychiatric services. A representative of the Club House also was interviewed. In addition, we expanded the number of community informants from organizations involved with mental health in the community survey described above.

## **8. Source of Inpatient Admissions**

During Year 2, DMA discontinued analysis of the admission sources of the three Worcester hospitals. In investigating apparent changes in admissions profiles, we noted the potential for overlap and inconsistency in the designation of admission source. For example, a transfer from a Skilled Nursing Facility could be reported as a SNF transfer, or could be reported as a physician referral or a transfer from an outside emergency department, depending on the route the person took to reach the hospital. It appears likely that the three Worcester hospitals do not use these categories consistently. In addition, Saint Vincent Hospital showed such dramatic changes in its admission profile between 1997 and 1998 that we believe that either reporting changes or errors were involved

since the rest of our analysis showed stability or much smaller degrees of change in hospital operations. Because of these inconsistencies, we do not believe that we can accurately analyze trends in admissions profiles, and have therefore not reported on these data in Chapter 3.

## **9. Consumer Satisfaction**

During Year 2, Saint Vincent Hospital discontinued use of the Press, Ganey Consumer Satisfaction Survey it had been using during the baseline and Year 1. We note that the final Press, Ganey report for Year 2 is not the same quarter reported for previous years. Therefore, differences may be due in part to seasonality.

We reviewed other sources of satisfaction data used by the hospital, including the Picker Institute survey, and a satisfaction survey used throughout the Tenet hospital system. We determined that the Tenet survey offered some similar measures to those used by Press, Ganey Associates, allowing us to compare overall satisfaction with inpatient services, though Tenet measures were not made available for departments we had been reporting on, psychiatry, obstetrics, and emergency. Therefore, in Years 2 and 3 we introduced a new section describing overall inpatient satisfaction and including data not previously reported for the baseline and Year 1 periods, and discontinued reports on satisfaction rates with obstetric and psychiatric services because comparable data were no longer available.

The methodology of the Tenet survey differs from that of Press, Ganey. While Press, Ganey used a mail survey sent to every discharged patient; the Tenet survey was conducted by telephone by a contracted research firm, Field Research Corporation. A minimum of 100 inpatients were randomly selected from a list of recently discharged patients provided by the hospital to be interviewed each quarter. Patients who received psychiatric services, patients living outside the hospital's local service area and relatives of deceased patients were excluded from the sample. The experiences of children under 18 were assessed by interview with their parents. Up to six calling attempts were made on different days and at different times to reach each subject selected in the sample. Interviewers are trained and monitored and no more than 10% of the interviews for a specific hospital were conducted by any one interviewer. Tenet reports a response rate of 50% to 60%, with 90% of subjects successfully contacted agreeing to participate. This compares to a response rate to Press, Ganey Associates mail surveys ranging from 8% to 25% for the departments we analyzed. Therefore, it is likely that the Tenet phone survey will produce results that are more representative than the mail survey because responses are more likely to be received from highly motivated as well as less motivated patients.

The lack of comparability of consumer satisfaction data sources will limit the effectiveness of our ability to analyze trends in satisfaction. A particular

limitation will be the lack of satisfaction data for obstetric and psychiatric services since these services are often utilized by the vulnerable populations that are a focus of our work. We have attempted to use other sources of data, such as results of consumer focus groups to monitor these issues.

## **10. Payor Mix of Ambulatory/Clinic Services**

As DMA completed its second year report, Saint Vincent Hospital determined that the data we used for clinic/ambulatory visits for Fiscal Year 1997 in the Year 1 report did not reflect a correction made subsequent to the Division of Health Care Finance and Policy's review of the RSC-403 report for that year. It was, therefore, necessary to adjust Fiscal Year 1996 data to make them consistent with Fiscal Year 1997 and Fiscal Year 1998 data. We did not have data necessary to correct Fiscal Year 1995 data, so we dropped that year from our analysis. These changes were significant, and all the tables and charts they affected in the Year 2 and Year 3 report note that the data have been revised.

### **C. ASSESSING THE IMPACT OF THE EXTERNAL ENVIRONMENT**

Some changes in Saint Vincent Hospital service provision that occurred between the baseline and follow-up may be due to changes in the external environment rather than the impact of the sale. In order to identify significant trends likely to affect hospital operations, DMA reviewed relevant information and data on trends in healthcare. Those of most significance to Massachusetts are summarized in Chapter III. In order to provide a further basis for identifying trends affecting hospitals generally, DMA also identified other Massachusetts hospitals that had experienced trends similar to Saint Vincent Hospital's over a three-year period. The method for selecting these comparison hospitals is described in Appendix A.

Hospitals selected for comparison include the two hospitals that are located in Worcester and share Saint Vincent Hospital's primary service area in Worcester County. These hospitals were Memorial Healthcare, Inc. (previously known as the Medical Center of Central Massachusetts) and University of Massachusetts Medical Center, which merged during Year 2 to become UMass Memorial Healthcare. In Year 3, U Mass Memorial began reporting as a single entity. To make previous years' data comparable, we added together the figures reported by U Mass and Memorial Healthcare.

Five other hospitals were chosen because they experienced similar trends over a three-year period. Milford-Whitinsville Hospital in Milford was selected because it is also located in Saint Vincent Hospital's service area and was found to have similar trends. Holyoke Hospital in Holyoke, Leominster-Health Alliance Hospital in Leominster, Mount Auburn Hospital in Cambridge, and Saint Elizabeth Hospital in Brighton were chosen because they demonstrated similar levels and directions of change to Saint Vincent Hospital's. One hospital had to be dropped from the comparison group. During Fiscal Year 1997, Leominster Health Alliance changed

its reporting practices to reflect its merger with Burbank Hospital. For this reason, Fiscal Year 1997 data from these hospitals are not directly comparable to data from Fiscal Year 1996 and Fiscal Year 1995, and did not accurately indicate year-to-year changes.

This report notes when changes at Saint Vincent Hospital are consistent with the expected effects of significant industry trends. However, DMA has not attempted to explain the reasons for all changes experienced by the hospital.

## **D. CRITERIA FOR SELECTING INDICATORS OF ACCESS**

### **1. List of Indicators**

DMA developed a comprehensive set of indicators that we could use at baseline and in subsequent years to measure and track changes in access to health care and community benefits at Saint Vincent Hospital. A list of the indicators used in the Baseline Report is described in Appendix A and the indicators drawn from our community data collection process are described in Chapter II of the Year 1 Report.

In Year 2, we added an indicator to provide a rough comparison of the hospital's non-physician staffing levels to its provision of services. With the hospital's announcement of staff cuts, we wished to better understand which categories of hospital service were affected by the staffing changes, and to determine the degree to which they were likely to constitute a significant change in methods of service provision. We found relevant data in one of our major data sources, the RSC-403 Cost Report. We compare the full-time equivalent staff (other than physicians) allocated as direct costs to routine inpatient, ancillary, and routine outpatient services to total units of inpatient and outpatient services. We use total inpatient days as the comparison for inpatient and ancillary services, and total outpatient visits as the comparison for outpatient services. We calculate a ratio between services and staffing that indicates an overall average of the number of non-physician FTEs per 1,000 service units. This allows us to look at the levels of hospital staffing over time compared to levels of service. If inpatient staffing is reduced, but is in proportion to a reduction in bed days, the ratio of FTEs per 1,000 bed days will remain constant. However, if staffing is reduced to a greater degree than a reduction in bed days, the ratio of FTEs per 1,000 bed days will fall. We recognize that this is a gross measure that does not capture the reason for changes in relative levels of staffing. For example, it does not account for case mix changes that might make a lower level of staffing appropriate, nor does it account for higher staff productivity that might also allow for a lower level of staffing. Nevertheless, this indicator allows us to better identify the changes in staffing by service category, and to look at these changes in the context of the level of service provision. We have provided data on this indicator for the full analysis period.

## **2. Rationale for Selecting These Indicators and Discussion of Limitations**

DMA conducted interviews with community respondents, analyzed public health data on Worcester City and County, and the literature about health care for vulnerable populations in order to identify the following vulnerable populations of special importance in the Worcester community:

- Non-English speakers
- People with mental illness
- People with substance abuse problems
- Elders
- People with physical disabilities

Please note that some indicators used in this report can be measured more reliably than others. Most notably, indicators of race, ethnicity, and language are sensitive items not always completed by patients. If the patient does not complete the field for race, ethnicity, or language, the admitting clerk then completes this information based on place of birth, visual determination, or degree of English fluency. Because of the importance of these data, we have included them in our analysis. However, given reliability and validity issues in how these data are recorded, we recommend caution when comparing these data to demographic information from other sources.

This project relies upon data produced by Saint Vincent Hospital and the comparison hospitals. The most significant source of such data for this report is the RSC 403 report, which is certified by senior hospital officials and reviewed by the Massachusetts Division of Health Care Finance and Policy for internal consistency. While a report of this complexity may have errors, the scope of this project did not allow for further verification or audit of these data. We have assumed that all data accurately represents hospital operations.

This assessment does not include every possible indicator of access, and will not provide information about every type of hospital service of importance to the Worcester community. Nonetheless, DMA has provided a thorough report on significant aspects of Saint Vincent Hospital's overall service provision, and provision of services to significant vulnerable populations in the Worcester community. This information will allow various constituencies to monitor Saint Vincent Hospital's maintenance of care for the poor and uninsured.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**III. OVERVIEW OF THE  
WORCESTER HEALTH CARE MARKET**



### **III. OVERVIEW OF THE WORCESTER HEALTH CARE MARKET**

This chapter provides a detailed analysis of the health care market in which Saint Vincent Hospital operates. We identify changes in Saint Vincent Hospital, in the Worcester health care market, and changes in Medicaid enrollment in that region of the State that occurred during and shortly after the assessment period.

#### **A. SAINT VINCENT HOSPITAL**

See Appendix B for an excerpt from Chapter III of the Baseline Report that contains a full description of the history of Saint Vincent Hospital, LLC, its relationship with Fallon Community Health Plan, a Worcester based health maintenance organization (HMO), its sale, and its commitment to build a new hospital and medical complex, the Worcester Medical Center. During the period covered by the first year report, the hospital was operated by Tenet HealthCare System. Though several top managers had left at the time of the sale, most were replaced by people with a long tenure at Saint Vincent Hospital, providing a considerable degree of continuity in the hospital's senior management after the sale of the hospital. However, in July 1998, late in Year 2, the hospital announced that it would cut 33 staff positions, postpone filling another 30 vacant positions, and fill any other new vacancies on a selective basis. These cuts represented approximately 2.6% of hospital staff. The hospital cited a \$3 million dollar shortfall caused primarily by Medicare cutbacks as the reason for these staff reductions.

In February 1998, the nursing staff of Saint Vincent Hospital voted for union representation. Negotiations with the hospital for a nursing contract began during Year 2, and extended into Year 3, becoming progressively more contentious. During Year 3, nurses filed a number of unsafe labor practice charges regarding staffing levels at Saint Vincent Hospital, and held several public rallies to call attention to their position. At the end of Year 3, the hospital announced further cuts as its laboratory services were consolidated and put out to bid, resulting in a loss of 45 positions. (The remaining laboratory positions would be hired by the new contractor.) At the same time, the hospital announced plans for outsourcing dietary, laundry, and maintenance services as part of a Tenet-wide cost-saving strategy.

#### **B. OVERVIEW OF CHANGES IN THE WORCESTER HEALTH CARE MARKET**

A number of changes have affected the health care market in Worcester, including the Balanced Budget Act, Massachusetts expansions in Medicaid eligibility, changes in the financing of the uncompensated care pool, and the merger of the two other large hospitals serving Worcester and its surrounding towns.

The Balanced Budget Act of 1997 was passed at the end of Year 1, and certain provisions took effect at the beginning of Year 2. The most significant impacts on hospitals are those changes designed to reduce the rate of growth in Medicare

payments over a five-year period. In Year 2 of this study, prospective payments for inpatient services were held to the same rates as the previous year, with no increase granted to adjust for inflation. Other changes that limit reimbursement for Indirect Medical Education, Outpatient Services, Ambulatory Surgery, and Skilled Nursing Facilities (applicable to Saint Vincent Hospital's new Skilled Nursing Unit) took effect in Year 3. As a hospital for which Medicare is a significant payor, and as a teaching hospital, Saint Vincent Hospital has been affected more than hospitals for which Medicare is a smaller payor, or those hospitals that do not have a significant teaching component.

On July 1, 1997, toward the end of the baseline period, the Division of Medical Assistance (Medicaid) began a Health Reform Initiative. This initiative expanded the Medicaid program to include new eligibility groups, such as families with incomes less than 133% of the federal poverty level, and children with family incomes less than 200% of the federal poverty level. In addition, the Children's Medical Security Plan, providing primary and preventive health care for children up to age 18, was opened to nearly all the State's remaining uninsured children. MassHealth coverage was also extended to individuals who had a history of long-term unemployment and a new State-funded program was established to provide prescription coverage to low income elders who were not eligible for MassHealth. The impact of these changes in the Worcester region is described in Section D of this chapter.

At the end of the Year 1 period, Massachusetts made a number of changes in the financing of its uncompensated care pool. The net effect of these changes reduces the charges placed on hospitals in two ways. Charges to third party payors were increased and the two hospitals that provide the largest share of uncompensated care were funded from a separate source, increasing the funds available to other hospitals. For example, there was an increase in federal funds available within the state to reimburse uncompensated care; there was a surcharge on payers, and an intergovernmental transfer of new funds to the Uncompensated Care Pool. As a result of these changes, the number of hospitals in the State that are net receivers from the pool has increased dramatically and the assessments of those that are net contributors have decreased. In addition, the state developed standardized forms for hospitals and health centers to document eligibility for free care pool coverage for their patients. This form incorporated screening for eligibility for other forms of insurance, such as the expanded eligibility categories for Medicaid.

At the end of March 1998 the planned merger between the other two hospitals located in Worcester, University of Massachusetts Medical Center and Memorial Health Care, resulted in an organization called UMass Memorial Health Care. The merger did not result in any loss of beds from the two hospitals or show any drop in utilization during Years 2 and 3. This new organization, UMass Memorial Health Care, is closely affiliated with other hospitals in Worcester County, including Clinton Hospital, Health Alliance hospitals in Fitchburg and Leominster, and Marlborough Hospital. In addition, UMass Memorial has clinical affiliations with

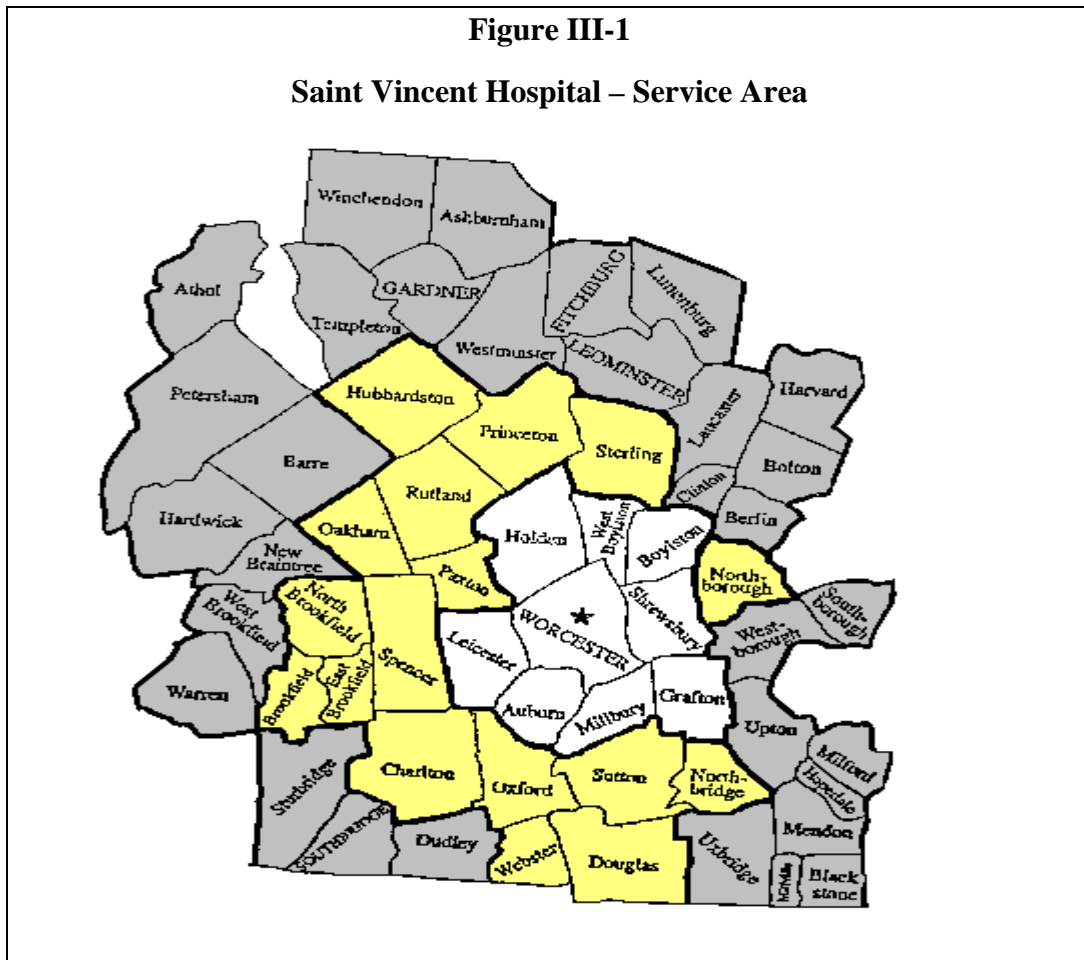
ten other hospitals, some within Worcester County and others in Western Massachusetts.

This merger leaves just two hospital systems in the Worcester region. According to statistics quoted in the *Boston Globe*, the UMass Memorial system controls 54% of the Central Massachusetts hospital admissions, and Saint Vincent Hospital controls a significant share of the remainder. This growing concentration of hospital resources in the Worcester region makes any change initiated by either health care system more important, because there is only one available alternative system of care. As described in Chapter II, these organizations began reporting as a unit in Year 3, affecting our presentation of their data.

### C. OVERVIEW OF THE SERVICE AREA

#### 1. Primary and Secondary Service Areas Description

Section C in Chapter III of the Baseline Report describes the primary and secondary service areas that we defined to aid in the analysis of Saint Vincent Hospital services. The map illustrating these areas appears on the next page. Demographic data for the primary and secondary service areas including population, income, and employment rate, are provided in the Baseline Report. We have been able to update some of the data in this report.



## **2. Recent Trends**

According to estimates of the Massachusetts Institute for Social and Economic Research, the population of Worcester County grew slowly between 1995 and 1998, at slightly more than 1% annually. The city of Worcester's rate of unemployment showed a favorable change, decreasing from 4.3% in 1996 to 3.6% in 1998 and increasing slightly to 3.9% in 1999, according to reports from the Commonwealth of Massachusetts, Division of Employment and Training.

### **D. HEALTH INSURANCE COVERAGE**

Health insurance coverage increased in Massachusetts during the period of this study. According to a 2000 survey of health insurance status by the Massachusetts Division of Health Care Finance and Policy conducted during the summer of 2000, 5.9% of Massachusetts's residents were uninsured, down from 8.1% in 1998 and 11.4% in 1995. Worcester's uninsurance rate also dropped, from 7.2% in 1998 to 6.6% in 2000, but did not drop as much as the statewide rate. The Division attributed the increased insurance coverage to both increased coverage through employers, and increased enrollment in the expanded eligibility categories of Medicaid.

In the Worcester region, membership in Medicaid increased thirty-two percent from June 1997 to a total of over 81,000 enrollees as of September 1999. In Year 3, half of Medicaid recipients, over 40,000 in the Worcester area, were enrolled in the Medicaid Primary Care Clinician Plan and another 11,000 individuals were enrolled in HMOs. Medicaid recipients not enrolled in an HMO or the PCC Plan received Medicaid benefits through senior benefits, CommonHealth, or other programs.

Medicaid enrollment both in the PCC Plan and in HMOs had increased considerably from the baseline period, but the Worcester region's rate of increase was not as high as the statewide rates. However, Fallon Community Health Plan, Saint Vincent Hospital's largest payor, experienced extraordinary growth in Medicaid enrollment. By February 1999, the total Medicaid population enrolled in Fallon accounted for 15,652 members compared to the 1996 figure of 6,020 members.

### **E. PUBLIC HEALTH INDICATORS**

The Baseline Report described a range of public health indicators for the City of Worcester and for Worcester County, some of which we have been able to update. While there were a number of improvements in public health during the analysis period, few positive trends were sustained throughout the period. Two indicators did show sustained improvement.

- The rate of children with elevated blood lead levels per thousand children screened dropped considerably over the five-year analysis period. City levels

dropped from 8.6 in 1995 to 1.4 in 2000. (Massachusetts Department of Public Health, Childhood Lead Poisoning Prevention Program).

- Births to adolescents as a percentage of total births decreased slowly over the five-year period from 14.7% in 1995 to 11.7% in 2000. (MassCHIP CHNA Health Status Indicators Report, MassCHIP, Massachusetts Department of Public Health).
- Age adjusted death rates/100,000 persons for motor vehicle accidents and suicide, showed a net decrease from 1995 to 2000. (MassCHIP CHNA Health Status Indicators Report, MassCHIP, Massachusetts Department of Public Health).

However, other public health indicators were less positive.

- The percent of mothers with adequate prenatal care during pregnancy decreased from 86% in 1995 to a low of 64% in 1997, and improved thereafter to 72% in 2000, but remained below 1995 levels. (MassCHIP CHNA Health Status Indicators Report, MassCHIP, Massachusetts Department of Public Health).
- Infant mortality rates (deaths/1,000 live births) decreased from 8.8 in 1995 to 7.0 per thousand in 1998, but then increased considerably to 9.9 per thousand in 2000. (MassCHIP CHNA Health Status Indicators Report, MassCHIP, Massachusetts Department of Public Health).
- Total death rates (age-adjusted per 100,000 persons) had improved, dropping from 555.5 to 510 between 1995 and 1997, but increased again in 1998 to 542, and then almost doubled to 944.7 in 2000. However, since the number of deaths dropped between 1998 and 1999, this jump in rate is likely due to changes in the population estimates used in the denominator. (MassCHIP CHNA Health Status Indicators Report, MassCHIP, Massachusetts Department of Public Health).
- Similarly, cancer deaths decreased and then increased considerably with the 2000 rate of 208 exceeding the rate of 138 in the beginning of the period, 1995. Lung cancer deaths followed a similar pattern, while breast cancer death rates rose substantially from 1995 to 1998, but fell to 1995 levels by 2000. (MassCHIP CHNA Health Status Indicators Report, MassCHIP, Massachusetts Department of Public Health).
- Homicide rates fell considerably between 1995 and 1998, dropping from 5.4 to 2.4 per thousand, but increased again to 4.2 by 2000.

## **F. WORCESTER INPATIENT SERVICES**

This section describes the overall trends that have occurred in inpatient services for the three hospitals in Worcester: Saint Vincent Hospital, Medical Center of Central Massachusetts, and University of Massachusetts Medical Center. Discharge data

from the two years leading up to the sale of Saint Vincent Hospital and the first and second year after the sale are used for this analysis.

### **1. Trends in Payor Mix**

Medicare remained the largest payor of inpatient hospital services in Worcester in 1998 and 1999 with total fee-for-service and managed care Medicare accounting for about 40% of all discharges, a slight increase from its relatively constant 38% share from 1995 to 1997. HMOs constituted 30% of discharges in both 1998 and 1999, after a period of slow increase. In 1999, Medicaid dropped to 12.6% from the consistent 15% share it held previously. Self-pay discharges dropped for a second year. They represented only 1.6% of all discharges in 1999 and all three hospitals experienced the lowest number of self-pay discharges in the three-year period.

Saint Vincent Hospital's share of total discharges among the three hospitals remained relatively constant from 1995 to 1999 at about 35%. Saint Vincent Hospital held the largest share of self-pay discharges among the three hospitals in Worcester over the whole period, increasing its share from approximately 50% at the beginning of the period, and reaching almost 60% at the end of the period. Its share of Medicaid discharges was a steady 25% for most of the period, but fell to 15% in 1999.

### **2. Trends in Admission Sources**

Inconsistencies in use of admission categories between the Worcester hospitals and between years make it difficult to accurately analyze trends. As discussed in Chapter II, DMA has discontinued analysis of these data.

### **3. Trends in Discharge Disposition**

The majority of people discharged from Medical Center of Central MA, Saint Vincent Hospital and UMass Medical Center, 61.6% in 1999, were discharged to their homes, and an additional 17.8% were discharged to their homes with home health agency services. 1999 saw a slight reversal of the prior years' trend of steadily increasing percentages of those going home with the support of home health services, with a slightly higher percentage going home than in 1998, but slightly fewer receiving home health services. A similar small reversal in trend was also observed in the number of discharges to skilled nursing facilities. Discharges to skilled nursing facilities, including Saint Vincent Hospital's own facility, increased steadily from 2.7% in 1994 to 11.1% in 1998, but slightly decreased in 1999 to 10.2%. While Memorial Healthcare experienced the highest rate of increase, doubling discharges to SNFs between Fiscal Year 1996 and Fiscal Year 1998, all three hospitals experienced a slight decrease in 1999.

#### **4. Trends in Hospital Length of Stay**

The overall average length of stay for all three hospitals in Worcester decreased each year from an average of 5.2 days in 1996 to 4.6 days in 1999, continuing the trend that existed from 1994.

#### **G. SUMMARY**

In its third year of for-profit operations, Saint Vincent Hospital maintained considerable continuity in its senior management staff and in the medical management of the departments upon which this assessment focuses. It maintained the staffing levels reached by lay-offs and frozen positions at the end of Year 2 for most of Year 3. At the end of that period, it outsourced laboratory services and announced plans for outsourcing other hospital support functions. Negotiations with the nursing union, begun during Year 2 became increasingly contentious during Year 3.

Other significant changes in the Worcester health care market included the merger of UMass Medical Center with Memorial Health Care. Meanwhile, changes in the method of financing the uncompensated care pool, resulted in more net receivers to the pool than prior to the reform. In addition, there was considerable expansion of enrollment of Worcester area Medicaid recipients in HMOs and the PCC Plan.

Inpatient payor mix in the Worcester area changed little over most of the period, though the HMO share grew somewhat and the self-pay share declined to a six year low. Saint Vincent Hospital's position as an important provider for self-pay discharges increased over the analysis period. Always a relatively less important provider for Medicaid recipients, Saint Vincent Hospital's share of Medicaid dropped in Year 3. However, Saint Vincent Hospital may very well serve many of Fallon's new MassHealth (Medicaid) enrollees needing hospital services, though these individuals are not identified as MassHealth members.

In FY1999, patterns of discharge in the Worcester area show a possible reversal of the increasing trend for discharge to nursing facilities occurring during the prior 4 years. Memorial Healthcare had experienced this trend most dramatically. Consistent with the influence of managed care, lengths of stay continued to slowly decrease.

Public health indicators show improvements in childbirth outcomes, but showed a number of signs of worsening adult health as well as lack of pre-natal care.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**IV. SAINT VINCENT HOSPITAL SERVICES**



## IV. SAINT VINCENT HOSPITAL SERVICES

### E. OVERVIEW

#### 1. Service Comprehensiveness

The following tables, Table IV-1, *Saint Vincent Hospital Inpatient Scope of Services*, and Table IV-2, *Saint Vincent Hospital Outpatient and Ancillary Services*, compare the services provided by Saint Vincent Hospital during the baseline years with those provided during the three years after the sale of the hospital. Changes between the baseline years and the follow-up period include the addition of a skilled nursing unit and an IV infusion service in Year 1 and the addition of a Geriatric Psychiatry Inpatient Unit, Day Psychiatry Programs for elders and adults (these services are not separately identified on the table below), and a Cardiac Rehabilitation Program in Year 2. However, 1½ acute medical/surgical units were eliminated between the baseline period and Year 2 of the assessment period. The Geriatric Psychiatry unit was eliminated during Year 3.

<b>Table IV-1</b>								
<b>Saint Vincent Hospital Inpatient Scope of Services</b>								
Inpatient Service Type	Fiscal Year 1995-1996		Fiscal Year FY 1997		Fiscal Year FY 1998		Fiscal Year FY 1999	
	Service Offered	No. of Units	Service Offered	No. of Units	Service Offered	No. of Units	Service Offered	No. of Units
Medical/Surgical Acute	✓	8.5	✓	8	✓	7	✓	7
Pediatric Acute	✓	1	✓	1	✓	1	✓	1
Psychiatric Acute	✓	1	✓	1	✓	1	✓	1
Obstetrical Acute	✓	1	✓	1	✓	1	✓	1
Newborn Nursery	✓	1	✓	1	✓	1*	✓	1*
Medical Surgical ICU	✓	2	✓	2	✓	2	✓	2
Coronary ICU	✓	1	✓	1	✓	1	✓	1
Skilled Nursing			✓	1	✓	1	✓	1

\* Licensed for two levels of nursery service.  
Source: Saint Vincent Hospital Finance Department

**Table IV-2**

**Saint Vincent Hospital Outpatient and Ancillary Services**

<b>Type of Services</b>	<b>Fiscal Year 1995</b>	<b>Fiscal Year 1996</b>	<b>Fiscal Year FY 1997</b>	<b>Fiscal Year FY 1998</b>	<b>Fiscal Year FY 1999</b>
Pre and post-natal Clinic	✓	✓	✓	✓	✓
New Surgical Clinic	✓	✓	✓	✓	✓
Urology Clinic	✓	✓	✓	✓	✓
Cardiac Clinic	✓	✓	✓	✓	✓
Gynecology Clinic	✓	✓	✓	✓	✓
Podiatry Clinic	✓	✓	✓	✓	✓
Nutrition Clinic	✓	✓	✓	✓	✓
Pain Clinic	✓	✓	✓	✓	✓
Diabetes Clinic	✓	✓	✓	✓	✓
Medical Clinic	✓	✓	✓	✓	✓
Infectious Disease Clinic	✓	✓	✓	✓	✓
Same Day Surgery	✓	✓	✓	✓	✓
Chemistry	✓	✓	✓	✓	✓
Pharmacy	✓	✓	✓	✓	✓
Pulmonary Lab	✓	✓	✓	✓	✓
Cat Scan	✓	✓	✓	✓	✓
Operating Room	✓	✓	✓	✓	✓
Respiratory Care Services	✓	✓	✓	✓	✓
Radiology	✓	✓	✓	✓	✓
Gastroenterology	✓	✓	✓	✓	✓
Medical Oncology	✓	✓	✓	✓	✓
Emergency Department	✓	✓	✓	✓	✓
Delivery Room	✓	✓	✓	✓	✓
Vascular Laboratory	✓	✓	✓	✓	✓
Cardiology	✓	✓	✓	✓	✓
EEG	✓	✓	✓	✓	✓
Observation		✓	✓	✓	✓
Fracture Room	✓	✓	✓	✓	✓
Rehabilitation (PT, OT, ST)	✓	✓	✓	✓	✓
Labor and Delivery	✓	✓	✓	✓	✓
Laboratory	✓	✓	✓	✓	✓
Electrocardiology	✓	✓	✓	✓	✓
Cardiac Cath. Laboratory	✓	✓	✓	✓	✓
Radiology	✓	✓	✓	✓	✓
Nuclear Medicine	✓	✓	✓	✓	✓
Respiratory Therapy	✓	✓	✓	✓	✓
Physical Therapy	✓	✓	✓	✓	✓
Occupational Therapy	✓	✓	✓	✓	✓
Speech/Language Therapy	✓	✓	✓	✓	✓
Renal Dialysis	✓	✓	✓	✓	✓
IV Infusion			✓	✓	✓
Cardiac Rehabilitation				✓	✓

*Source: Saint Vincent Hospital Finance Department*

## 2. Payor Mix

Overall hospital payor mix, measured by calculating revenue from a particular payor source as a percentage of gross patient service revenue (GPSR), provides an overview not only of the hospital's revenue sources but also of the hospital's patient mix. As illustrated in Figure IV-1, *Saint Vincent Hospital Overall Payor Mix*, payor mix did not change substantially between Years 2 and 3, and did not show dramatic changes over the five-year period. The two largest payment sources, Medicare and Managed Care, represented between 83% and 86% of gross patient service revenue over the five years period. The largest single change in the analysis period was the almost 4% increase in the share of managed care payors occurring between the baseline and Year 3. The remaining payors generally experienced small decreases in their percentages of gross patient service revenue over the period. However, the 1% to 2% drop in self-pay share from baseline levels constituted approximately a 1/3 drop. Medicaid experienced an increase in its share of revenues in Year 1 as it rose to a high of 5.8%, but then fell back to baseline levels.

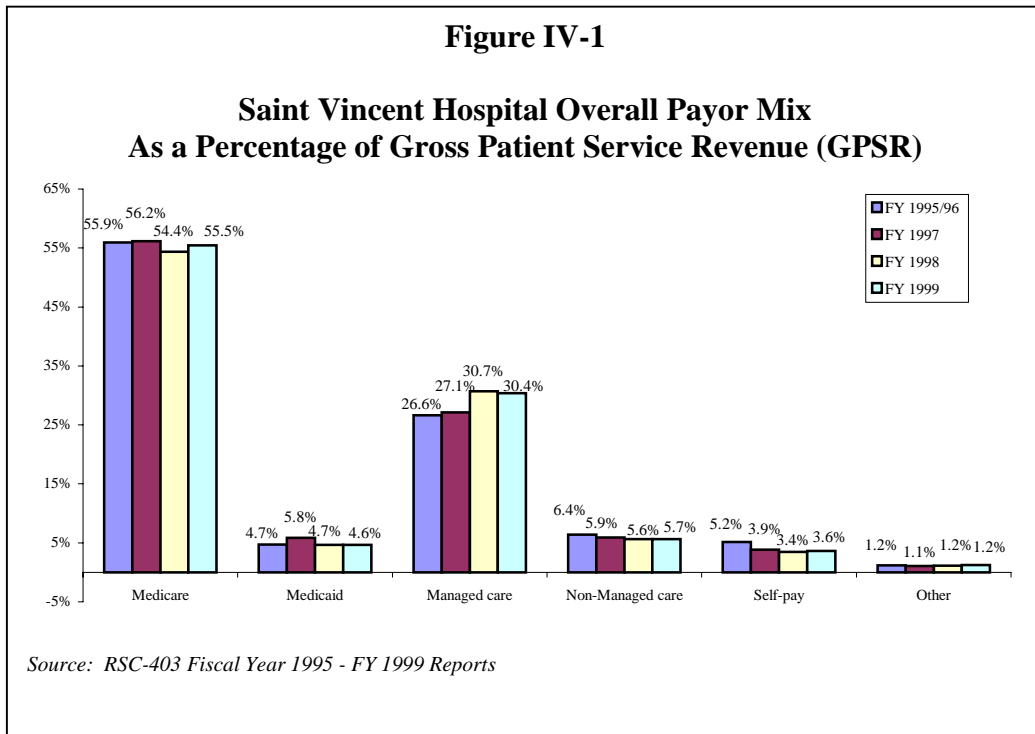
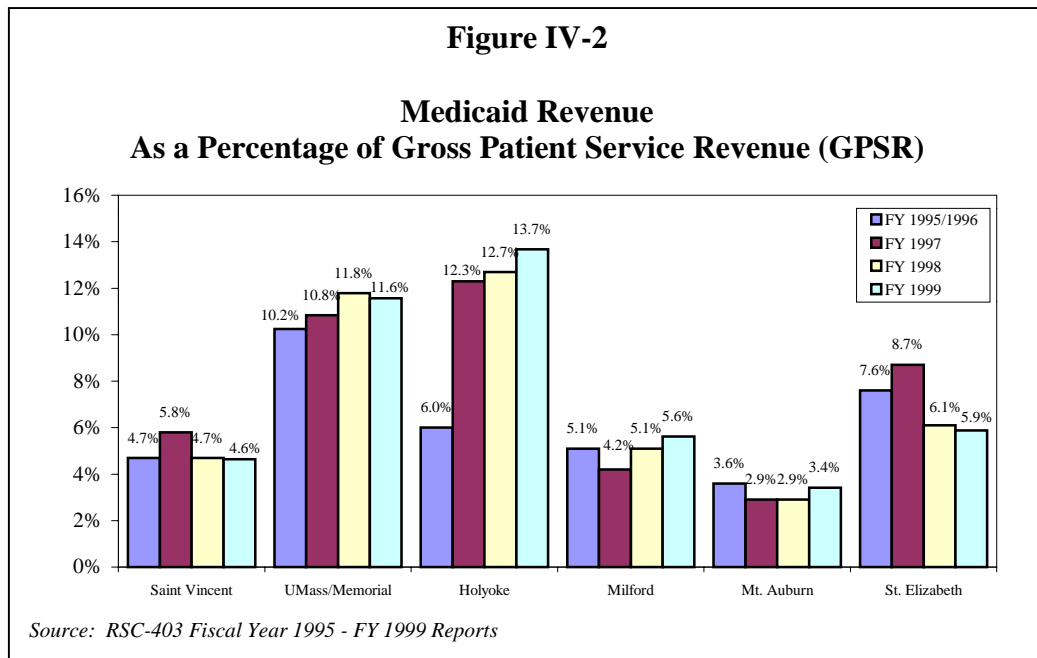


Figure IV-2, *Medicaid Revenue as a Percentage of Gross Patient Service Revenue*, compares Saint Vincent Hospital's trends in Medicaid revenues with comparison hospitals. The hospitals experienced varied trends in their Medicaid shares, with Saint Vincent hospital showing more consistency than most others, continuing to provide Medicaid care at baseline levels – with the exception of its one year increase in FY 1997. In contrast, three of the other hospital systems increased their Medicaid share from the baseline average, in some cases quite

significantly. This likely reflects expanded Medicaid enrollment from implementation of health reform. The remaining hospitals, Mount Auburn and Saint Elizabeth showed declines from baseline levels of greater magnitude than Saint Vincent. These results raise the question of whether Saint Vincent Hospital is serving a proportionate share of the expanding Medicaid population. This question will be reconsidered as payer data is presented for specific hospital departments.



### 3. Indicators of Overall Hospital Quality

#### a. Accreditation

Saint Vincent Hospital's status of accreditation with commendation from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) remained in place during Year 3. This was an improvement from its prior accreditation status, which did not achieve commendation.

#### b. Complaints and Grievances

Saint Vincent Hospital classifies its complaints into four levels, based on the seriousness of the matter. (See Table IV-3, *Saint Vincent Hospital Volume and Severity of Complaints*.) Over the five years of this study, the number and pattern of complaints has shifted. Overall the number of complaints has risen, primarily due to increases in minor complaints, Level II, which now constitute almost 70% of the total, up from almost 50% in the baseline. However, the least serious level of complaint, Level I, has dropped from baseline levels of over 40% to about twenty-five percent in Years 1, 2 and 3. One explanation for this increase is likely the hospital's active solicitation of client feedback

while they are hospitalized; any problems identified by this process are documented as complaints. In Year 3, Level III complaints dropped to 30, the number experienced in the first baseline year, continuing a trend of reduction from a high level of 76 serious complaints received in Year 1. This level of complaint involves serious quality of care issues. Level IV complaints indicating severe problems increased to two from zero in the previous year. The five-year pattern in these most serious complaints suggests that the normal level of variation is from zero per year to three per year. There does not appear to be an increasing trend.

<b>Table IV-3</b>				
<b>Saint Vincent Hospital Volume and Severity of Complaints</b>				
<b>Severity</b>	<b>Baseline</b>		<b>Analysis Period</b>	
	<b>Avg. FY 1995-1996</b>		<b>Fiscal Year FY 1997</b>	
	<b>Number of Complaints</b>	<b>% of Total Complaints</b>	<b>Number of Complaints</b>	<b>% of Total Complaints</b>
<b>Level I</b> - Minor complaint, easily rectified	232	45.2%	136	25.2%
<b>Level II</b> - Minor complaint; generally relating to the quality of service, or unsubstantiated perception of quality of care	243	47.3%	324	60.1%
<b>Level III</b> - Alleging complaint of serious quality of care/service, with possible medical/legal implications	38	7.4%	76	14.1%
<b>Level IV</b> - Indicates severe problem with probable consequences	1	0.0%	3	0.6%
<b>Total</b>	<b>514</b>	<b>100.0%</b>	<b>539</b>	<b>100.0%</b>
<b>SEVERITY</b>	<b>Analysis Period</b>			
	<b>Fiscal Year FY 1998</b>		<b>Fiscal Year FY 1999</b>	
	<b>Number of Complaints</b>	<b>% of Total Complaints</b>	<b>Number of Complaints</b>	<b>% of Total Complaints</b>
<b>Level I</b> - Minor complaint, easily rectified	153	22.5%	153	26.9%
<b>Level II</b> - Minor complaint; generally relating to the quality of service, or unsubstantiated perception of quality of care	466	68.5%	384	67.5%
<b>Level III</b> - Alleging complaint of serious quality of care/service, with possible medical/legal implications	61	9.0%	30	5.3%
<b>Level IV</b> - Indicates severe problem with probable consequences	0	0.0%	2	0.4%
<b>Total</b>	<b>680</b>	<b>100.0%</b>	<b>569</b>	<b>100.0%</b>

#### 4. Hospital Staffing

##### a. Physicians

The number of physicians who admitted patients to Saint Vincent Hospital in Fiscal Year FY 1999 dropped dramatically from 495 physicians in Fiscal Year FY 1998 to a five year low of 325. In all other years, the number of admitting physicians was at least 400. This is counter to the description of a hospital informant that physicians' affiliations have been increasing, and its creation of a risk pool to attract independent practitioners. Unfortunately, we had little information that allowed us to further assess the reasons for and possible impact of this change.

##### b. Hospital Staff

The size of the hospital staff decreased by 83 positions between Year 2 and Year 3, reflecting cuts at the end of Year 2, and the outsourcing of laboratory services between Year 1 and Year 2. This left a hospital staff 3% smaller than the average staff level during the baseline period. (*Table IV-4, Saint Vincent Hospital Staff Ethnic Distribution.*) The hospital announced that additional cuts were planned with the outsourcing of dietary, laundry, and maintenance services.

The table indicates that the cuts came entirely from the category of 'administrative and other staff'. The number of staff physicians remained constant, and the nursing and non-nursing clinical staff actually increased somewhat. In comparison to the baseline, there were somewhat fewer nurses, and 25% more non-nursing clinical staff. Because of the importance of staffing levels as a determinant of quality, we sought additional data on staffing and analyzed it in comparison to levels of service provision in relevant sections of this report.

The overall ethnic distribution of staff changed only slightly over the five year period, with some increase in Black and Hispanic staff in comparison to White staff. In Year 2, for the first time in the study period, there were Black physicians on staff, and the number of Black clinical non-nursing staff more than doubled. However, the small number of Hispanics and Asians represented among the nursing and non-nursing clinical staff dropped considerably, especially for Hispanics, leaving the hospital with no Hispanic nurses in Years 2 or 3. Though there were increases in representation of persons of color among administrative and clinical staff, the reduction in Asian and Hispanic clinical staff may reduce the hospital's ability to seem familiar and welcoming to its Asian and Hispanic patients.

<b>Table IV-4</b>					
<b>Saint Vincent Hospital Staff Ethnic Distribution</b>					
<b>Hospital Personnel</b>	<b>1995/1996 Average</b>				
	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Total</b>
Physicians	53.5	0	3	47.5	104
Nursing Staff	712	5	1.5	4	722.5
Clinical, Non-Nursing Staff	474.5	10.5	10.5	10	505.5
Administrative and Other Staff	1132	41	55.5	17.5	1246
<b>Total</b>	<b>2372</b>	<b>56.5</b>	<b>70.5</b>	<b>79</b>	<b>2,578</b>
<b>Percent of Total</b>	<b>92.0%</b>	<b>2.2%</b>	<b>2.7%</b>	<b>3.1%</b>	<b>100.0%</b>
<b>HOSPITAL PERSONNEL</b>	<b>FY 1997</b>				
	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Total</b>
Physicians	43	0	4	33	80
Nursing Staff	658	4	1	4	667
Clinical, Non-Nursing Staff	535	9	16	15	575
Administrative and Other Staff	1048	45	64	9	1166
<b>Total</b>	<b>2,284</b>	<b>58</b>	<b>85</b>	<b>61</b>	<b>2,488</b>
<b>Percent of Total</b>	<b>91.8%</b>	<b>2.3%</b>	<b>3.4%</b>	<b>2.5%</b>	<b>100.0%</b>
<b>Hospital Personnel</b>	<b>FY 1998</b>				
	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Total</b>
Physicians	48	3	3	30	84
Nursing Staff	658	5	0	2	665
Clinical, Non-Nursing Staff	486	19	14	10	529
Administrative and Other Staff	1140	47	96	33	1316
<b>Total</b>	<b>2332</b>	<b>74</b>	<b>113</b>	<b>75</b>	<b>2594</b>
<b>Percent of Total</b>	<b>89.9%</b>	<b>2.9%</b>	<b>4.4%</b>	<b>2.9%</b>	<b>100.0%</b>
<b>Hospital Personnel</b>	<b>FY 1999</b>				
	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Total</b>
Physicians	48	3	3	30	84
Nursing Staff	693	6	0	4	703
Clinical, Non-Nursing Staff	573	24	18	9	624
Administrative and Other Staff	956	42	84	18	1100
<b>Total</b>	<b>2270</b>	<b>75</b>	<b>105</b>	<b>61</b>	<b>2511</b>
<b>Percent of Total</b>	<b>90.4%</b>	<b>3.0%</b>	<b>4.2%</b>	<b>2.4%</b>	<b>100.0%</b>
<i>Source: Saint Vincent Hospital Internal Report, Snapshot of July 1, 1995, 1996, FY 1997, FY 1998 and FY 1999. Staff Ethnic Distribution</i>					

## **B. INPATIENT SERVICES**

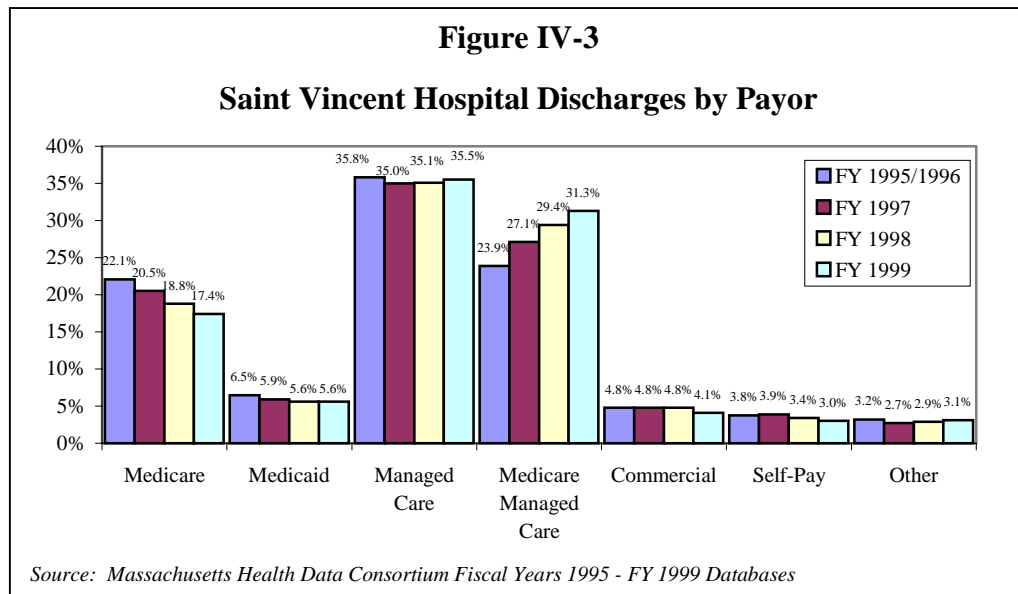
### **1. Overall Inpatient Services**

#### *a. Discharges by Payor*

Figure IV-3, *Saint Vincent Hospital Discharges by Payor*, shows the trends in payor mix over the past four years. In all years, managed care represented the largest percentage of inpatient discharges, with a constant share of about 35% in all five years. A consistent trend has been a slow increase in the share of Medicare (both managed and fee-for-service), which accounted for almost 49% of discharges in FY 1999. Within Medicare, the share of managed care Medicare has risen consistently in each year at a significant rate, offset by a slower rate of decline in fee-for-service Medicare. Medicare's increasing share may be attributable to the aging of the population, leading to a higher percentage of persons eligible for Medicare. Medicaid discharges dropped from baseline levels of 6.5% to 5.6% of discharges in FY 1998 and remained at that level in FY 1999. The percentage of self-pay patients continued to drop from a high of 3.9% in Year 1 to 3.4% in Year 3.

The declines in service to Medicaid and self-pay patients are concerning. However, to the extent that fewer patients are uninsured because of a good job market and expanded Medicaid eligibility, the drop in self-pay may be a positive indicator. Given that Saint Vincent Hospital increased its share of Worcester self-pay discharges (see Section 3.F.1.), it appears that the hospital remains accessible to uninsured individuals who need inpatient care. The same was not true for Medicaid discharges, where both the Medicaid percentage of Saint Vincent Hospital discharges and the hospital's share of Worcester Medicaid discharges fell. The experience of other hospitals may assist us to better understand the changes in Medicaid discharges at Saint Vincent Hospital.





*b. Inpatient Days by Type*

As shown in Table IV-5, *Saint Vincent Hospital Inpatient Days by Type*, total inpatient days dropped 5% from FY 1998 to FY 1999 to a level 7% lower than the average during the baseline period. Decreases in acute inpatient services are consistent with the trends expected from an increase in managed care penetration. The decrease occurred primarily in acute services, while intensive care and the newborn nursery experienced small increases. Medical/surgical acute days, the majority of days provided, continued to lose share, decreasing to a level 20% below the baseline. Some of this decrease is likely the result of changing patterns of care, with some patients able to receive surgery services on an ambulatory basis. Pediatric acute days decreased by one third from the previous year's level. In contrast, obstetrics days reached a high for the entire analysis period. Psychiatric days also increased for the first time in the analysis period, but remained 27% below the baseline average number of days. Some of this decrease is likely due to shorter stays for inpatient treatment. However, Saint Vincent Hospital's decreases in average length of psychiatric stay did not explain the entire decrease in bed days, indicating that a significant reduction in provision of psychiatric service had occurred.

<b>Table IV-5</b>								
<b>Saint Vincent Hospital Inpatient Days by Type</b>								
<b>INPATIENT UNIT</b>	<b>Avg. of FY 1995-1996</b>		<b>Fiscal Year FY 1997</b>		<b>Fiscal Year FY 1998</b>		<b>Fiscal Year FY 1999</b>	
	<b>Avg. No. of Patient Days</b>	<b>Percent of Total</b>	<b>Number of Patient Days</b>	<b>Percent of Total</b>	<b>Number of Patient Days</b>	<b>Percent of Total</b>	<b>Number of Patient Days</b>	<b>Percent of Total</b>
Med/surg Acute	67,297	69.0%	62,864	65.7%	60,914	63.9%	54,687	60.4%
Pediatric Acute	622	0.6%	722	0.8%	602	0.6%	371	0.4%
OB Acute	5,356	5.5%	5,392	5.6%	5,151	5.4%	5,636	6.2%
Psych Acute	12,310	12.6%	9,839	10.3%	7,975	8.4%	9,028	10.0%
SNFs	0	0.0%	5,293	5.5%	8,570	9.0%	8,655	9.6%
<i>Subtotal Acute</i>	<i>85,584</i>	<i>87.8%</i>	<i>84,110</i>	<i>87.9%</i>	<i>83,212</i>	<i>87.3%</i>	<i>78,377</i>	<i>86.6%</i>
Med/surg ICU	5,456	5.6%	4,932	5.2%	5,299	5.6%	5,296	5.9%
Coronary ICU	2,003	2.1%	1,908	2.0%	1,960	2.1%	2,022	2.2%
<i>Subtotal ICU</i>	<i>7,459</i>	<i>7.7%</i>	<i>6,840</i>	<i>7.1%</i>	<i>7,259</i>	<i>7.6%</i>	<i>7,318</i>	<i>8.1%</i>
Newborn Nursery	4,437	4.6%	4,762	5.0%	4,795	5.0%	4,786	5.3%
<b>Total Patient Days</b>	<b>97,479</b>	<b>100.0%</b>	<b>95,712</b>	<b>100.0%</b>	<b>95,266</b>	<b>100.0%</b>	<b>90,481</b>	<b>100.0%</b>

*Source: RSC-403 Fiscal Years 1995 – FY 1999 Reports*

c. *Occupancy*

Table IV-6, *Saint Vincent Hospital Patient Occupancy Statistics*, indicates that licensed beds remained constant in all three years of the assessment period. However, the average daily census and the occupancy rate decreased from baseline levels during the three years of the assessment period.

<b>Table IV-6</b>			
<b>Saint Vincent Hospital Patient Occupancy Statistics</b>			
<b>Fiscal year</b>	<b>Total Licensed Beds*</b>	<b>Average Daily Census</b>	<b>Occupancy Rate</b>
1995-1996 Average	398	267.8	67.3%
FY 1997	398	262.2	66.0%
FY 1998	398	261.0	65.6%
FY 1999	398	247.9	62.3%

*\* Licensed Beds at the end of the year*  
*Source: RSC-403 Fiscal Years 1995 – FY 1999 Reports*

d. *Length of Stay*

The overall average length of stay at Saint Vincent Hospital declined slowly to 4.4 days over the analysis period, as exhibited in Table IV-7, *Saint Vincent Hospital Average Length of Stay (ALOS) by Service*. Acute medical/surgical stays showed a steeper decline, decreasing a full day over the 5-year period. Skilled nursing average length of stay also dropped from 13 days to not quite 12 days. Pediatric acute average length of stay returned to 2 days after reaching a high of 6.4 days in FY 1998. This suggests that the high value may have been affected by outlier cases in the relatively small pediatric caseload. Obstetric, newborn nursery and cardiac ICU stays remained quite stable over the period. In contrast, both psychiatric acute and medical/ surgical ICU days increased. Psychiatry reached a new high of 8.4 days after declining to a low of 6.6 days in the previous year, while medical/surgical ICU lengths of stay showed a steady increasing trend.

<b>Table IV-7</b>				
<b>Saint Vincent Hospital</b>				
<b>Avg. Length of Stay (ALOS)* by Service</b>				
<b>Baseline Periods</b>				
<b>Service</b>	<b>Average FY 1995-1996</b>	<b>Fiscal Year FY 1997</b>	<b>Fiscal Year FY 1998</b>	<b>Fiscal Year FY 1999</b>
Medical/Surgical Acute	4.9	4.4	4.3	3.9
Pediatric Acute	1.8	2.1	6.4	2.6
Obstetric Acute	2.1	2.3	2.0	2.3
Psychiatric Acute	7.9	7.3	6.6	8.4
Skilled Nursing	N/A	13.1	13.3	11.9
Medical/Surgical ICU	2.4**	2.3	2.5	3.0
Coronary ICU	2.0**	1.8	1.9	1.9
Newborn Nursery	2.0	2.3	2.4	2.4
<b>Total</b>	<b>4.7</b>	<b>4.5</b>	<b>4.5</b>	<b>4.4</b>
<p>* ALOS based on inpatient days and discharges  ** Represents only Fiscal Year 1996.  Source: RSC-403 Fiscal Years 1995 – FY 1999 Reports</p>				

e. *Discharge Disposition*

As demonstrated in Table IV-8, the recent trends in discharge dispositions leveled off in Year 3. The number of routine discharges, which had been falling, declined only slightly from the previous year, while discharges to skilled nursing facilities declined slightly after three years of increasing. The other significant type of discharge, discharge to a home health agency, experienced a small increase from the prior year. In all five years, the

majority of Saint Vincent Hospital patients, over 60% were routinely discharged to their homes. While the hospital's operation of a SNF unit as part of the hospital and the joint ownership of other nursing homes probably allows Saint Vincent Hospital to capture a significant share of the market, the trend had moderated in Year 3. Trends of similar magnitude were seen in other Worcester hospitals, suggesting that this change is an industry-wide phenomenon.

DISCHARGE DISPOSITION	Avg. FY 1995-1996		Fiscal Year FY 1997		Fiscal Year FY 1998		FISCAL YEAR FY 1999	
	No. of Discharge	% of Total	No. of Discharge	% of Total	No. of Discharge	% of Total	No. of Discharge	% of Total
Home/Routine	14,987	71.6%	13,449	64.9%	12,992	63.4%	12,614	62.9%
Short Term Facility	154	0.7%	145	0.7%	118	0.6%	172	0.9%
SNF	1,484	7.1%	2,518	12.2%	2,803	13.7%	2,507	12.5%
Intermediate Care Facility	543	2.6%	66	0.3%	62	0.3%	225	1.1%
Home Health Agency	2,621	12.5%	3,466	16.7%	3,437	16.8%	3,419	17.1%
Against Medical Advice	120	0.6%	89	0.4%	99	0.5%	80	0.4%
Chronic Hospital	471	2.2%	394	1.9%	398	1.9%	303	1.5%
Died	560	2.7%	581	2.8%	595	2.9%	559	2.8%
Other: Further outpatient or inpatient care							169	0.8%
<b>Total</b>	<b>20,938</b>	<b>100.0%</b>	<b>20,708</b>	<b>100.0%</b>	<b>20,504</b>	<b>100.0%</b>	<b>20,048</b>	<b>100.0%</b>

*Source: Massachusetts Health Data Consortium Fiscal Years 1995 – FY 1999 Databases*

*f. Discharges by Town of Patient Residence*

In all three years, the patients from the City of Worcester were the largest share of Saint Vincent Hospital discharges, and more than 60% of discharges were individuals residing in the primary service area (see Table IV-9). Most other area towns had fewer than 5% of total discharges. From the baseline, the share of inpatients from the city of Worcester and the primary service area declined slightly, while the share of patients from the rest of Worcester County showed a small corresponding increase.

**TABLE IV-9**

**Saint Vincent Discharges by Patient Residence**

Patient Residence	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	Discharge	% of Total Discharge	Discharge	% of Total Discharge	Discharge	% of Total Discharge	Discharge	% of Total Discharge
<b>Primary Area</b>								
Auburn	647	3.5%	649	3.5%	670	3.6%	687	3.8%
Boylston	97	0.5%	98	0.5%	86	0.5%	86	0.5%
Grafton	516	2.8%	527	2.8%	488	2.6%	501	2.8%
Holden	346	1.8%	329	1.8%	366	2.0%	374	2.1%
Leicester	415	2.2%	455	2.4%	447	2.4%	499	2.8%
Millbury-Sutton	1,030	5.5%	995	5.3%	1,042	5.6%	965	5.3%
Shrewsbury	767	4.1%	755	4.1%	763	4.1%	714	4.0%
West Boylston	238	1.3%	256	1.4%	191	1.0%	221	1.2%
Worcester	7,890	42.2%	7,681	41.2%	7,470	40.4%	7,180	39.8%
<i>Sub-Total</i>	<i>11,943</i>	<i>63.9%</i>	<i>11,745</i>	<i>63.0%</i>	<i>11,523</i>	<i>62.3%</i>	<i>11,227</i>	<i>62.2%</i>
<b>Secondary</b>								
Brookfield	72	0.4%	70	0.4%	96	0.5%	84	0.5%
Charlton	192	1.0%	202	1.1%	207	1.1%	211	1.2%
Douglas	117	0.6%	116	0.6%	135	0.7%	137	0.8%
East Brookfield	60	0.3%	64	0.3%	61	0.3%	72	0.4%
Hubbardston	47	0.3%	35	0.2%	38	0.2%	35	0.2%
Northbridge	388	2.1%	394	2.1%	343	1.9%	330	1.8%
North Brookfield	125	0.7%	132	0.7%	110	0.6%	130	0.7%
Northborough	222	1.2%	216	1.2%	201	1.1%	177	1.0%
Oakham	39	0.2%	37	0.2%	38	0.2%	54	0.3%
Oxford	520	2.8%	495	2.7%	530	2.9%	475	2.6%
Paxton	102	0.5%	104	0.6%	160	0.9%	134	0.7%
Princeton	39	0.2%	44	0.2%	40	0.2%	55	0.3%
Rutland	142	0.8%	152	0.8%	149	0.8%	136	0.8%
Spencer	462	2.5%	542	2.9%	511	2.8%	489	2.7%
Sterling	84	0.4%	83	0.4%	83	0.4%	87	0.5%
Webster (including Dudley)	633	3.4%	675	3.6%	647	3.5%	636	3.5%
<i>Sub-Total</i>	<i>3,240</i>	<i>17.3%</i>	<i>3,361</i>	<i>18.0%</i>	<i>3,349</i>	<i>18.1%</i>	<i>3,242</i>	<i>18.0%</i>
Other Worcester County	2,351	12.6%	2,437	13.1%	2,586	14.0%	2,526	14.0%
Other	1,170	6.3%	1,093	5.9%	1,049	5.7%	1,052	5.8%
<b>Total*</b>	<b>18,703</b>	<b>100.0%</b>	<b>18,636</b>	<b>100.0%</b>	<b>18,507</b>	<b>100.0%</b>	<b>18,047</b>	<b>100.0%</b>

*g. Hospital Discharges by Patient Residence*

Hospital discharges by patient residence can be an indicator of access in terms of patients' choice of hospital. Table IV-10, *Percentage of Total Discharges by Hospital and Patient Residence*, shows what proportion of the residents of five selected towns in the Saint Vincent Hospital service area who received inpatient services were discharged from the three

Worcester area hospitals or from a facility outside Worcester. These towns collectively account for over half of the total discharges from Saint Vincent Hospital. For the second year, Saint Vincent Hospital showed small declines in its share of inpatient discharges from four of five towns between Year 1 and Year 3. This is consistent with the pattern shown in the previous table, with Saint Vincent

Hospital serving an increasing share of patients outside of Worcester and the primary service area. In contrast, the percentage of discharges from Leicester, one of the two lowest income towns in this sample, increased sharply and the other low income town, Millbury showed only a small decline. Medical Center of Central Massachusetts experienced smaller changes, with slight decreases in discharges from Auburn and Leicester. UMass Medical Center experienced small increases in two towns.

Patient Residence	Saint Vincent Hospital				Medical Center of Central MA			
	Avg. FY 1995-1996	FY 1997	FY 1998	FY 1999	Avg. FY 1995-1996	FY 1997	FY 1998	FY 1999
Auburn	40.2%	39.0%	38.8%	38.0%	38.0%	37.5%	38.3%	36.1%
Leicester	43.7%	46.2%	45.5%	47.2%	29.6%	29.6%	29.0%	26.5%
Millbury	50.7%	52.2%	51.4%	49.8%	24.8%	22.6%	25.1%	25.4%
Shrewsbury	28.6%	28.4%	28.2%	25.9%	35.5%	34.2%	35.8%	36.9%
Worcester	35.4%	35.2%	34.8%	32.8%	35.7%	34.8%	36.3%	35.4%
Patient Residence	UMass				Other			
	Avg. FY 1995-1996	FY 1997	FY 1998	FY 1999	Avg. FY 1995-1996	FY 1997	FY 1998	FY 1999
Auburn	15.1%	16.3%	17.0%	17.2%	6.7%	7.2%	6.0%	8.7%
Leicester	18.2%	17.4%	19.1%	18.1%	8.6%	6.8%	6.4%	8.2%
Millbury	14.2%	15.4%	14.2%	16.1%	10.4%	9.8%	9.3%	8.7%
Shrewsbury	24.3%	25.1%	24.7%	25.6%	11.9%	12.3%	11.3%	11.7%
Worcester	21.2%	22.7%	22.7%	24.9%	7.8%	7.3%	6.1%	6.9%

*Source: Massachusetts Health Data Consortium Fiscal Year 1995 – FY 1999 Databases*

*h. Discharges by Race/Ethnicity*

Table IV-11, *Saint Vincent Hospital Discharges by Ethnic Origin*, shows modest changes in the breakdown of discharges from Saint Vincent Hospital by race over the five years. The vast majority of individuals discharged from the hospital, 91%, were white, and approximately 4% were Spanish speaking. The percentage of African-Americans and Asians each grew during the five-year study period, African-Americans increasing from

2% to 2.4% and discharges of people of Asian background more than doubling from .6% to 1.6%.

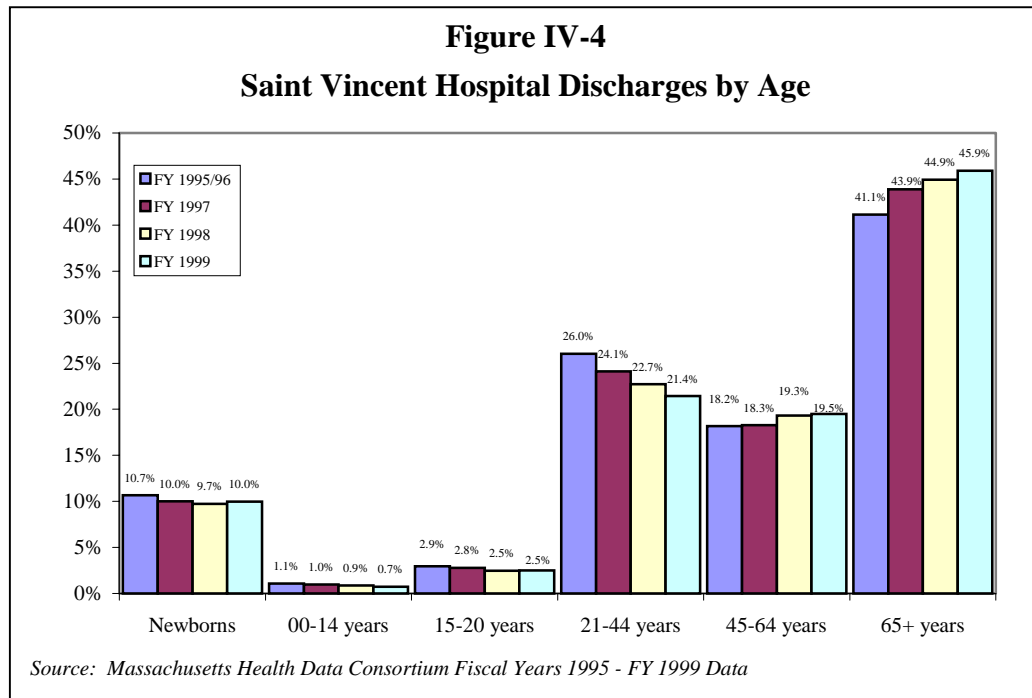
**Table IV-11**  
**Saint Vincent Hospital Discharges by Ethnic Origin**

Race	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	NUMBER	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
White	19,322	92.3%	19,001	91.8%	18,736	91.4%	18,273	91.1%
African-American	414	2.0%	424	2.0%	485	2.4%	489	2.4%
Asian	123	0.6%	199	1.0%	305	1.5%	318	1.6%
Spanish Speaking	824	3.9%	900	4.3%	866	4.2%	807	4.0%
American Indian	98	0.5%	36	0.2%	3	0.0%	7	0.0%
Other	157	0.7%	148	0.7%	109	0.5%	154	0.8%
<b>Total</b>	<b>20,938</b>	<b>100.0%</b>	<b>20,708</b>	<b>100.0%</b>	<b>20,504</b>	<b>100.0%</b>	<b>20,048</b>	<b>100.0%</b>

*Source: Massachusetts Health Data Consortium, Fiscal Years 1995 – FY 1999 Databases*

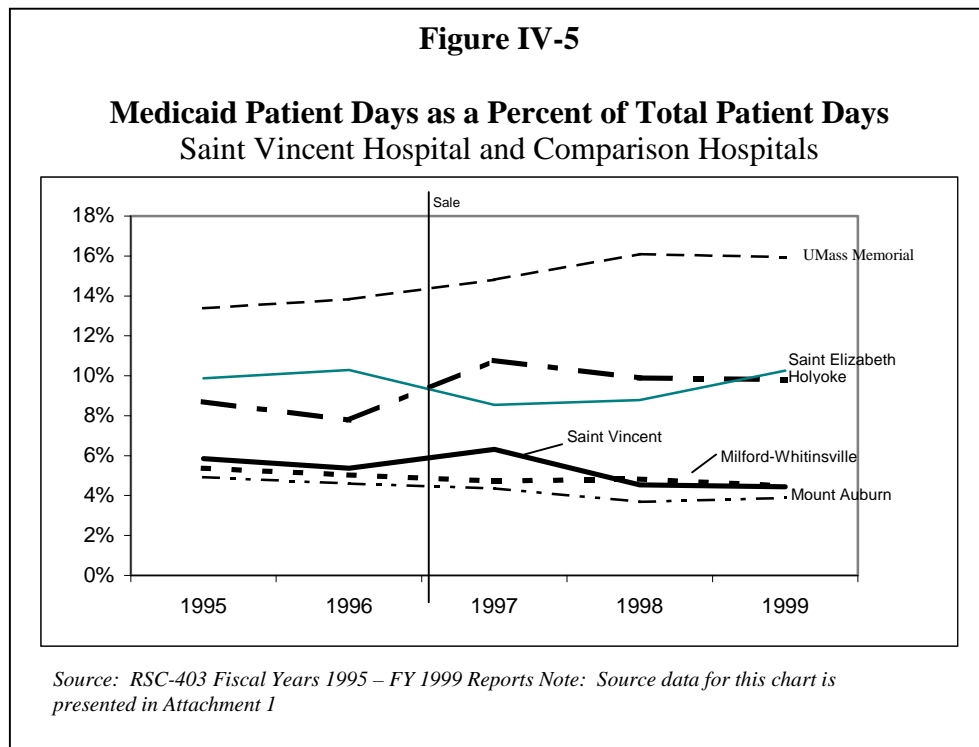
*i. Discharges by Age Group*

As illustrated in Figure IV-4, *Saint Vincent Hospital Discharges by Age*, the age distribution of discharges at Saint Vincent Hospital showed a consistent trend over the five-year analysis period. An increase was seen each year in the elderly (65+ years) category, offset by decreases in discharges among the 21-44 age group each year.



j. *Inpatient Services to Medicaid Enrollees in Comparison Hospitals*

As illustrated in Figure IV-5, *Medicaid Patient Days as a Percent of Total Patient Days*, the Medicaid percentage of inpatient days decreased at Saint Vincent Hospital from 6.3% in FY 1997 to 4.4% in FY 1999, and continued to be at a much lower level than that provided by the other Worcester hospital. Saint Vincent Hospital also experienced a reduction in total inpatient days, but the number of Medicaid days decreased even more, dropping its Medicaid share below levels experienced during the baseline. (See Figure IV-2, *Medicaid Revenue as a Percentage of Gross Patient Service Revenue (GPSR)*, page IV-4.) This decrease differed from the other Worcester hospital, Saint Elizabeth, and Holyoke, which experienced increases in the percentage of Medicaid patient days or rebounded to reach baseline levels. Saint Vincent Hospital's experience was similar to two of the comparison hospitals with lower Medicaid shares, which also experienced declining Medicaid shares. This trend is notable in the context of expanded Medicaid enrollment statewide, as a result of health reform.



As demonstrated in Table IV-12, *Medicaid Average Length of Stay (ALOS) Compared to Overall ALOS*, the average length of stay for all Saint Vincent Hospital's patients fell consistently over the five-year period. The Medicaid



length of stay was consistently shorter than the overall average length of stay over the period, but experienced an increase between Years 1 and 2. All other hospitals showed consistent declines in their overall average length of stay, suggesting that the industry trend toward shorter stays continues. However, Medicaid average lengths of stay were much more variable. In most cases, Medicaid lengths of stay were shorter than overall average stays, but two hospitals had longer Medicaid stays than their overall average. Trends in Medicaid average length of stay also varied; two hospitals experienced decreasing trends, one had consistent average stays, and two varied up and down in their Medicaid average lengths of stay.

**TABLE IV-12**

**Medicaid Compared to Overall Average Length of Stay (ALOS)**

Saint Vincent Hospital and Comparison Hospitals

Hospital	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	Overall ALOS	Medicaid ALOS	Overall ALOS	Medicaid ALOS	Overall ALOS	Medicaid ALOS	Overall ALOS	Medicaid ALOS
<b>Worcester Hospitals</b>								
<b>Saint Vincent Hospital</b>	<b>4.7</b>	<b>4.0</b>	<b>4.5</b>	<b>3.5</b>	<b>4.5</b>	<b>3.8</b>	<b>4.4</b>	<b>3.5</b>
Medical Center of Central MA	4.9	4.5	4.6	4.6	4.4	4.6		
UMass Medical Center	6.5	7.6	5.8	6.3	5.8	7.0		
<b>UMass/Memorial</b>	5.6	5.8	5.1	5.3	5.0	5.7	4.8	5.3
<b>Peer Hospitals</b>								
Holyoke	6.1	8.9	5.9	4.4	5.5	3.8	5.4	3.6
Milford-Whitinsville	4.2	3.2	3.9	3.1	3.8	3.2	3.9	3.0
Mount Auburn	4.9	5.1	4.6	5.0	4.3	4.1	4.2	4.0
Saint Elizabeth	7.1	6.5	6.0	9.3	5.9	5.5	5.6	6.2
*ALOS based on admissions and patient days Source: RSC-403 Fiscal Years 1995 – FY 1999 Reports								

*k. Staffing*

This section uses information about inpatient staffing, drawn from the RSC 403 cost report and compares it to the level of inpatient service provided. We have compared the patient days provided in each year, with the staff FTEs allocated to routine inpatient care, and to ancillary care. While ancillary care supports both inpatient and outpatient services, it is probably most fairly compared to inpatient service levels. *Table IV-13, Inpatient and Ancillary FTEs Compared to Total Inpatient Days* shows that staffing increased between the baseline average and Year 1, while the number of inpatient days fell. This resulted in a higher staffing ratio for Year 1. However, non-physician staffing fell in Year 2 to below the baseline level. In Year 3, inpatient staffing fell even more. Total inpatient days also

declined over the period. By Year 3, the decline in bed days was sufficient to bring staffing ratios into the same range as they were in the baseline, though below Year 1 levels.

<b>TABLE IV-13</b>						
<b>Non-Physician FTE Compared to Total Inpatient Days</b>						
Saint Vincent Hospital						
Service Category	Avg. FY 1995-1996			FY 1997		
	Non-Physician FTEs	Bed Days	FTE per 1000 Bed Days	Non-Physician FTEs	Bed Days	FTE per 1000 Bed Days
Routine Inpatient Services	520.30	97,479	5.3	521.20	95,712	5.4
Ancillary Services	360.55		3.7	381.40		4.0
FY 1998			FY 1999			
Routine Inpatient Services	487.87	95,266	5.1	466.10	90,481	5.2
Ancillary Services	345.34		3.6	345.02		3.8

*Source: RSC-403 Fiscal Years 1995 – FY 1998 Reports*

*1. Satisfaction*

This section combines information about client satisfaction with overall inpatient services from two sources in order to monitor satisfaction over the entire analysis period. Saint Vincent Hospital changed from one satisfaction survey instrument to another in Year 2. Table IV-14 compares data from the Press, Ganey Associates mail survey for the quarter February through April for the years 1996, FY 1997, and FY 1998<sup>3</sup>. These data measure aspects of all inpatient services of the hospital and compare them to a group of over 100 peer hospitals that used the same Press, Ganey survey and methodology. They show that Saint Vincent Hospital experienced a slight decline in the overall satisfaction scores of respondents to its survey in Year 2, compared to Year 1 and the final year in the baseline. This dropped Saint Vincent Hospital from the top 10% of peer hospitals to the top 20%. All measures of different aspects of inpatient care also showed declines in percentile rankings. In contrast to the baseline, when all rankings were close to or in the top 20% of peer hospitals, in FY 1998, ratings for accommodations and for admissions had dropped into the 50<sup>th</sup> and 60<sup>th</sup> percentiles. The remaining three aspects of care, nursing, meals and physicians, were still in the top 20%, but were ranked lower than they had been previously.

<sup>3</sup> February through April FY 1998 was the last quarter in which the Press, Ganey survey was conducted.

<b>Table IV-14</b>						
<b>Satisfaction with Saint Vincent Hospital Inpatient Services According to Press, Ganey Associates Survey</b>						
	<b>Baseline Feb.-April 1996</b>		<b>Year 1 Feb.-April FY 1997</b>		<b>Year 2 Feb.-April FY 1998</b>	
	<b>Score</b>	<b>Peer Group Percentile</b>	<b>Score</b>	<b>Peer Group Percentile</b>	<b>Score</b>	<b>Peer Group Percentile</b>
Overall Satisfaction	86.3	92%	85.8	82%	85.1	81%
Admissions	88.2	78%	86.3	72%	85.8	63%
Rooms/ Accommodations	81.4	80%	79.8	64%	79.6	51%
Diet and Meals	81.4	98%	80.1	79%	80	90%
Nursing	90.5	90%	90.0	81%	89.2	86%
Physicians	86.6	83%	86.9	89%	87.3	81%
N	1,236	121	1,329	124	1,392	136
<i>Source: Press, Ganey Associates Report, February-April 1996, FY 1997, and FY 1998</i>						

In order to provide a bridge to ratings calculated using a different survey method that can be carried into the future, we provided a second measure of satisfaction in Year 2 (See Table IV-15). This phone survey used by Tenet hospitals includes measures of satisfaction with aspects of inpatient care that are similar to those in the Press, Ganey survey. Many of the aspects of inpatient care rated had descriptions that were the same as or similar to those for Press, Ganey. We believe that the Tenet category closest to the

<b>Table IV-15</b>		
<b>Satisfaction with Saint Vincent Hospital Inpatient Services According to Tenet Survey</b>		
	<b>YEAR 2 MARCH – MAY FY 1998</b>	<b>YEAR 3 MARCH – MAY FY 1999</b>
	<b>Percent Dissatisfied</b>	<b>Percent Dissatisfied</b>
Rather go elsewhere	7%	5%
Admissions	0%	1%
Environmental Aspects	4%	5%
Diet and Meals	7%	11%
Nursing	5%	7%
Physicians	7%	4%
Employee Communication/Teamwork	11%	12%
N	At least 100 surveys attempted	At least 100 surveys attempted
<i>Source: Tenet Satisfaction Survey Summary, March-May FY 1998 and March-May FY 1999</i>		

overall satisfaction measure used by Press, Ganey is the percent indicating that they would “rather go elsewhere” if hospitalized in the future. Similarly, we believe that “environmental aspects” measures an aspect of care that is substantially similar to “rooms/accommodation”. We have added one additional measure, even though there was no comparable measure in Press, Ganey. The measure of “employee communication/teamwork” is significant in the provision of healthcare and may provide an indication of the effects of changes in hospital staff structure noted earlier.

Between Years 2 and 3, overall satisfaction, as indicated by fewer respondents indicating that they would ‘rather go elsewhere’ improved somewhat, and the percentage of respondents dissatisfied with their physicians also declined from 7% to 4%. This provides one indication that the smaller number of admitting physicians did not negatively affect patient satisfaction. However, employee communication/teamwork was the lowest rated measure in both Years 2 and 3. This suggests that changes in staffing and difficult negotiations with the nurses’ union may have affected this aspect of patient care. All other measures showed 1% or 2% increases in dissatisfaction. Diet and meals showed a sharper decline, from 7% to 11% dissatisfied.

It is difficult to draw strong interpretations on the basis of two different satisfaction surveys using different methodologies. However, more measures of hospital care showed declining levels of satisfaction than increases over the four years measured. Rooms, meals and employee communication/ teamwork were aspects of care showing the lowest ratings.

## **2. Psychiatric Inpatient Services**

Saint Vincent Hospital contracted with Capstan, a behavioral managed care organization, to manage the psychiatric unit in Year 1 through Year 3. This arrangement allowed the Hospital’s chief of psychiatry to remain as the unit chief, providing considerable continuity between the direct management in earlier years and Capstan’s management.

Beginning prior to the baseline period and continuing throughout the analysis period, the market for psychiatric inpatient services changed considerably as behavioral managed care practices were implemented. These included closed panels for Medicaid and other managed care services, with negotiated rate reductions for inpatient care, tighter controls on admissions and lengths of stay, and the introduction of new services designed to prevent hospitalization.

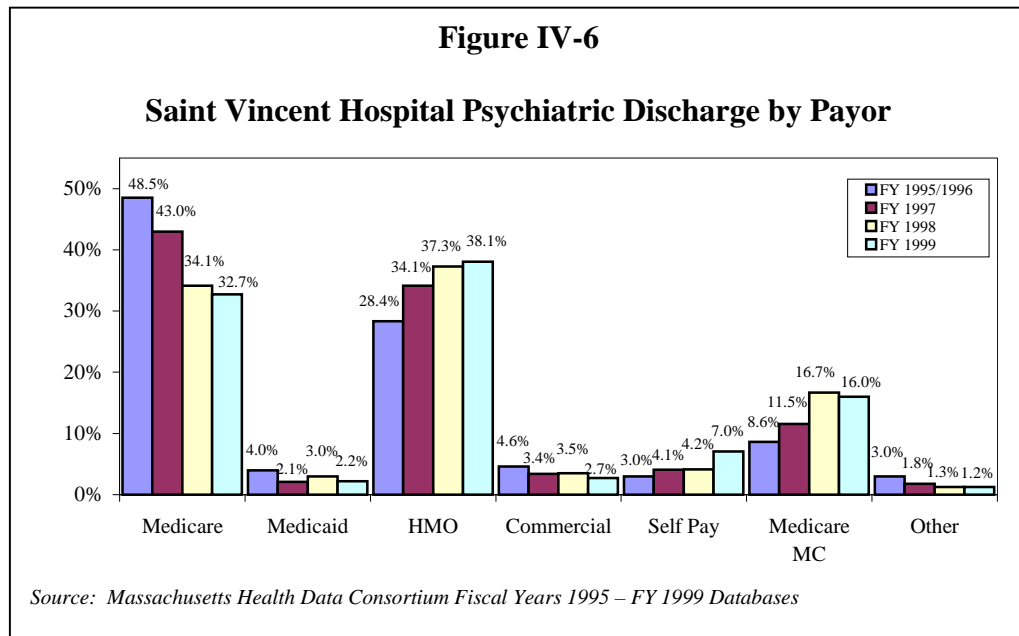
Saint Vincent Hospital was active during this period in applying for Medicaid and other closed panels, and pursued other options to strengthen its psychiatric program. The psychiatry department expanded by the addition of a new

Geriatric Unit, a partial hospitalization program and a Crisis Assessment Team in the Emergency Department. It also tested a psychiatry program in which nurse practitioners from the psychiatric service routinely saw patients in three area nursing homes.

These initiatives had mixed results. The hospital was not selected to participate in the Medicaid managed care panel. However, it did increase the HMO and managed Medicare clients it served. The ten-bed Geriatric Psychiatry Unit was opened during Year 2 and was closed during Year 3. No one from the hospital was available to discuss the reasons for this change. The Crisis Assessment Team continued. These changes left the hospital less well equipped to serve some kinds of clients, including those with a co-occurring substance abuse disorder and elderly clients.

*a. Payor Mix*

As depicted in Figure IV-6, *Saint Vincent Hospital Psychiatric Discharge by Payor*, Saint Vincent Hospital’s payor mix for psychiatric discharges experienced some significant changes over the five-year period. Medicare (non-managed care) decreased considerably over the analysis period to 32.7% as a proportion of psychiatric discharges, compared to an average of 48.5% in the baseline years. Other payors offset this decrease; the percentage of psychiatric discharges for Medicare Managed Care patients nearly doubled from 8.6% in FY 1995 to a high of 16.7% in FY 1998 and remained near that level in FY 1999. Similarly, HMO payors increased by 9% from baseline levels to constitute 38.1% of psychiatric discharges in FY 1999. Self-pay discharges showed an increasing trend over the period, intensifying in Year 3. The share of Medicaid discharges varied over the three-year analysis period, but remained below the baseline average.



b. *Partial Hospitalization*

The partial hospitalization program provided 3362 days of service in Year 2 and 6,663 days in Year 3. The percentage of Medicaid recipients receiving psychiatric partial hospitalization services was similar to the percentage receiving inpatient services. They used less than 1% of Year 2 service days, and about 4% of Year 3 service days.

c. *Ethnic Origin*

Table IV-16, *Saint Vincent Hospital Psychiatric Discharges by Ethnic Origin*, shows the psychiatry unit's inpatient ethnic distribution. It continued to differ from the hospital's overall ethnic mix which was 91.1% Caucasian in Year 3 (see Table IV-11, page IV-14). While in both cases a vast majority of discharges were white or Caucasian individuals, psychiatric services showed a slightly higher proportion of Caucasians. The distribution of psychiatric discharges did not change significantly between the baseline years and the assessment period.

Race	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
White	1,267	94.8%	1,059	95.4%	1,052	94.9%	1,071	94.2%
Spanish Speaking	37	2.8%	28	2.5%	27	2.4%	36	3.2%
African-American	27	2.0%	14	1.3%	23	2.1%	22	1.9%
Asian	1	0.1%	3	0.3%	5	0.5%	5	0.4%
Amer. Indian	2	0.1%	1	0.1%	0	0.0%	0	0.0%
Other	4	0.3%	5	0.5%	1	0.1%	3	0.3%
<b>Total</b>	<b>1,337</b>	<b>100.0%</b>	<b>1,110</b>	<b>100.0%</b>	<b>1,108</b>	<b>100.0%</b>	<b>1,137</b>	<b>100.0%</b>

*Source: Massachusetts Health Data Consortium Fiscal Years 1995 - FY 1999 Databases*

d. *Patient Residence*

Similar to the hospital overall, most discharges from the inpatient psychiatric unit were residents of Worcester, as shown in Table IV-17. The city of Worcester's share of psychiatric discharges decreased by 7% from the baseline, while the share of discharges from individuals living outside the primary service area increased by almost 8%.

**Table IV-17**

**Saint Vincent Hospital Psychiatric Discharges by Patient Residence**

Patient Residence	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	Avg. Psych. Dischg.	% of Psych. Dischg.	Psych. Dischg.	% of Psych. Dischg.	Psych. Dischg.	% of Psych. Dischg.	Psych. Dischg.	% of Psych. Dischg.
<b>Primary Service Area</b>								
Auburn	28	2.1%	20	1.8%	28	2.5%	17	1.7%
Boylston	5	0.4%	1	0.1%	1	0.1%	0	0.0%
Grafton	45	3.3%	28	2.5%	23	2.1%	22	2.2%
Holden	20	1.5%	10	0.9%	21	1.9%	20	2.0%
Leicester	15	1.1%	16	1.4%	21	1.9%	26	2.6%
Millbury	47	3.4%	50	4.5%	48	4.3%	35	3.5%
Shrewsbury	44	3.2%	32	2.9%	35	3.1%	28	2.8%
West Boylston	10	0.7%	10	0.9%	8	0.7%	10	1.0%
Worcester	646	47.9%	486	43.4%	476	42.7%	409	40.4%
<i>Sub-Total</i>	858	63.6%	653	58.4%	661	59.2%	567	56.0%
<b>Secondary Service Area and Other Areas</b>								
Secondary and Other Areas	491	36.4%	466	41.6%	455	40.8%	446	44.0%
<b>Total</b>	<b>1,349</b>	<b>100.0%</b>	<b>1,119</b>	<b>100.0%</b>	<b>1,116</b>	<b>100.0%</b>	<b>1,013</b>	<b>100.0%</b>

*Source: Massachusetts Health Data Consortium Fiscal Years 1995, 1996, FY 1997, FY 1998 and FY 1999 Database*

*e. Access Standards*

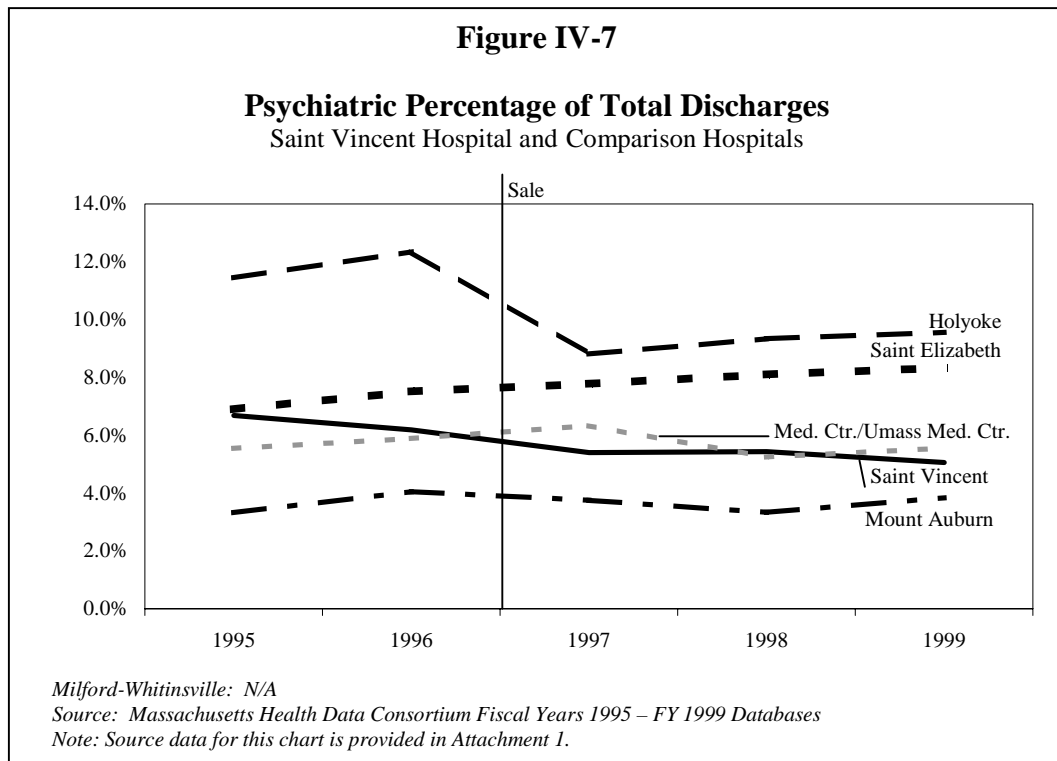
During the baseline period, the psychiatry unit measured the timeliness of its response to requests for consultation to the emergency department, to other hospital departments, and for provision of psychodiagnostic testing. Subsequently, psychiatric department staff were detailed to the emergency room, lessening the need for the unit to consult. The department measured the percentage of requests for consultation to intensive care units within 2 hours and to all other departments within 24 hours. No measures were provided for Year 2.

In Year 1 the department responded to 80% of requests within these time frames, an improvement from the prior year when only 54% of requests received a timely response. Year 3 showed a similar level, with compliance rates between 78% and 83%. This level of compliance with standards is less than the levels reported by other hospital departments from whom we requested data on access performance, most of whom reported performance at or close to 100%. With relatively short lengths of stay, delay in provision of almost 20% of requested psychiatric consultations can be a significant

problem. However, the data do not indicate whether the responses were late by minutes, hours or days, information that would allow us to better determine the significance of the problem.

f. *Change Between Years in Comparison to Peer Hospitals*

Saint Vincent Hospital psychiatric inpatient discharges declined as a share of total discharges during the two-year baseline and for the three years following, as shown in Figure IV-7. Year 3 represented a decline of 24% from baseline percentages. Together with the decrease in psychiatric patient days noted on page IV-9, the amount of inpatient psychiatric services provided by Saint Vincent Hospital has eroded. While no doubt, Saint Vincent Hospital was affected by the dramatic changes in the psychiatric market described earlier, other hospitals experienced mixed trends in their share of psychiatric discharges. UMass/Memorial was stable after experiencing a peak in FY 1997. Saint Elizabeth increased slowly throughout the period, Holyoke Hospital increased from a dramatic low experienced in FY 1997, and Mount Auburn experienced only small fluctuations. Comparing the average psychiatric discharges during the baseline to the average psychiatric discharges in the analysis period, Saint Vincent Hospital experienced a 20% decrease. Only one other hospital, Mount Auburn, experienced a decrease of 7%. Notably, Holyoke Hospital, whose share of psychiatric discharges dropped dramatically, actually experienced a 5% increase in psychiatric discharges, but had dramatic jump in non-psychiatric discharges that impacted the relative share of psychiatry.





*g. Patient Satisfaction*

In previous years, Saint Vincent Hospital had data on the satisfaction of patients who had been served in the psychiatry unit using a Press, Ganey Associates survey. The hospital's switch to the new survey methodology during Year 2 specifically excluded psychiatric patients. The discontinuation of the consumer satisfaction surveys that included this department, make it more difficult for us to assess access to services for this vulnerable population.

We did get some qualitative feedback from community informants. In Year 2 consumers and family members who had used Saint Vincent Hospital inpatient psychiatric services indicated some concern about timely assessment in the emergency room for admission to inpatient care.

Community providers from a variety of organizations also expressed concerns about Saint Vincent psychiatric services, focused primarily on those programs that were eliminated during Year 3, and describing the possibility that the hospital's commitment to psychiatric services was declining. Respondents indicated that there was a prolonged period of uncertainty as to whether the recently added geriatric psychiatry unit had been closed or not. They reported receiving conflicting information about the status of this unit from different sources, making it difficult to know whether to refer elderly patients with psychiatric needs. Several individuals expressed concerns that the Saint Vincent's partial hospital programs would also be closed.<sup>4</sup>

*h. Outreach*

Over the three-year assessment period, Saint Vincent Hospital provided grants to certain community outpatient mental health organizations including:

- ◆ Community HealthLink: a \$100,000 pledge for facility renovation and support of social rehabilitation and housing rehabilitation services for this major Medicaid outpatient psychiatric care provider.
- ◆ Genesis Club: support for capital improvements for a consumer operated rehabilitation program. The hospital also provided flexible employment opportunities for Genesis Club members at the Hospital.
- ◆ McCauley Nazareth Home for Boys: a small grant supported psychiatric and psychological consultation for at risk boys.

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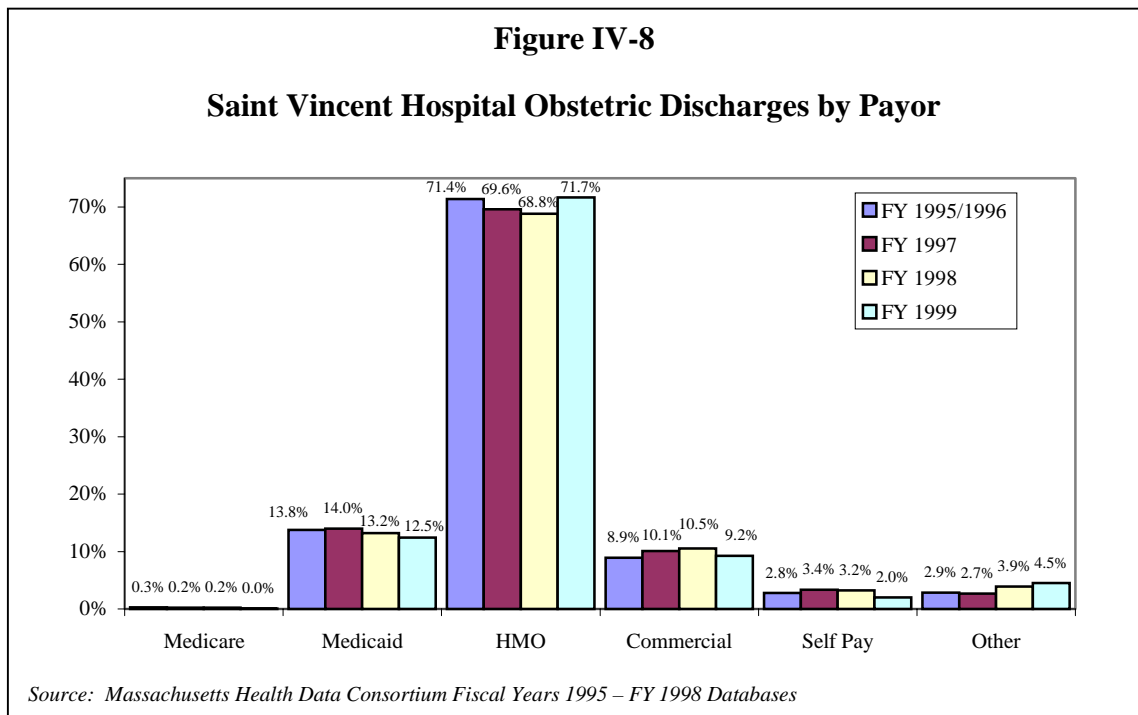
<sup>4</sup> In fact Saint Vincent Hospital's psychiatric partial hospitalization programs were closed several months past the end of Year 3.

### 3. Obstetric Inpatient Services

Saint Vincent Hospital's obstetric and gynecological services did not experience major changes during Fiscal Year FY 1999, though a new acting chief with 10 year's tenure in the department was appointed. A community respondent reported that the atmosphere of the unit was more formal than in the past, and that there were new risk management policies, but that the quality of care remained high. Another reported longer waiting times for OB and X-ray services, perhaps related to the higher volume of the department, as reflected in its increased patient days (see Table IV-5). The Hospital continued to operate an Inpatient Obstetrics Unit, a Newborn Nursery, an Outpatient Obstetrics Unit, and a small Outpatient Gynecology Unit. Utilization of inpatient acute services decreased to a level somewhat below the baseline average while newborn nursery days increased somewhat to a level above the baseline average. The Unit began participating in a hospital-wide initiative to identify areas that could be targeted for continuous quality improvement activities.

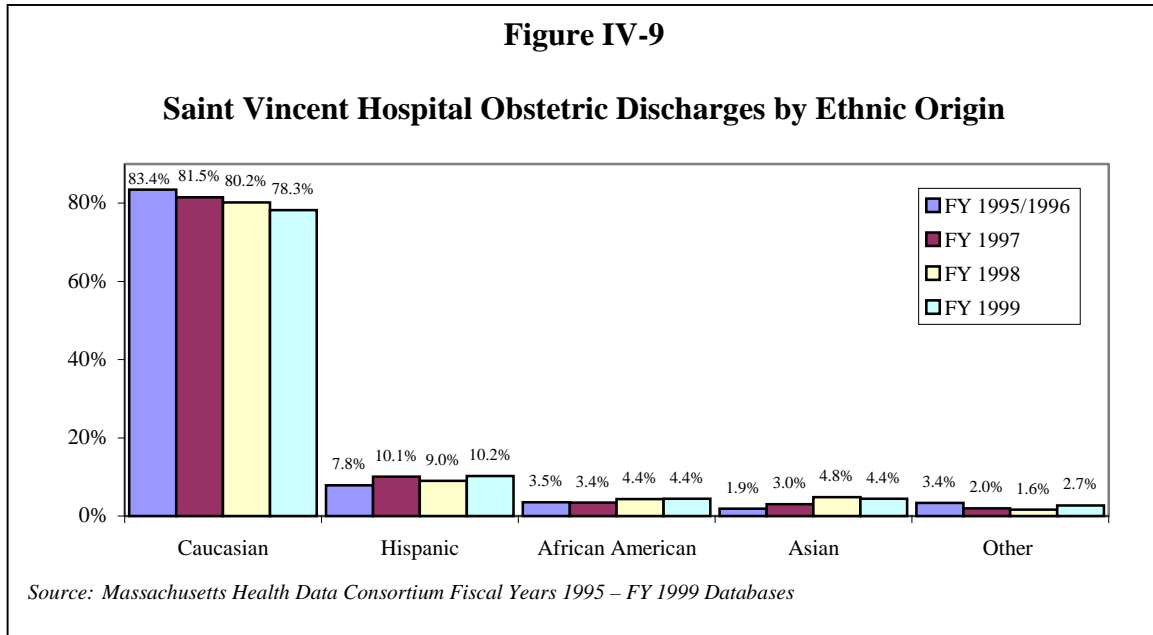
#### a. Payor Mix

The payor mix for obstetric services did not change greatly over the five-year analysis period as shown in Figure IV-8, *Saint Vincent Hospital Obstetric Discharges by Payor*. HMOs continued to be the largest payor, at 72% of discharges in FY 1999. HMO discharges reversed a three-year declining trend, increasing up to baseline levels in Year 3. The next largest payor, Medicaid, accounted for 13% of discharges, down slightly from prior years. Not surprisingly, because of presumptive eligibility rules, Medicaid's share of obstetric discharges remained considerably larger than Medicaid's share of overall hospital services, which was 5.6% in FY 1999. Self-pay discharges dropped in Year 3 to below baseline levels.



b. *Ethnic Group*

Figure IV-9, *Obstetric Discharges by Ethnic Origin*, shows that the obstetrics department has steadily increased the number of patients it serves from non-white ethnic groups over the study period. This ethnic distribution is quite different from that of the hospital overall with 78.3% of the discharges being Caucasian in Year 3 (compared to 91.1% overall). Obstetric discharges declined for Caucasians (78.3% compared to 83.4% in the baseline), and Hispanic, African-American, and Asian increased. In addition, the department chief reported that the number of Kosovo Albanians served has been increasing.



c. *Patient Residence*

The obstetrics department experienced changes in the residences of obstetrics patients that differed from those experienced by the hospital as a whole. Obstetrics experienced a small increase in the share of patients from the city of Worcester, and a small decrease in the share of patients from the secondary service area, as shown in Table IV-18. This change differed from the decrease in services provided to city of Worcester residents by the hospital overall. (See Table IV-9.)

**Table IV-18  
Saint Vincent Hospital Obstetric Discharges by Patient Residence**

Patient Residence	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	OB Dischg.	% of OB Dischg.	OB Dischg.	% of OB Dischg.	OB Dischg.	% of OB Dischg.	OB Dischg.	% of OB Dischg.
<b>Primary Service Area</b>								
Auburn	70	2.9%	71	3.2%	51	2.4%	70	3.3%
Boylston	15	0.6%	11	0.5%	8	0.4%	12	0.6%
Grafton	65	2.7%	60	2.7%	52	2.4%	61	2.9%
Holden	65	2.7%	51	2.3%	68	3.2%	56	2.6%
Leicester	52	2.2%	52	2.3%	42	2.0%	56	2.6%
Millbury	111	4.7%	110	4.9%	100	4.7%	78	3.7%
Shrewsbury	106	4.4%	84	3.8%	98	4.6%	80	3.8%
West Boylston	15	0.6%	24	1.1%	19	0.9%	16	0.8%
Worcester	920	38.7%	881	39.4%	831	39.1%	897	42.3%
<i>Sub-Total</i>	<i>1,417</i>	<i>59.7%</i>	<i>1,344</i>	<i>60.2%</i>	<i>1,269</i>	<i>59.7%</i>	<i>1,326</i>	<i>62.5%</i>
<b>Secondary Service Area and Other Areas</b>								
Secondary and Other Areas	957	40.3%	890	39.8%	857	40.3%	796	37.5%
<b>Total *</b>	<b>2,374</b>	<b>100.0%</b>	<b>2,234</b>	<b>100.0%</b>	<b>2,126</b>	<b>100.0%</b>	<b>2,122</b>	<b>100.0%</b>

\* Discharges include newborn discharges.

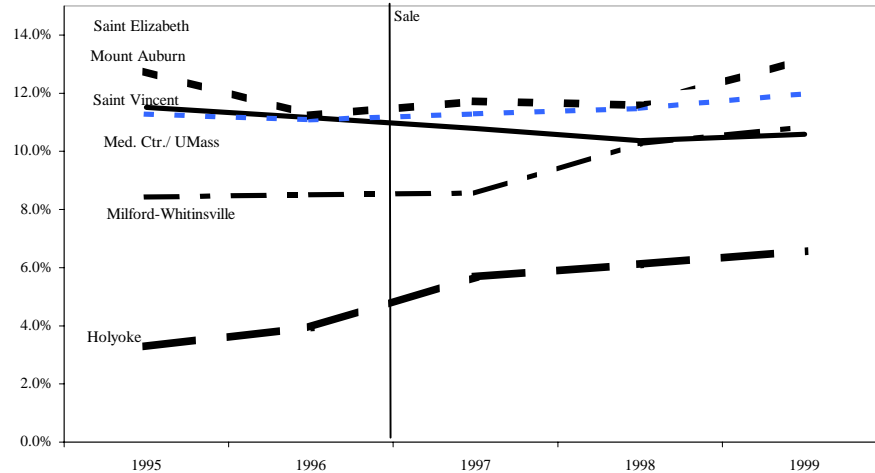
Source: Massachusetts Health Data Consortium FY 1995-FY 1999 Databases

*d. Change Between Years in Comparison to Peer Hospitals*

Obstetric discharges at Saint Vincent Hospital decreased steadily but slowly between 1995 and FY 1999 both in number of discharges and as a percentage of total discharges, while the UMass Medical Center showed a slow increase. Like Saint Vincent Hospital, Saint Elizabeth Hospital experienced a decrease in number and share of obstetric discharges, but the other peer hospitals experienced increases.

**Figure IV-10**

**Obstetric Percentage of Total Discharge**  
Saint Vincent Hospital and Comparison Hospitals



UMass Medical Center: N/A

Source: Massachusetts Health Data Consortium Fiscal Years 1995 – FY 1999 Databases

Note: Source data for this chart is provided in Attachment 1.

*e. Quality Indicators*

The obstetrics department compiles data on aspects of its process and birth outcomes to report to the Department of Public Health. (See Table IV-19.) In comparison to the Baseline average, the percentage of mothers breast feeding on discharge increased each year, a favorable change. Use of epidural anesthesia varied between 46% and 50% with no clear trend. The percentage of cesarean deliveries increased, an unfavorable change.

**Table IV-19**

**Saint Vincent Hospital Obstetric Services**  
**Selected Indicators of Process and Outcome**

Indicator	Avg. FY 1995-1996	Fiscal Year FY 1997	Fiscal Year FY 1998	Fiscal Year FY 1999
Total Births	2,201	2,000	2,048	1,959
Use of Epidural Anesthesia	49%	46%	50%	48%
Percent Cesarean Deliveries	14%	15%	17%	17%
Mothers Breast Feeding on Discharge	64%	65%	66%	67%

Source: Saint Vincent Hospital Statistics for Submission to the Department of Public Health

*f. Patient Satisfaction*

We do not have continuous and comparable data on client satisfaction for the full five-year analysis, which limits our ability to assess access for vulnerable populations. However, the available data is positive. A satisfaction survey conducted between May and August of 1996 and the same period FY 1997 showed an increase in client satisfaction with the Obstetrics Department. The small sample of four Saint Vincent Hospital consumers in our Year 3 survey who used obstetric services rated the access and quality of pre- and post-natal services as 6 or 7 on a scale where 7 was the most favorable rating.

*g. Staffing*

The department reported no significant issues in staffing obstetrical services during the third year of follow-up. However, the number of nurse-midwives was reduced from 8 to 7, the level of staffing in the Baseline and Year 1. Saint Vincent continued to provide 24-hour coverage by a neonatologist and pediatrician, and in-house 24-hour anesthesia coverage. One physician continues to provide obstetrical services in a hospital clinic for people without insurance coverage. Generally, individuals are provided services in the clinic until they receive insurance coverage. The hospital also uses volunteers in the nursery and in its perinatal education programs.

*h. Outreach*

Over the three year assessment period, Saint Vincent Hospital worked closely with the Family Health Center (formally called Family Health and Social Services), a nearby community health center whose clients frequently deliver at Saint Vincent Hospital, and Pernet Family Health, which provides home based services for at-risk families. Both programs are supported by the Hospital's community benefit program. In the case of the Family Health Center, the funds support a bilingual labor coach program for non-English speaking women who deliver at Saint Vincent Hospital, a bilingual health educator/case manager, and obstetrical backup services to assist FHC physicians and residents. In addition, funding supports Pernet Family Health Service's case management, advocacy and home visiting program including a full-time outreach case manager and a part-time health aide for home visits.

## **C. OUTPATIENT SERVICES**

### **1. Overall Outpatient**

The two major sources of data regarding outpatient services at Saint Vincent Hospital were the Division of Health Care Finance and Policy cost reports (RSC-403) and Saint Vincent Hospital internal reports. Due to reporting

conventions, cost reports contain significantly fewer visit counts than internal data. Because of these differences, only tables drawn from the same source of data can be compared. Cost report data are used to describe outpatient volume revenue, and payor mix, and to compare those indicators to other hospitals. Internal hospital data are used for indications of patient demographics and residence.

a. *Outpatient Service Volume by Type*

Figure IV-11, *Saint Vincent Hospital Outpatient Service Volume by Type*, shows outpatient visits by type of service. The hospital's overall provision of outpatient services during the three-year assessment period increased from baseline levels, remaining above baseline levels despite dropping from the Year 2 high in Year 3. Clinic/ambulatory visits were the most frequent outpatient service, followed closely by emergency services. Clinic visits increased over the entire period, except for a decline in the last year, while emergency services remained at a very consistent level slightly higher than the baseline average. Ambulatory surgery services also experienced a considerable increase during the first two assessment years, but dropped to baseline levels in Year 3. Observation beds and fracture room visits both dropped from baseline levels.

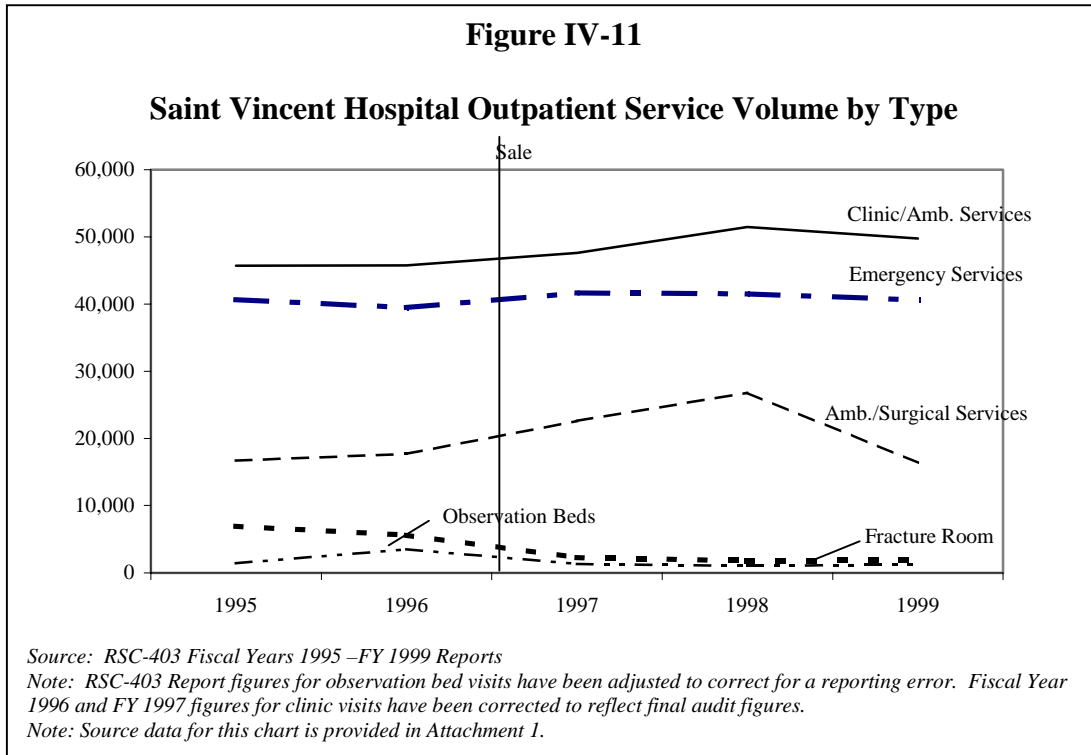
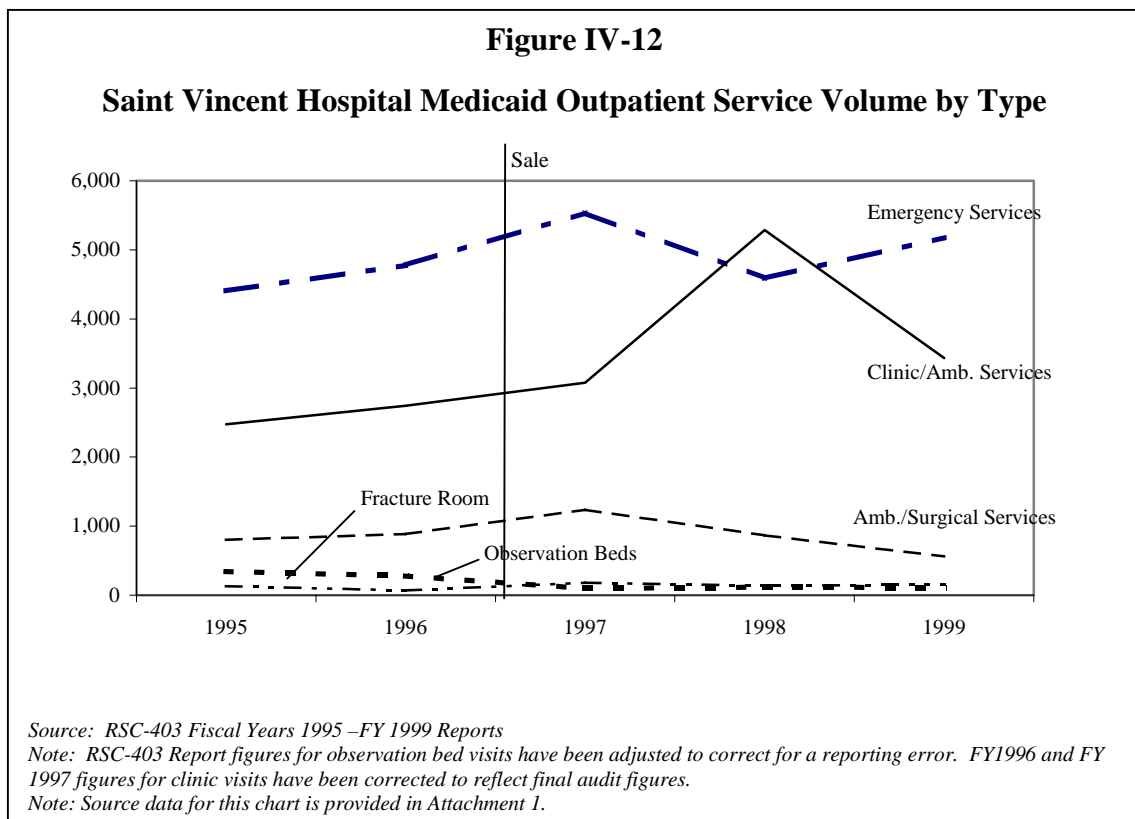


Figure IV-12, *Saint Vincent Hospital Medicaid Outpatient Service Volume by Type*, shows that Medicaid outpatient services experienced different patterns than overall outpatient services. Most notably, Medicaid recipients used fewer clinical ambulatory services than emergency services except in Year 2 when the pattern was briefly reversed. This contrasts to the overall pattern where clinic visits are more frequent, but is consistent with a tendency for Medicaid recipients to rely more extensively on emergency services. The reversal of this pattern in year two may have represented a desirable increase in the use of preventive and primary care services by Medicaid recipients. However, this desirable change was not maintained. In Year 3, the pattern of Medicaid service use was similar to that in Years 1 and earlier. Medicaid recipients showed similar patterns to overall patients in their use of other outpatient services. Ambulatory surgical services increased and then decreased, while use of observation beds and the fracture room decreased.

Medicaid visits maintained a larger share of total outpatient visits in Years 1 to 3 than the average of 7.3% in the baseline. This increasing share of Medicaid outpatient visits differs from the decreasing trend seen for inpatient services, and suggests that Saint Vincent Hospital is providing outpatient services for the growing number of Medicaid enrollees.





b. *Outpatient Visits by Town*

As shown in Table IV-20, *Saint Vincent Hospital Outpatient Services by Patient Residence*, the majority of patients receiving outpatient services in all four years were from the City of Worcester. However, the percentage of outpatient services provided to Worcester residents decreased from an average of 47.5% in the baseline period to a low of 42.4% in FY 1998. Services to Worcester residents increased somewhat in FY 1999, but remained below baseline levels. Correspondingly, the percent of patients residing outside of the primary service area was higher during the three-year assessment period than the baseline average. The share of outpatient services was generally stable for most towns in the primary service area, other than Worcester.

Patient Residence	Avg. FY 1995/1996		FY 1997		FY 1998		FY 1999	
	No. of Outpt. Visits	% of Total Visits	No. of Outpt. Visits	% of Total Visit	No. of Outpt. Visits	% of Total Visits	No. of Outpt. Visits	% of Total Visits
<b>Primary Service Area</b>								
Auburn	6,714	3.4%	6,717	3.2%	5,756	2.9%	6,252	3.2%
Boylston	860	0.4%	862	0.4%	653	0.3%	675	0.3%
Grafton	1,708	0.9%	1,755	0.8%	1,613	0.8%	1,815	0.9%
Holden	2,727	1.4%	3,307	1.6%	2,657	1.3%	2,748	1.4%
Leicester	2,708	1.4%	2,635	1.3%	2,482	1.2%	2,400	1.2%
Millbury	8,640	4.4%	9,494	4.5%	8,230	4.1%	7,536	3.9%
Shrewsbury	7,485	3.8%	8,189	3.9%	6,642	3.3%	7,374	3.8%
West Boylston	2,685	1.4%	2,700	1.3%	1,898	0.9%	2,796	1.4%
Worcester	93,841	47.5%	98,623	47.1%	85,565	42.4%	86,007	44.5%
<i>Sub-Total Core</i>	<i>127,365</i>	<i>64.5%</i>	<i>134,282</i>	<i>64.1%</i>	<i>115,496</i>	<i>57.3%</i>	<i>117,603</i>	<i>60.9%</i>
Other	70,147	35.5%	75,177	35.9%	86,109	42.7%	75,663	39.1%
<b>Total</b>	<b>197,511</b>	<b>100.0%</b>	<b>209,459</b>	<b>100.0%</b>	<b>201,605</b>	<b>100.0%</b>	<b>193,266</b>	<b>100.0%</b>

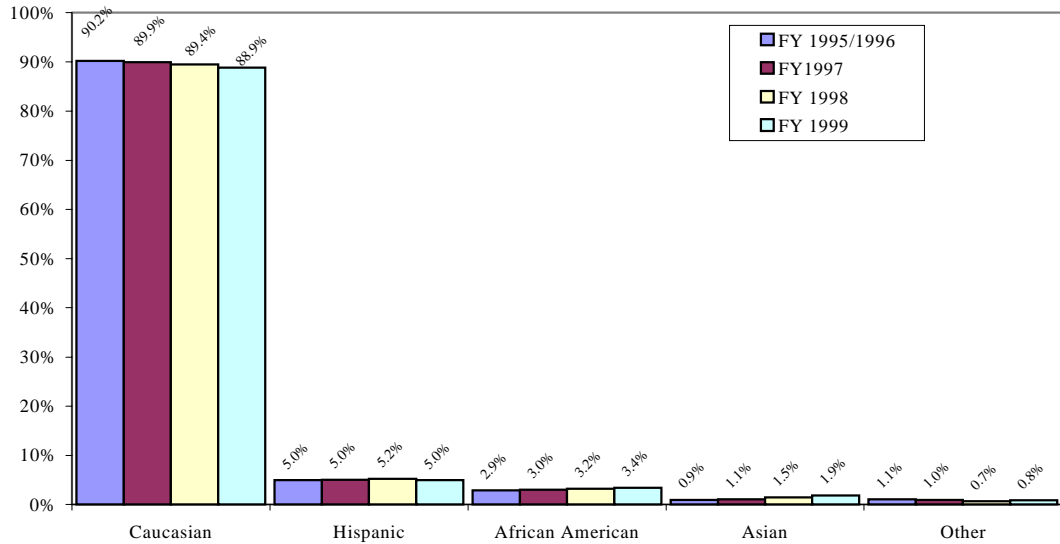
*Source: Saint Vincent Hospital Internal Reports, Fiscal Years 1995 - FY 1999*

c. *Outpatient Services by Race*

Figure IV-13 shows that the distribution of outpatient services by race was very stable over the five-year period with a 1% decrease in Caucasians and a corresponding increase in patients from other groups. The vast majority of individuals receiving outpatient services from Saint Vincent Hospital were white. In all four years, about 5% of patients were Hispanic, while approximately 3% were African-American. The small percentage of Asian patients increased from 1% to 2% over the period.

**Figure IV-13**

**Saint Vincent Hospital Outpatient Services by Race**



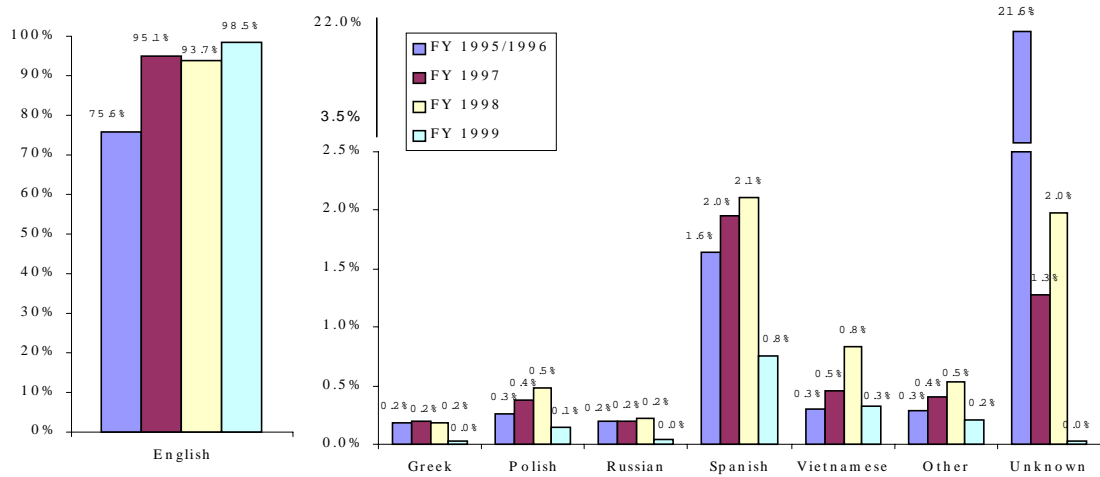
Source: Saint Vincent Hospital Internal Reports, Fiscal Years 1995 – FY 1999

*d. Outpatient Services by Primary Language*

As demonstrated in Figure IV-14, *Saint Vincent Hospital Outpatients by Primary Language Spoken*, the primary languages spoken by patients was also quite stable. English was the most common language spoken by individuals using Saint Vincent Hospital’s outpatient services in all five years. (The apparent increase in English speaking patients since the baseline is primarily due to increased identification of primary language, which caused a sharp decrease in the percentage of patients whose language was unknown.) The other language categories did not experience significant changes over most of the period but in Year 3, all the non-English language groups decreased from their previous levels. While the changes are small as a percentage of all outpatients, they represent substantial percentages of non-English language outpatients. However, the ethnic distribution figures for inpatient, outpatient and emergency services did not show changes of like magnitude for Hispanics or Asians. This suggests that, rather than showing a change in clientele, this pattern is more likely to indicate a change in how or when staff attempt to identify and document language and ethnicity during outpatient visits. Identification of fewer non-English speakers may affect their access to interpretation services. This issue is discussed in more detail in Section D.4.a.

**Figure IV-14**

**Saint Vincent Hospital Outpatients by Primary Language Spoken**



Source: Saint Vincent Hospital Internal Reports, Fiscal Years 1995 – FY 1999.

*e. Staffing*

As shown in Table IV-21, staffing (other than physicians) for Saint Vincent Hospital outpatient services was at a high in Year 2. This resulted in a higher ratio of non-physician FTEs per 1000 visits than in the baseline or the other two years of the assessment period. The increases were experienced primarily in the emergency department, ambulatory surgery, and in the addition of psychiatric day programs. The ratio dropped in Year 3 to levels more similar to the baseline and Year 1. This gross indicator suggests that outpatient-staffing levels were lower in two years of the assessment period.

**Table IV-21**

**Non-Physician FTE Compared to Total Ambulatory Visits**

Saint Vincent Hospital

Service Category	Avg. Fiscal Year 1995-1996			FY 1997		
	Non-Physician FTEs	Total Visits	FTE per 1,000 visits	Non-Physician FTEs	Total Visits	FTE per 1,000 visits
Routine Ambulatory Care Services	154.55	114,499	1.35	155.8	127,777	1.22
	FY 1998			FY 1999		
Routine Ambulatory Care Services	198.81	126,045	1.58	156.68	128,581	1.22

Source: RSC-403 Fiscal Years 1995 – FY 1999 Reports

## 2. Ambulatory Services

This section presents information about Saint Vincent Hospital ambulatory/clinic services. Saint Vincent Hospital operates a number of outpatient clinics and provides other outpatient treatment options. Data for all such non-emergency outpatient services are summarized here. (The Psychiatric Partial Hospital services are reported separately.) In addition, Saint Vincent Hospital's "ambulatory clinic" program is also described. This program is part of the outpatient department and provides important services mainly for Medicaid and free care clientele.

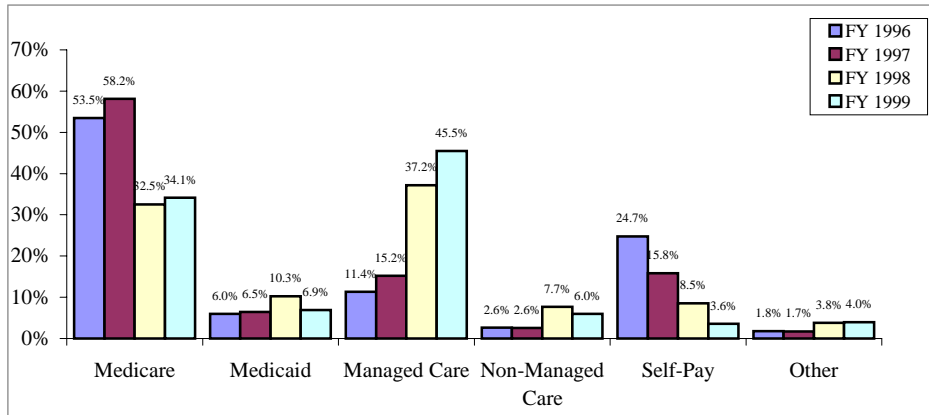
### *f. Clinic and Ambulatory Service Visits by Payor*

Saint Vincent Hospital's payor mix for clinic and ambulatory services is shown in Figure IV-15, *Saint Vincent Hospital – Clinic/Ambulatory Service Visits by Payor*. Outpatient payor mix appeared to show a number of dramatic changes between the baseline period and the following three years. However, both DMA and the hospital agree that errors appear to have been made in categorizing FY 1998 outpatient visits between Medicare and managed care, resulting in the appearance of dramatic shifts in payor mix. Apparently, similar problems continued to exist in the Year 3 data. While these two payors appear to have reversed their relative prominence, errors or changes in methods of categorizing data are likely responsible for these figures and obscure any real changes that occurred in Years 2 and 3 in Medicare and managed care shares.

The share of other payors was not similarly affected. Payors of vulnerable populations showed changes. Self-pay visits fell dramatically from the 25% share in the second baseline year to only 4% in Year 3. Medicaid showed a slow increase from 6% to 7% over the period, with a brief jump to 10% in Year 2, which was not maintained. While some decrease in self-pay is consistent with increased ability to enroll uninsured patients into Medicaid; there is not a corresponding increase in Medicaid. However, given the large increase in Fallon's Medicaid enrollment, it is likely that a number of these patients may have enrolled into a Medicaid managed care plan and be counted in the managed care category rather than as Medicaid. Our interviews with community informants and ambulatory department staff described later in this section provide some additional information to help interpret these data on Saint Vincent Hospital's services for uninsured patients.

**Figure IV-15**

**Saint Vincent Hospital - Clinic/Ambulatory Service Visits by Payor**



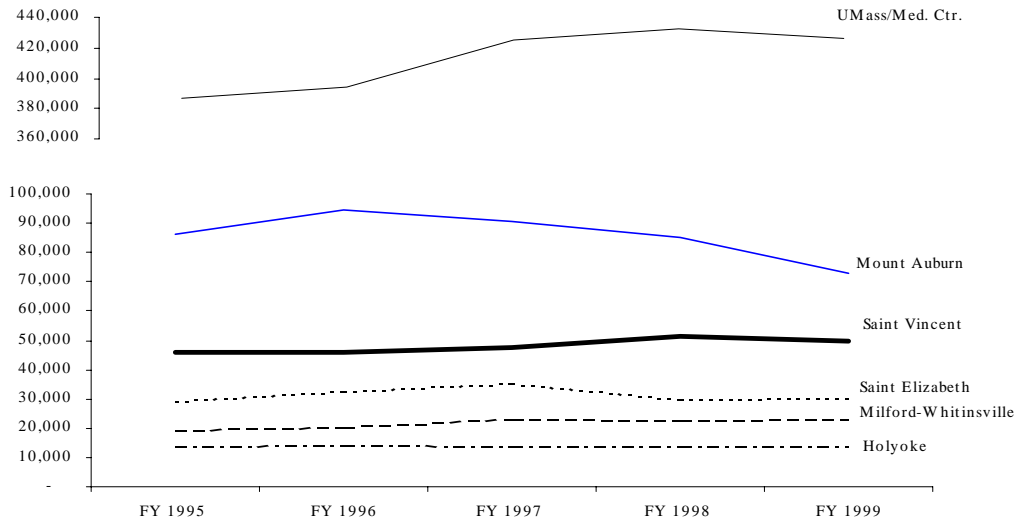
Source: RSC-403 Fiscal Years 1995 – FY 1999 Reports  
 Note: Fiscal Year 1996 and FY 1997 figures have been corrected to reflect final audit figures.

**g. Volume Change in Ambulatory/Clinic Visits Compared to Peer Hospitals**

Figure IV-16, *Volume Change in Ambulatory/Clinic Visits*, shows that Saint Vincent Hospital experienced a slow increase in ambulatory visits. UMass Medical Center leveled off after a period of considerable growth, on a base more than three times larger than any of the other hospitals included in this report. Of the other peer hospitals, only Milford-Whitinsville experienced a larger increase from the baseline than Saint Vincent Hospital. The others showed decreases, or more gradual increases than Saint Vincent Hospital.

**Figure IV-16**

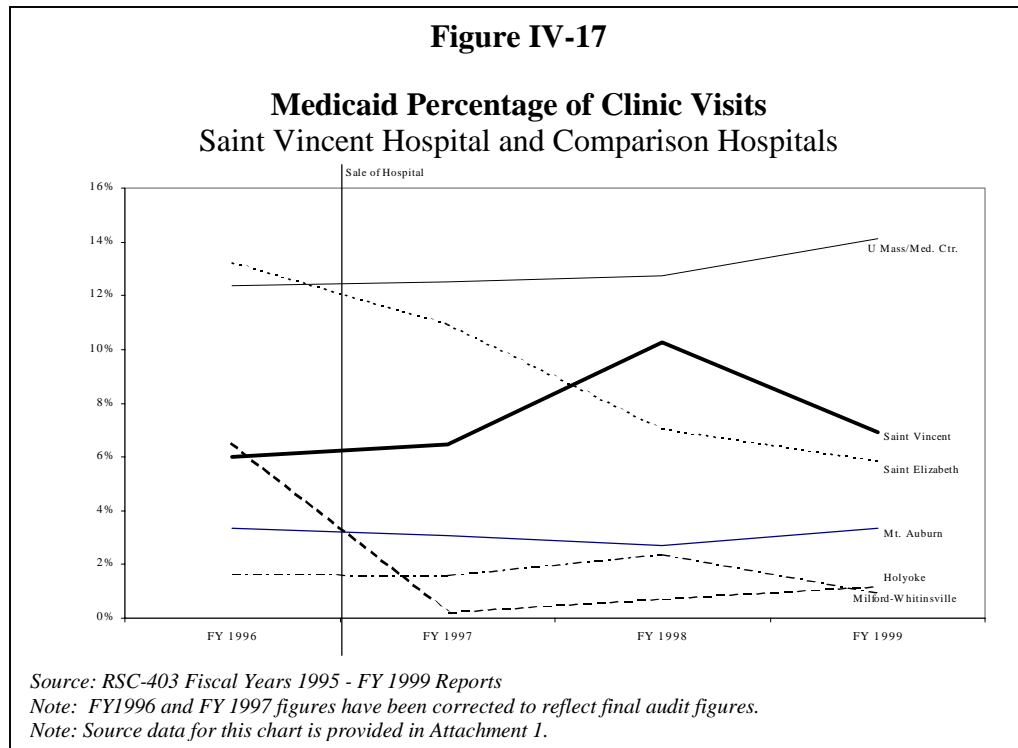
**Volume Change in Clinic/Ambulatory Visits Compared to Peer Hospitals**



Source: RSC-403 Fiscal Years 1995 - FY 1999 Reports  
 Note: Fiscal Year 1996 and FY 1997 figures have been corrected to reflect final audit figures.  
 Note: Source data for this chart is provided in Attachment 1.

*h. Medicaid Reimbursed Clinic Visits*

Figure IV-17, *Medicaid Percentage of Clinic Visits*, compares trends in Medicaid outpatient visits at Saint Vincent Hospital to trends at the comparison hospitals. (This analysis excludes emergency room visits.) The two Worcester hospitals, Saint Vincent Hospital and UMass/Memorial experienced continuous growth in the share of Medicaid clinic visits from the second year of the baseline. Saint Vincent experienced a considerable jump in Medicaid share in FY 1998, but dropped back to a level consistent with its earlier trend of slow increase. In contrast, the peer hospitals experienced either a stable share of Medicaid clinic visits or considerable decreases in Medicaid share. These data suggest that Saint Vincent Hospital is doing relatively well at providing outpatient services for Medicaid recipients.



*i. Saint Vincent Hospital Ambulatory Clinic Program*

Saint Vincent Hospital’s ambulatory clinic program is a set of related clinics in which medical residents, supervised by a preceptor, provide services to patients, many of whom receive services in the hospital’s free care program. The Preceptor for the Ambulatory Clinic indicated that patient volume increased in these clinics. The clinics participate as a Primary Care Clinician in Medicaid’s managed care program. The number of Medicaid recipients selecting the clinic as their primary care clinician

increased from baseline levels, with 169 in FY 1997, 147 in FY 1998, and 190 in FY 1999.

In Year 2, the preceptor reported that access to free care improved for ambulatory clinic patients. He described an improvement in the timeliness of social workers' response to ambulatory clinic patients, with social workers generally arriving within five or ten minutes of a request, while the patients are still seeing the physician. The social workers assess patients' eligibility for Medicaid, Medicare, or hospital free care, and assist them in completing applications for available public health benefits. Patients eligible for free care were getting their acceptances sooner, which entitled them to referrals for other hospital services. As described in Chapter V, Section A.3, the hospital reached agreement with its physicians that they waive their professional fees for patients eligible for hospital free care. While many physicians previously waived their fees when requested by a patient or the hospital, the existence of a formal agreement to do so made it easier to refer patients to other hospital physicians. These improvements attracted other clients. In addition, more patients who were admitted on an inpatient basis inquired about outpatient free care services.

In Year 3, a new clinic director reported a number of changes in the clinic's clientele. The number of patients served increased 45% due to aggressive outreach from the hospital's free clinics for elders. He also reported that the number of people who were eligible for Medicaid under expanded eligibility criteria increased substantially, reducing the percentage of free care clients in the ambulatory clinic from 84% to 50%. The remainder consists of 30% Medicaid and 20% managed care. This description of the Ambulatory Clinic's activities and the hospital's procedures for securing coverage for free-care clients was consistent with the perceptions of a number of community informants. They commented that Saint Vincent Hospital was increasingly effective in enrolling ambulatory clinic clients and those served in elderly outreach clinics onto Medicaid or some other form of coverage.

These perceptions about the hospital's services to Medicaid and free-care clients differ from the payor mix figures presented in Figure IV-15, which includes all Saint Vincent Hospital outpatient services. We believe that the consistency between the hospital's description of its Medicaid enrollment procedure and community informant perceptions gives weight to the likelihood that the decrease in free care is due to the hospital's significant efforts to serve uninsured clients and enroll them in Medicaid. As mentioned previously, those who enroll in a Medicaid HMO cannot thereafter be distinguished from non-Medicaid members of the HMO and would be counted as managed care clients.

*j. Access Standards*

The clinic expanded service hours by offering Thursday night services. However, the increase in patients lengthened the wait time for a new visit from 10 days to 14 days. In previous years, the ambulatory clinic set access standard that called for providing urgent care the same day as the request, some types of follow-up and initial visits within seven working days of the request, and remaining follow-up and new visits within 14 working days of the request. Twenty-one days were allowed for initial prenatal visits. The ambulatory clinics documented that they were able to meet these standards 100% of the time during calendar FY 1997 and FY 1998. However, the clinic discontinued collection of these data in FY 1999. This limits our ability to analyze the extent and possible impact of the increased wait for service described to us.

*k. Staffing*

The staffing of the clinics remained the same from the baseline through Year 2. Late in Year 2, the clinics were brought under the management of the Nurse Manager, who was also responsible for the Emergency Department. According to hospital staff, the intent of the change was to bring similar departments under common management, creating efficiencies at the management level. Year 3 saw expansion of this program. Toward the end of the year, the preceptor, who had been a 1/3<sup>rd</sup> time position, was replaced by a full-time director. Other staffing was increased with the addition of a nurse, a technician and an administrative position.

*l. Outreach*

Outreach efforts remained significant throughout the baseline and follow-up period. The clinic continued to work closely with the Saint Vincent Hospital Emergency Department, which referred patients determined not to have a PCC to the Ambulatory Clinic. The clinic continued to receive referrals for certain specialty services from the Family Health Center (previously known as Family Health and Social Services), a community health center. In addition, a Robert Wood Johnson funded initiative, Worcester Health Care Outreach, which seeks to identify uninsured individuals and assist them to access health services, is making referrals to the Ambulatory Clinic. Finally, the clinics worked closely with Saint Vincent Hospital's elderly outreach clinics.

### **3. Access to Emergency Services**

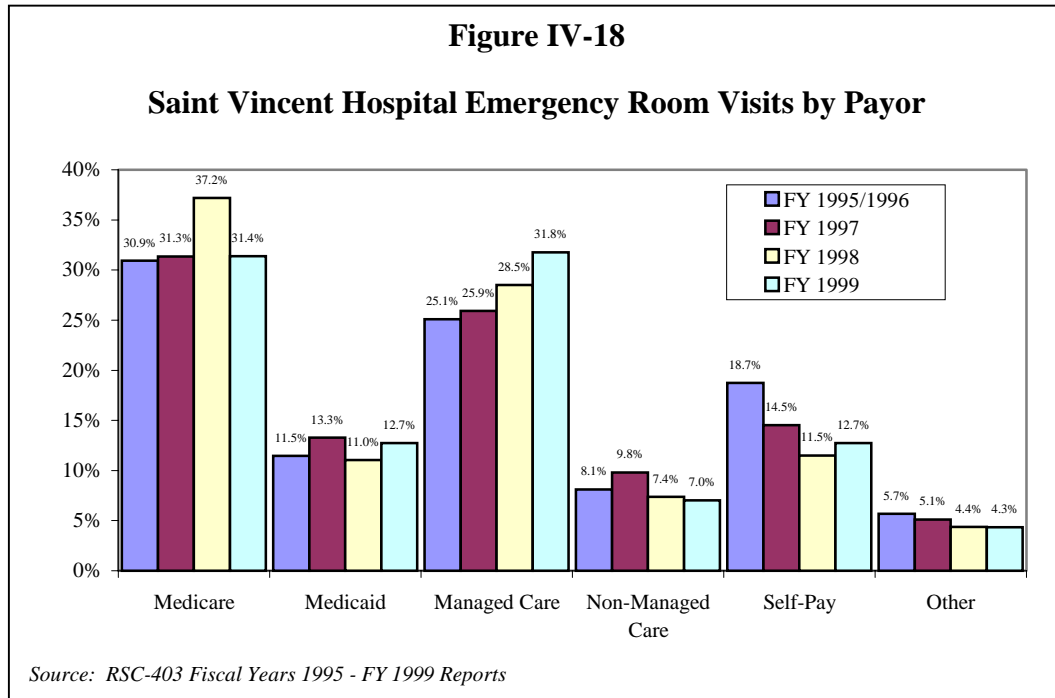
During the assessment period, the Emergency Department slowly recovered from a loss of four staff physicians during Year 1, and broadened staff capabilities. Two new physicians and several emergency technicians were added in Year 2 and 3. Ten hours of moonlighting physician time and a Director of Physician Assistants were added to the staff, and a tenth nurse was assigned during busy periods in Year 3. By Year 3, the emergency department staff



included 2 Spanish speaking physician assistants and a Vietnamese speaking doctor, and more of the department's physicians had been certified in pediatric emergency medicine, enabling the department to handle pediatric cases at any time. Both administrative and technical personnel also improved their computer skills, enabling increased staff autonomy. In Year 3 the department received a new ultrasound machine for serious trauma use.

*m. Emergency Services by Payor*

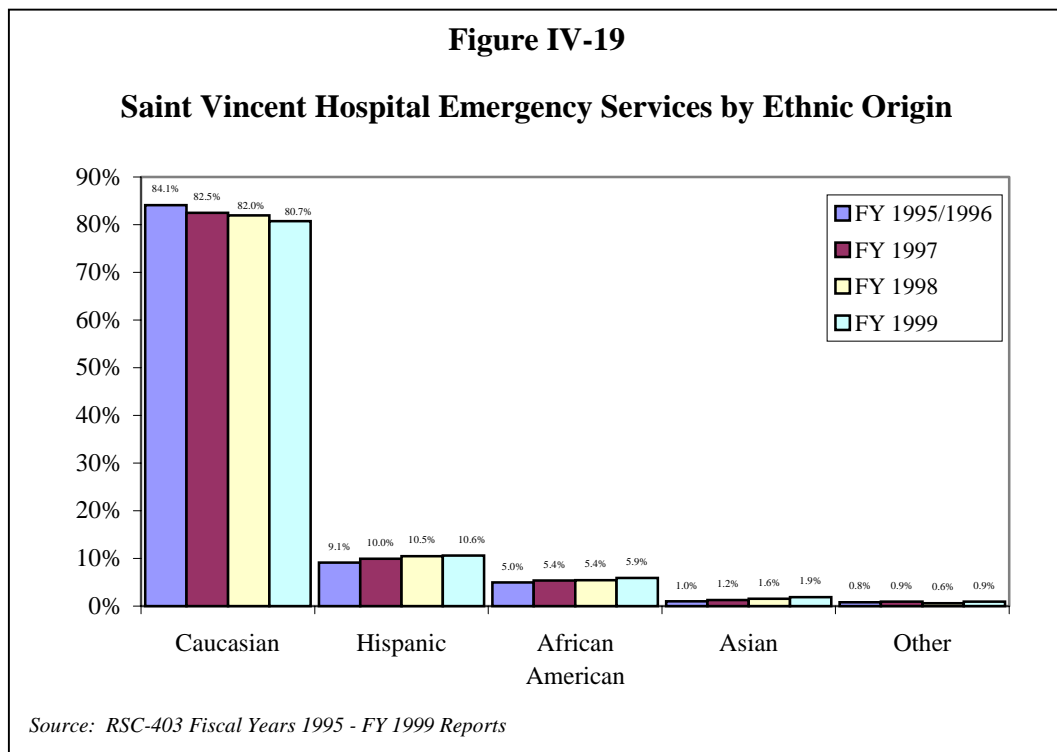
Analyzing emergency services by payor can provide valuable information about access to care for low-income and uninsured individuals, as emergency services are often disproportionately used by Medicaid patients or self-pay individuals. The total number of emergency room visits at Saint Vincent Hospital increased slightly from baseline levels during Years 1 and 2. It fell in Year 3, but not below the average number of visits provided during the baseline period. Payor mix showed a number of changes over the analysis period as shown in Figure IV-18, *Saint Vincent Hospital Emergency Room Visits by Payor*. Medicare, including fee-for-service and managed care, was the largest payor, and accounted for approximately 30% of emergency visits, except in Year 2, when its share jumped to 37%. The percent of emergency room visits provided to Managed Care patients increased every year from the baseline, experiencing its largest increase between Years 2 and 3, and equaling Medicare's share for the first time. Part of this increase may be attributable to recent legislation that requires HMOs to cover emergency services that any prudent layperson would use. It may also reflect increased enrollment of previously self-pay clients into Medicaid HMOs. The Medicaid percentage of emergency visits varied from year to year, ranging from 11% to 13%. In Year 3, the percentage of self-pay patients reversed a downward trend, but remained below the share



provided in the baseline. The increases experienced in Medicaid and self-pay between Years 2 and 3 somewhat diminishes previously expressed concerns that these vulnerable client groups may have lost access to Saint Vincent Hospital emergency services.

*n. Emergency Services by Ethnic Origin*

Figure IV-19, *Saint Vincent Hospital Emergency Services by Ethnic Origin*, indicates that Hispanics and African-Americans use Saint Vincent Hospital emergency services more frequently than they use overall outpatient services (see Figure IV-13) or inpatient services (see Figure IV-11). Utilization by the Hispanic, African-American, and Asian populations steadily increased from 1995 to FY 1999.



*o. Emergency Services by Patient Residence*

As shown in Table IV-22, *Saint Vincent Hospital Emergency Services by Patient Residence*, the majority of emergency room services were provided to City of Worcester residents, approximately 60% until the final analysis year, when Worcester’s share dropped to 58%. The representation from all other towns held fairly steady till Year 3, when the secondary service area increased its share by about 2%.

**Table IV-22**

**Saint Vincent Hospital Emergency Services by Patient Residence**

Patient Residence	Average Fiscal Year 1995-1996		Fiscal Year FY 1997		Fiscal Year FY 1998		Fiscal Year FY 1999	
	Number of ER Visits	Percent of Total Visits	Number of ER Visits	Percent of Total Visits	Number of ER Visits	Percent of Total Visits	Number of ER Visits	Percent of Total Visits
<b>Primary Service Area</b>								
Auburn	961	3.2%	1,015	3.3%	1,018	3.3%	1,017	3.5%
Boylston	107	0.4%	105	0.3%	90	0.3%	105	0.4%
Grafton	206	0.7%	212	0.7%	235	0.8%	246	0.9%
Holden	353	1.2%	347	1.1%	416	1.3%	369	1.3%
Leicester	402	1.4%	422	1.4%	442	1.4%	372	1.3%
Millbury	1,271	4.3%	1,344	4.3%	1,380	4.4%	1,227	4.3%
Shrewsbury	806	2.7%	760	2.4%	730	2.3%	711	2.5%
West Boylston	422	1.4%	432	1.4%	343	1.1%	474	1.7%
Worcester	17,931	60.2%	19,044	61.3%	18,837	60.5%	16,677	58.1%
<i>Sub-Total Core</i>	<i>22,457</i>	<i>75.5%</i>	<i>23,681</i>	<i>76.2%</i>	<i>23,491</i>	<i>75.4%</i>	<i>21,198</i>	<i>73.8%</i>
Other	7,306	24.5%	7,405	23.8%	7,651	24.6%	7,518	26.2%
<b>Total</b>	<b>29,763</b>	<b>100.0%</b>	<b>31,086</b>	<b>100.0%</b>	<b>31,142</b>	<b>100.0%</b>	<b>28,716</b>	<b>100.0%</b>

*Source: Saint Vincent Hospital Internal Reports, Fiscal Years 1995 – FY 1999*

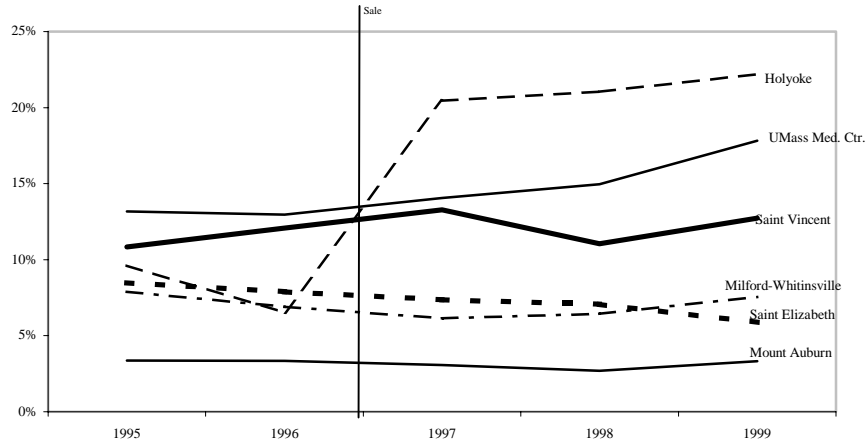
*p. Medicaid Emergency Room Visits in Comparison to Peer Hospitals*

As demonstrated in Figure IV-20, Medicaid Percentage of Emergency Room Visits, Saint Vincent Hospital’s Medicaid visits increased between Year 2 and Year 3. Since overall emergency visits decreased slightly, the Medicaid share of emergency visits increased as well. This increase reversed the trend experienced between Years 1 and 2, and represented an overall increase from the baseline, both in number of Medicaid visits and in Medicaid share. However, the other Worcester hospital experienced a much steeper increase in both Medicaid visits and Medicaid share from the baseline period, suggesting that its relative importance as a provider of emergency services to Medicaid recipients has been increasing.

With the exception of Holyoke, which experienced a dramatic increase from the baseline period, peer hospitals were generally stable; showing small increases or decreases in Medicaid share.

**Figure IV-20**

**Medicaid Percentage of Emergency Room (ER) Visits  
Saint Vincent Hospital and Comparison Hospitals**



Source: RSC-403 Fiscal Years 1995 – FY 1999 reports.  
Note: Source data for this chart is provided in Attachment 1.

*q. ER Access Standards: Average Length of Stay*

In Year 3, the Emergency Department no longer compiled data on the time from a patient’s presentation to discharge from the emergency room. The Acting Chief states that the ER response time is within generally accepted standards for timely treatment, but acknowledges that when the emergency department gets busy, non-urgent cases wait too long and the department is not consistently able to meet its desired goal of serving urgent cases within 70 minutes. This is similar to the department’s performance in Year 2, when timely admission to inpatient had improved, but average time for other patients increased. While one community respondent in Year 3 indicated that the long waiting times documented in Year 2 had improved, the lack of data on this significant aspect of access to emergency care is a weakness of this report.

**Table IV-23**

**Saint Vincent Hospital Emergency Room  
Average Length of Stay in Hours (ALOS)**

Type of Care	Avg. 1995-1996 ALOS	FY 1997 ALOS*	FY 1998 ALOS	FY 1999 ALOS	Target
Admitted	4.8	4.8	3.9	N/a	4.0
Prompt Care	1.2	1.5	3.8	N/a	1.0
Other	3.0	3.1		N/a	2.0

\* Includes nine months of data from October 1996 through June FY 1997  
Unlike previous years, FY 1998 Data were reported as admitted or discharged.  
Source: Saint Vincent Hospital Internal Reports 1995-FY 1998

r. *Patient Satisfaction with Emergency Services*

During Year 2, Saint Vincent Hospital discontinued participation in the Press, Ganey satisfaction survey system, replacing that survey with a survey method used throughout the Tenet system. It also continued its participation in the Picker Institute satisfaction survey. Unfortunately, neither of these data collection protocols survey emergency room users. Therefore, we can provide no formal satisfaction data for the emergency room.

Our community data collection elicited mixed responses about Saint Vincent Hospital emergency services. Phone interviews with seven Spanish-speaking consumers addressed their satisfaction with access and services provided by the Emergency Department. The average rating of this small sample of respondents was quite high. The average rating of emergency access was 6.33 out of 7 and their average satisfaction was rated 6.5 out of 7, with 7 being the most favorable rating. Consumers who had used Saint Vincent Hospital services, however, described some problems. In a focus group held during Year 2, concern was expressed about the long wait for psychiatric patients and the need for them to wait among patients with medical problems

**D. SAINT VINCENT HOSPITAL SPECIALTY PROGRAMS OF SIGNIFICANCE TO WORCESTER**

Cardiology and neurology services are described in this section because of their significance to Worcester generally. Cardiology is a high incidence need as indicated by high coronary death rates in Worcester, and Saint Vincent Hospital operates one of the largest neurology departments outside of Boston.

**1. Cardiology**

The Cardiology Department has seen significant investment and improvement during the three years of for profit ownership. In the middle of Year 3, a new Chief of Cardiology was appointed. He had been trained and had admitting privileges at Saint Vincent. No other organizational or staffing changes were reported. Saint Vincent Hospital cardiology department operations had been significantly enhanced during the second follow-up year. A new comprehensive outpatient cardiac rehabilitation program was initiated that included behavior management, diet intervention and psychiatric interventions. In Year 3, the Unit Director reported dramatic expansion in utilization of this service. In addition, in Year 2, the hospital also opened a new electro-physiology lab, with new technology to detect heart arrhythmias. In Year 3, the Director reported provision of training to upgrade staff skills to keep up with advancements in the practice of cardiology and improvements in utilization management and the development of “care maps” for specific diagnoses. These improvements were

reported to have reduced lengths of stay for cardiac patients relative to DRG, and are also designed to improve response to emergency cardiac events. In Year 3, the Department is more aware of budget tightening, but does not believe that this has affected its provision of a solid standard of cardiac care.

*a. Cardiac discharges*

Saint Vincent Hospital's number of cardiac discharges increased from the baseline period, both in absolute number (from 4,200 to almost 4,600) and in its share of all discharges (from approximately 20% to 23%), remaining at about the same level throughout the three-year for-profit period. The other Worcester hospitals showed small increases in Year 2 and Year 3.

*b. Access standards*

The Cardiac Department sets standards for access to several of its services as described in the Baseline Report. Most urgently needed services are to be provided immediately, within 15 minutes, or the same day, depending on the nature of the test. Most routine inpatient services were expected to be provided the same day or by the following business day. Most routine outpatient services are to be provided within two weeks, except that ambulatory monitoring is to be provided within seven days and EKG monitoring on the same day. Compliance with these standards is measured for a random sample of cases. The Electrophysiology Lab met its scheduling standards in every month during Year 3, while the Cardiac Catheterization Lab met its standards in all but two months. The Non-Invasive Cardiology/EKG Department continued to meet its inpatient and outpatient standards 100% of the time, as it had during Years 1 and 2.

## **2. Neurology**

*a. Staffing*

In the middle of Year 3, one of the current neurologists was named as Department Chief. However, the slot that he previously held had not been filled. In all other respects, the organization and staffing of the department remained constant. Two residents from the University of Massachusetts are on duty in the hospital during the day. There remained four full time neurologists and one part time neurologist practicing at the hospital, in addition to occasional involvement by two others in private practice. Neurology department physicians serve in a consultative capacity; patients with neurological problems are admitted to Saint Vincent Hospital under the supervision of Internal Medicine Department admitting physicians.

New equipment and technology provided by Tenet during Year 3 have been significant in supporting Neurology Department services. These include a fully digitized system of radiology records, bioengineering, and a new ambulatory EEG service. The department operates the Central New England Sleep Center, the only accredited sleep center outside of Boston.

This center is about to expand from two beds to four beds. The Department Head is active in providing public service information about sleep disorders, and the Department sponsored the national Sleep Disorder Week in Years 2 and 3.

*b. Neurology Discharges*

Saint Vincent Hospital’s neurology discharges dropped in Year 1, and then rebounded to the numbers experienced during the baseline period in Year 2, and slightly exceeded baseline levels in Year 3. The total number of neurology discharges for the three Worcester hospitals was remarkably stable from 1996 to FY 1999, with UMass accounting for the largest percentage.

**E. PROGRAMS OF SPECIAL SIGNIFICANCE TO VULNERABLE POPULATIONS**

**1. Elderly Outreach, Prevention and Treatment**

The Elderly Outreach Program located in Saint Vincent Hospital’s Extended Care Division provides nursing, social work, medical and podiatry services in elderly high rises, retirement communities, churches, a grocery store, and senior citizen centers, primarily in the city of Worcester, but also in six surrounding communities. Latino and Russian clinics were held monthly with the assistance of Saint Vincent Hospital’s interpreter department, and interpreters for other languages were also used as needed. During FY 1999, the program added two service sites, but the number of visits decreased by 14% from the prior year’s high. This is consistent with the perception of some community observers that the frequency of some of the clinics was reduced. The program had increased in each of the prior three years. Year 3’s decrease brought the program to the level it experienced in the second baseline year, but it remained above the baseline average. (See Table IV-24, *Saint Vincent Hospital Elderly Outreach Volume of Service*)

<b>Saint Vincent Hospital Elderly Outreach Volume of Services</b>		
<b>Time Period</b>	<b>Number of Patient Contacts</b>	<b>Number of Clinics</b>
October 1994 – September 1995	12,949	19
October 1995 – September 1996	16,556*	22
October 1996 – September FY 1997	18,376	29
October FY 1997 - September FY 1998	18,920	32
October FY 1998 – September FY 1999	16,308	34
<small>* Replaces figure of 16,507 reported in Baseline Table for 11-month period of Oct. 1995 – Aug. 1996.            Source: Saint Vincent Internal Reports – Elderly Outreach Department</small>		

Nurses provided the majority of clinic services, at 66% of contacts, in FY 1999. Podiatry accounted for 12% of clinic services and medical for 2% of clinic services. In addition to these standard services, the outreach program also participated in an immunization campaign, which included the provision of 2808 flu vaccinations and 173 pneumococcal immunizations, and an osteoporosis education and screening effort. Social work services decreased considerably, from 3% to 0.4%.

Community respondents who work with elderly populations expressed praise for this program and the effectiveness of its follow-up component, which assists patients to obtain insurance for which they are eligible and link them directly to the hospital for continued services. One informant praised the willingness of clinic staff to help its patients meet some of their non-medical needs.

## **2. Substance Abuse Treatment**

Saint Vincent Hospital's outpatient substance abuse program, the Division of Alcohol and Drug Services (DADS), contracts with the Department of Public Health (DPH) in order to promote access to substance abuse services for low-income and uninsured individuals. DADS provides substance abuse services to uninsured individuals on a sliding fee basis through DPH, and also holds a contract to serve Medicaid enrollees. In Year 3, staff cuts continued, bringing total staffing down 5.4 FTE from the higher levels experienced in Year 1 and the baseline. The Year 3 staff cuts were associated with the termination of the Dual Diagnosis Day Treatment program (and its DPH contract). Two positions and .75 FTE were transferred out of the Department into the Dual Diagnosis Partial Hospitalization Program that replaced it. The Partial Hospital program had a higher daily rate, was not supported by DPH, and served primarily an insured clientele. While the two day programs were similar, the day treatment model focused on group treatment, while the partial hospital program was targeted to more troubled clients and provided a more medically oriented service. Community informants reported that this transition was made with little prior notice to the community. One reported that waiting lists for substance abuse services were noticeably longer than previously.

### *a. Service Mix*

Table IV-25, *Client Visits to the Division of Alcohol and Drug Services*, shows the level of outpatient substance abuse services provided by Saint Vincent Hospital over the three-year period. Total substance abuse service visits dropped slightly below baseline levels, a decrease of 5% from Year 2. The decrease in day treatment with the elimination of the program accounted for the largest share of this decrease. Batterers Treatment visits increased substantially, by almost 50%, and offset the decreases experienced in the other services offered in Year 3. Outpatient substance abuse services declined in Year 3 but were still substantially above the baseline levels.



**Table IV-25****Client Visits to the Division of Alcohol and Drug Services**

Program Type	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	Number of Visits	% of Total	Number of Visits	% of Total	Number of Visits	% of Total	Number of Visits	% of Total
Driver Alcohol Education (D.A.E.P.)	8,363	50.2%	9,414	49.8%	7,887	45.9%	7,758	47.7%
Batterers Treatment (A.D.V.E.N.T.)	2,859	17.2%	2,728	14.4%	2,652	15.4%	3,875	23.8%
Employee Assistance (E.A.P.)	427	2.6%	460	2.4%	510	3.0%	375	2.3%
Outpatient Substance Abuse	3,649	21.9%	4,609	24.4%	4,389	25.5%	4,126	25.4%
Dual Diagnosis Day Treatment (D3TP)	1,348	8.1%	1,698	9.0%	1,749	10.2%	135	0.8%
<b>Total</b>	<b>16,645</b>	<b>100.0%</b>	<b>18,909</b>	<b>100.0%</b>	<b>17,187</b>	<b>100.0%</b>	<b>16,269</b>	<b>100.0%</b>

Source: Saint Vincent Hospital Internal Report

*b. Payor Mix*

Though the number of visits was only slightly below baseline levels, the total number of clients receiving outpatient substance abuse services were substantially lower (13%), as demonstrated in Table IV-26, *Saint Vincent Hospital Outpatient Substance Abuse Services Payor Mix*.

**Table IV-26****Saint Vincent Outpatient Substance Abuse Services Payor Mix**

Reported Payor Source	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	No. of Clients	% of Total	No. of Clients	% of Total	No. of Clients	% of Total	No. of Clients	% of Total
Private	63	10.8%	49	9.2%	113	21.1%	24	4.5%
HMO	56	9.6%	31	5.8%	19	3.5%	136	25.4%
<i>Sub-Total</i>	<i>119</i>	<i>20.4%</i>	<i>80</i>	<i>15.0%</i>	<i>132</i>	<i>24.6%</i>	<i>160</i>	<i>29.9%</i>
Medicare	82	14.1%	49	9.2%	47	8.8%	46	8.6%
Medicaid	164	28.3%	120	22.4%	116	21.6%	121	22.6%
<i>Sub-Total</i>	<i>246</i>	<i>42.4%</i>	<i>169</i>	<i>31.6%</i>	<i>163</i>	<i>30.4%</i>	<i>167</i>	<i>31.2%</i>
Other	14	2.3%	5	0.9%	6	1.1%	5	0.9%
None	256	44.3%	303	56.6%	246	45.9%	172	32.1%
<b>Total</b>	<b>578</b>		<b>535</b>		<b>536</b>		<b>504</b>	

\* Numbers do not add up to total admissions because multiple payors may be listed for one patient.

Source: Department of Public Health, Bureau of Substance Abuse Reports, Fiscal Years 1995 - FY 1999

The relative share of different payors showed some significant changes, with HMO patients increasing and private pay patients decreasing from Year 2 shares. The total share of the two private insurers increased to almost a third of patients. Public payors, Medicare, Medicaid and the Massachusetts Behavioral Health Partnership, accounted for about thirty percent of patients, down from a high of forty percent in the baseline. Patients with no insurance payor dropped substantially to 32% in FY 1999, after accounting for between 40% and 50% of patients in previous years. These patients are supported both by the DPH contract and by Saint Vincent Hospital, which covers the portion of the cost of the program not met by the DPH reimbursement. The decrease in the number of uninsured clients served was greater than for clients overall. Saint Vincent Hospital calculates that its total contribution to this program decreased almost \$20,000 between Year 1 and Year 2, and another \$24,000 in Year 3, to a total of \$68,800. However, this was still substantially above the average annual subsidy during the baseline period.

While total visits were not much below baseline levels, this shift in payor mix indicates that these services are no longer as available to the most vulnerable patients, those who are uninsured or are publicly insured.

c. *Age, Gender, Racial and Ethnic Distribution*

The average age of outpatient substance abuse clients was 39 years of age, a continued increase from 37 in Year 2 and the average of 35 years of age in the previous three years. The gender distribution changed slightly, dropping back to 29% female from a higher level of about 31% female in Years 1 and 2. As shown in Table IV-27, *Saint Vincent Hospital Outpatient Substance Abuse Services by Race*, and Table IV-28, *Saint Vincent Hospital Outpatient Substance Abuse Services by Ethnic Origin*, the percentages of Black, Portuguese, and Hispanic patients dropped somewhat from Year 2 to Year 3, though Asian clients increased. The overall level of diversity had decreased from the baseline, as reflected in the increased percentages of white clients, and of clients whose ethnic identity was 'other'. However, the ethnic composition of outpatient substance abuse clients continued to be non-white to a considerably greater degree than the hospital overall.

<b>Table IV-27</b>				
<b>Saint Vincent Hospital Outpatient Substance Abuse Services by Race</b>				
<b>Race</b>	<b>Avg. FY 1995-1996</b>	<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
	<b>% of Clients</b>	<b>% of Clients</b>	<b>% of Clients</b>	<b>% of Clients</b>
White	83.3%	83.4%	80.4%	85.8%
Black	6.3%	7.9%	10.6%	5.3%
Other	10.5%	8.8%	9.0%	8.9%

*Source: Department of Public Health, Bureau of Substance Abuse Reports, Fiscal Years 1995 – FY 1999*

<b>Table IV-28</b>				
<b>Saint Vincent Hospital Outpatient Substance Abuse Services by Ethnic Origin</b>				
<b>Ethnicity</b>	<b>Avg. FY 1995-1996</b>	<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
	<b>% of Clients</b>	<b>% of Clients</b>	<b>% of Clients</b>	<b>% of Clients</b>
Hispanic	10.9%	9.0%	8.2%	7.2%
Portuguese	0.3%	0.4%	0.7%	0.6%
Asian	1.1%	0.7%	0.9%	1.5%
Other	87.8%	89.9%	90.2%	90.7%

*Source: Department of Public Health, Bureau of Substance Abuse Reports, Fiscal Years 1995 - FY 1999*

*d. Physical Access*

This program remained in the same site in an older building on the Saint Vincent Hospital campus, but not in the main hospital building. Hospital facilities continued to be available for provision of services to people who could not easily negotiate the older building.

*e. Outreach*

Both the Department and community informants reported that outreach efforts had diminished. While staff continued to meet with DPH and other community substance abuse providers, outreach efforts to a family shelter and training of elder peer counselors were considerably reduced.

**3. Free Pharmacy Program**

Saint Vincent Hospital provides financial assistance for inpatient and outpatient prescriptions through its free care program, and by offering free samples

provided by manufacturers. As exhibited in Table IV-29, *Saint Vincent Hospital Prescription Volume*, the volume of subsidized prescriptions increased in FY 1999 by an expansion of free care prescriptions to a new five year high that was 13% above its prior high in FY 1997. Over 600 patients were served.

<b>Table IV-29</b>				
<b>Saint Vincent Hospital Prescription Volume</b>				
<b>Pharmacy Program</b>	<b>Avg. FY 1995-1996</b>	<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
Samples	328	343	279	242
Free Care	911	1,083	951	1,368
<b>Total</b>	<b>1,238</b>	<b>1,426</b>	<b>1,230</b>	<b>1,610</b>
<i>Source: Saint Vincent Hospital Internal Reports – Ambulatory Pharmacy</i>				

*a. Language Capability*

The hospital pharmacy department had 9 staff members with capability in a second language. The languages include French, Vietnamese, Spanish, German and Polish.

*b. Community Services*

Pharmacy staff continued to participate in community educational programming such as poison prevention programs in schools, presenting a program called “Appropriate Medication Use” to help seniors with their medications, and supporting the Senior Outreach program. The staff also participated in Career Day at Burncoat High School to educate students and encourage them to become pharmacists.

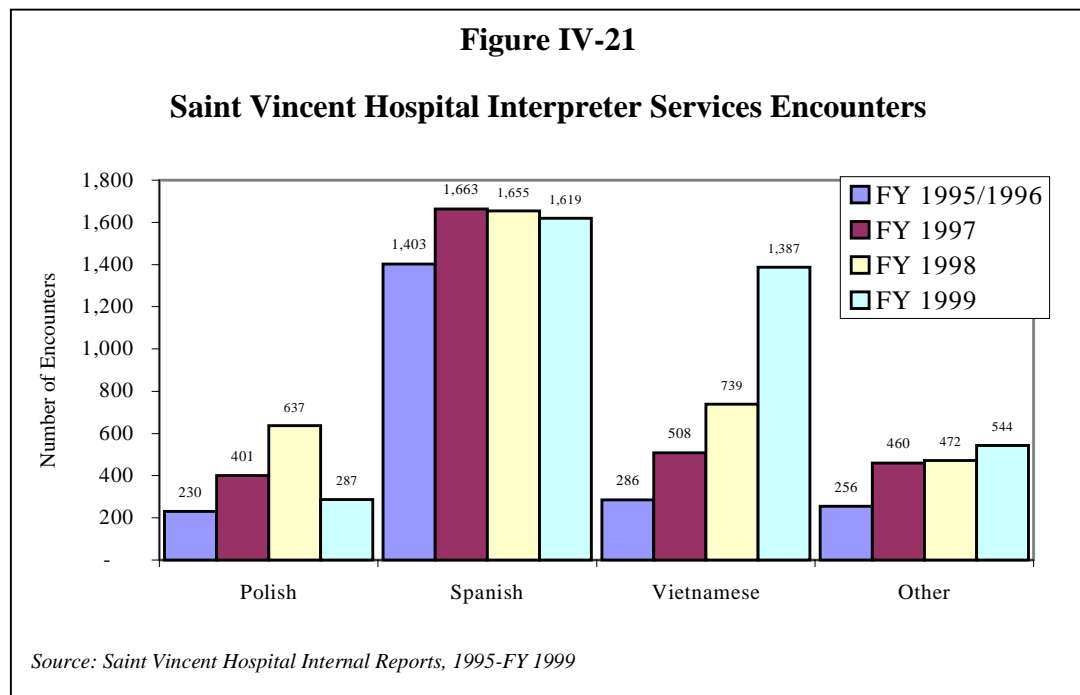
**4. Medical Interpreter Services**

*a. Services*

Figure IV-21, *Saint Vincent Hospital Interpreter Services Encounters*, showing the volume of interpretation contacts by language over the five-year period, indicates a marked improvement in provision of service for non-English speaking individuals. The total number of these encounters increased 82% over the five years, from 2,105 in 1995 to 3,837 in FY 1999. Vietnamese interpretation encounters almost doubled between Years 2 and 3, and the other category, which included a large number of Albanian interpretation encounters, also grew. Spanish encounters dropped somewhat for a second year, and Polish interpretations fell off sharply. In addition, the hospital began to collect data on the interpretation assistance provided over the phone, counting over 1000 such encounters in the first 9 months of calendar FY 1999.

Despite the overall increase in interpreter encounters, our communication with community members indicated a higher level of concern about the accessibility of interpretation than we had previously encountered. We conducted phone interviews with seven Spanish speaking Saint Vincent Hospital consumers about their perceptions of access to care at the hospital. Most reported uniformly high ratings of the services they received and the accessibility of those services. However, two of the seven reported that it was very hard to arrange for interpreter services. One indicated that this was true even when she called beforehand. A focus group of interpreters who work at Saint Vincent Hospital expressed similar perceptions, indicating a higher level of concern than in the focus group held in the prior year. When interpretation was requested and provided on time, they felt that non-English speaking patients at Saint Vincent were treated very well and received high quality services. However, they cited a number of problems, including last minute scheduling of interpreters resulting in late arrivals, patients who no show, physicians who are unwilling to work with the interpreter, and appointments scheduled too close together to allow adequate time for both visits.

The Director of Saint Vincent Hospital's interpreter service acknowledged that there had been difficulties in scheduling interpretation due to the uncertainty of timing of physicians' rounds and delays in provision of scheduled procedures. One unplanned delay makes it difficult for the interpreter to maintain his or her schedule for the remainder of the day. She suggested that higher volume has made this problem more prevalent. In addition, she acknowledged that there had been some serious difficulties in providing interpretation on evenings and weekends, with two situations resulting in the filing of incident reports.



*b. Staffing*

Interpreter staffing remained the same in Year 2 as in prior years. The staff of the Interpreter's Department consisted of three full-time Spanish interpreters, one Vietnamese interpreter and a per diem pool of 100 interpreters. Interpretation staff are trained in-house and by programs offered by Language Link and Clark University. Interpreters also received an in-service training on death and dying and a medical training offered by the Department of Public Health.

*c. Policies*

The hospital continues to train new staff in how and when to use interpreter services, providing this information as part of the twice-monthly orientation, as well as at other times. In addition, staff with relevant language ability are identified. Seven Spanish-speaking administrative assistants were trained in medical terminology during Year 3. However, a decrease in the number of outpatient clients for whom a non-English primary language is identified (see Figure IV-14, page 35) raises a question of whether procedures that may affect outpatients' access to interpreters may have changed. If a non-English primary language fails to be identified and documented, it may be less likely that interpreter services will be offered and utilized.

## **5. Physical Access**

No improvements relevant to physical access made in FY 1999 were reported to us. A small focus group of disabled consumers held during Year 2 reported that the Saint Vincent Hospital physical site continued to be difficult to get around in, citing easily fixable problems such as lack of mirrors in elevators and difficulties getting access to a wheelchair, to larger problems such as inappropriate location of wheelchair ramps. These consumers had mixed perceptions of the quality of care they received from the hospital, reporting both high and low satisfaction with services.

Though the hospital's new physical plant, designed with input of disabled consumers, will presumably eliminate these problems for many patients, several departments, such as the psychiatry unit, will remain in this facility. Therefore these issues will continue to be pertinent even after most units move.

## **6. Patient Relations and Social Services**

As shown in Table IV-30, *Department of Social Work Services Staffing*, the Department of Social Work Services has substantially reduced its staffing levels every year since the baseline. By FY 1999, the number of social worker positions had decreased by 25% and consequently the hours worked per week were reduced by 20% from the hours worked during the baseline period. While

hospital inpatient volume as measured in hospital days dropped by 7%, outpatient visits and ambulatory surgery both increased from the baseline, suggesting that social work services would continue to be needed. This suggests that social work services may be less available to patients, an important finding for vulnerable populations who may need these services. However, we noted that despite this reduction, the Emergency Department and the Ambulatory Clinics reported improved access for its patients to social workers due to closer coordination.

**Table IV-30**

**Department of Social Work Services Staffing**

Social Work Services Clinicians	Avg. FY 1995-1996		FY 1997		FY 1998		FY 1999	
	No. of Staff	Total Hours Per Week	No. of Staff	Total Hours per Week	No. of Staff	Total Hours per Week	No. of Staff	Total Hours per Week
MSW-Obstetric	3.5	120	4	120	3	100	2.4	96
MSWs	7.5	300	7	280	6*	224	5.8	232
BSWs	4.5	172	4	152	4	152	3.4	140

*\*Includes one MA who works 40 hours per week  
Source: Saint Vincent Hospital Internal Reports, 1995-FY 1999*

**F. CONCLUSION**

Saint Vincent Hospital continued to provide and enhance its services to Worcester County during its first three years as a for-profit organization. However, while virtually all of the services on which this assessment focuses increased in Year 1, the following two years saw reductions of some types of service. In most cases, the reductions did not reduce services below the average provided during the final two years of non-profit operations, which serves as our baseline.

The hospital's ratings on levels of quality were mixed. Its accreditation rating was renewed during the for-profit period at the highest level. In contrast, the number of serious complaints was higher than the baseline for two of the three years. Satisfaction ratings on measures of quality were limited by change to a different satisfaction survey that did not address all the same areas as the original instrument. Client satisfaction declined for more measures of general aspects of hospital care than increased, suggesting that aspects of performance such rooms, meals, and employee communication and teamwork were not performed as well as in previous years.

Hospital staffing was higher than baseline levels for most of the first two for-profit years, but staff cuts toward the end of Year 2 brought staffing to baseline levels, and further cuts in Year 3 brought it somewhat below baseline levels. The composition of staffing also changed; the number of admitting physicians both increased and decreased substantially from the baseline for reasons that we were not able to explain, the number of nurses

declined slightly, and non-nursing staff increased substantially. These changes and the increasing difficulty in negotiations with the nursing union may have had negative effects on employee communication and teamwork.

There was a slow decline in the amount of inpatient services provided from baseline levels, which was consistent with the continued influence of managed care. However, despite reversing a declining trend in Year 3, psychiatric services were challenged by changes in the psychiatric market place and remained considerably below baseline levels. This constitutes one area of inpatient operations in which the for-profit years did not maintain prior levels of service. Psychiatry showed considerable variation in its payor mix during the for-profit period and a stronger trend of serving patients who live outside of Worcester than the hospital as a whole. While several new psychiatric services were added during the for-profit period, one was terminated during Year 3. In contrast to psychiatric services, obstetric services also declined, but at a slower rate, maintained considerable consistency in payor mix and served a population more ethnically varied than the hospital as a whole.

In contrast to inpatient services, Saint Vincent Hospital outpatient services slowly increased from baseline levels. There was little change in the demographics of persons served. The ambulatory clinic expanded its staff and reported improved ability to help its clients arrange for Medicaid and free care. The emergency department also rebuilt its staffing levels after a group of resignations in Year 1 and added needed equipment. However, it continued to exceed its desired standards for timely service.

We have attempted to synthesize the information available to us to reach a conclusion about continued access to Saint Vincent Hospital services by uninsured patients. Self-pay discharges dropped, self-pay outpatient visits dropped considerably, and self-pay emergency department visits dropped less steeply, and then increased somewhat in Year 3. However, there are a number of indications that these decreases were due to increased enrollment of uninsured individuals into Medicaid or other forms of coverage, and that uninsured individuals continued to have access to Saint Vincent Hospital services. For example, despite a drop in self-pay discharges, Saint Vincent Hospital was responsible for a greater share of Worcester self-pay discharges than in the baseline. In addition, the evidence available to us from both internal and external informants describe the hospital as being particularly effective in outreaching to uninsured clients and assisting them to apply for expanded Medicaid coverage. While we do not see Medicaid increases that correspond to the self-pay decreases, the significant increases in Fallon Medicaid enrollment suggest that a high percentage of new Medicaid enrollees may have selected an HMO where they would be counted as a managed care patient.

The picture for Medicaid is somewhat mixed. Saint Vincent Hospital experienced a decreased level of inpatient services for Medicaid patients, a stable share in overall hospital payor mix, and an increased share of outpatient services. This pattern differed from other hospitals, which were more likely to experience an increase in Medicaid inpatient share and a decreasing or constant share of outpatient services. Our interpretation of this information is that Saint Vincent Hospital is serving a fair share of



the increasing Medicaid enrollment as evidenced by the increased share of outpatient services, but that it is likely serving a healthier mix of Medicaid eligibles than it did previously, and than is served by the comparison hospitals. This is consistent with a lower utilization of inpatient services. However, we cannot rule out the possibility that the hospital is somehow discouraging its Medicaid patients to get inpatient services, though we found no indications that this is the case. There are a number of possible explanations for the apparent difference in the utilization patterns of Medicaid recipients served by different hospitals. Possible causes could include a hospital that is successful in providing appropriate outpatient care to prevent the need for hospitalization, or having a location or types of services that attract younger Medicaid recipients, who are likely to be healthier than older recipients. We did not have sufficient information to identify any likely causes for the utilization patterns of Saint Vincent Hospital's Medicaid patients.

Two conventional inpatient services, cardiology and neurology, somewhat increased their share of inpatient services. In contrast, the hospital in the final two years of the for profit analysis period, decreased its investment in services important to vulnerable populations, including substance abuse treatment, social work staffing, and elder outreach services. However, social work staffing and the number of clients receiving substance abuse services declined below baseline levels. Notably, interpreter services and free pharmacy services continued to increase in Year 3.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**V. PROVISION OF FREE CARE AND COMMUNITY BENEFITS**

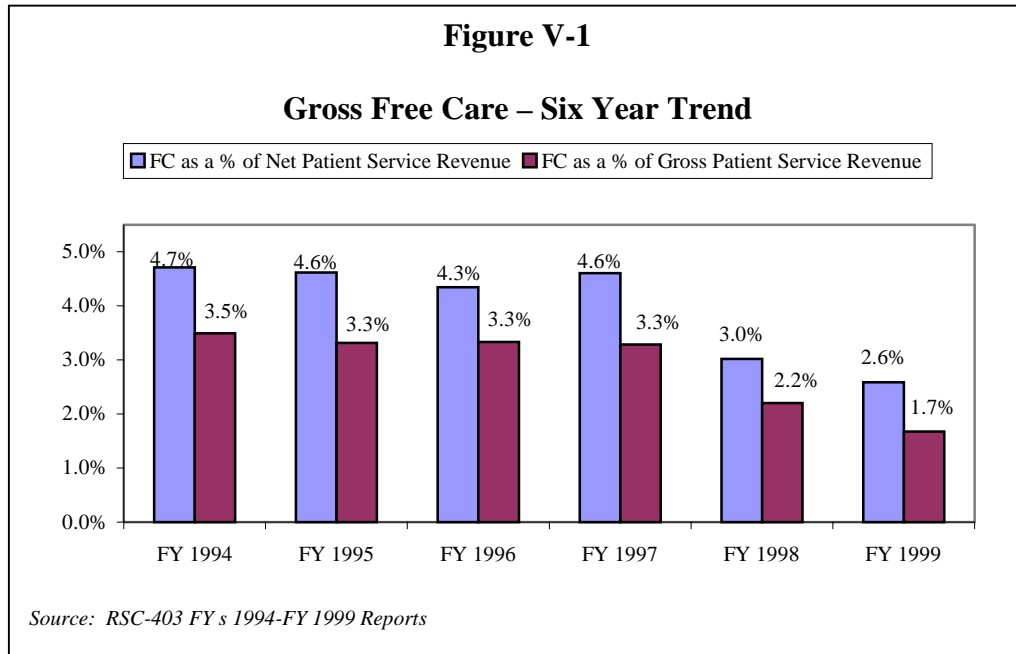
## V. PROVISION OF FREE CARE AND COMMUNITY BENEFITS

### A. CHARITY CARE

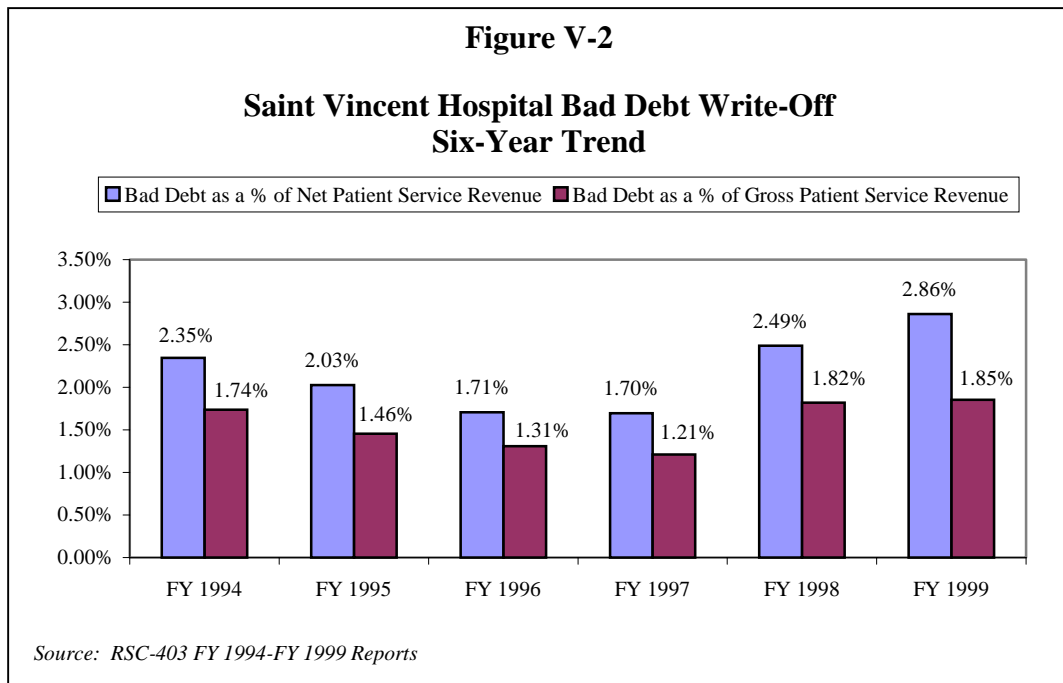
#### 1. Uncompensated Care Pool Contributions

The following figures and tables display the amount of uncompensated care provided by Saint Vincent Hospital, including payments made to the uncompensated care pool and bad-debt write-offs, which are also associated with care provided to low-income individuals or the uninsured.

In Year 1, Saint Vincent Hospital continued to provide free care at the same level it had in the previous three years. However, in each of FY 1998 and FY 1999, the hospital's provision of gross free care fell sharply in both in dollar value and as a percentage of gross and net patient service revenue, indicating that Saint Vincent Hospital provided less inpatient and outpatient service to uninsured patients eligible for free care. In the years included in this figure, gross free care reached a six-year high of about \$7.3 million in FY 1997. In FY 1999, however, gross free care had dropped significantly to \$5.0 million. The proportions of free care to gross patient service revenue and free care to net patient service revenue dropped even more steeply, because both gross and net patient service revenues increased considerably – 20% to 30% from FY 1997 levels.



As shown in Figure V-2, bad debt write-offs as a percentage of gross and net patient service revenue slowly declined from FY 1994 to FY 1997. In FY 1998, bad debt write-offs jumped to a six-year high, and remained almost as high in FY 1999. Changes in bad debt write-offs may, but do not necessarily, reflect changes in access to care for the uninsured. They may also reflect changes in the effectiveness of hospitals' documentation of free care eligibility, collection of accounts or increases in eligibles.



After a steady upward trend from 1995 to FY 1997, as Table V-1, *Saint Vincent Hospital Uncompensated Care Pool*, shows, Saint Vincent Hospital changed from being a net payor to becoming a net receiver from the uncompensated care pool, with dramatic increases in receipts from the pool and a significant decrease in assessments paid to the pool. This likely reflects state level policy changes that resulted in decreasing contributions from hospitals to the uncompensated care pool. In FY 1999 Saint Vincent Hospital remained a net receiver from the uncompensated care pool, though at a lower level than in FY 1998. Total assessments increased, though not to the levels experienced between 1995 and FY 1997, and receipts dropped somewhat, resulting in a decrease in the net amount received from the pool.

<b>Table V-1</b>				
<b>Saint Vincent Hospital Uncompensated Care Pool</b>				
<b>Uncompensated Care Pool</b>	<b>Average FY 1995-1996</b>	<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
Assessment Paid to Pool	\$4,283,014	\$4,460,781	\$3,244,666	\$3,540,778
Receipts from Pool	\$2,887,488	\$2,723,501	\$5,054,326	\$4,917,441
<b>Net Payment to Pool</b>	\$1,395,526	\$1,737,280	(\$1,809,660)	(\$1,376,663)
<i>Source: RSC-403 FY 1995 – FY 1999 Reports</i>				

Table V-2, *Saint Vincent Hospital Accounts Written-Off*, shows a breakdown of hospital accounts written off into Emergency Bad-Debt and Free Care. Emergency bad debt is considered to be part of a hospital's contribution to the uncompensated care pool. The table shows that the total number of people receiving free care for emergency services in Year 2 increased considerably, 41%, from 7,064 in FY 1997 to a high of 9,943 in FY 1998 and remained almost as high in FY 1999. This increase is consistent with the increase in bad debt shown in Figure V-2 and suggests that uninsured individuals continue to have access to Saint Vincent's emergency services.

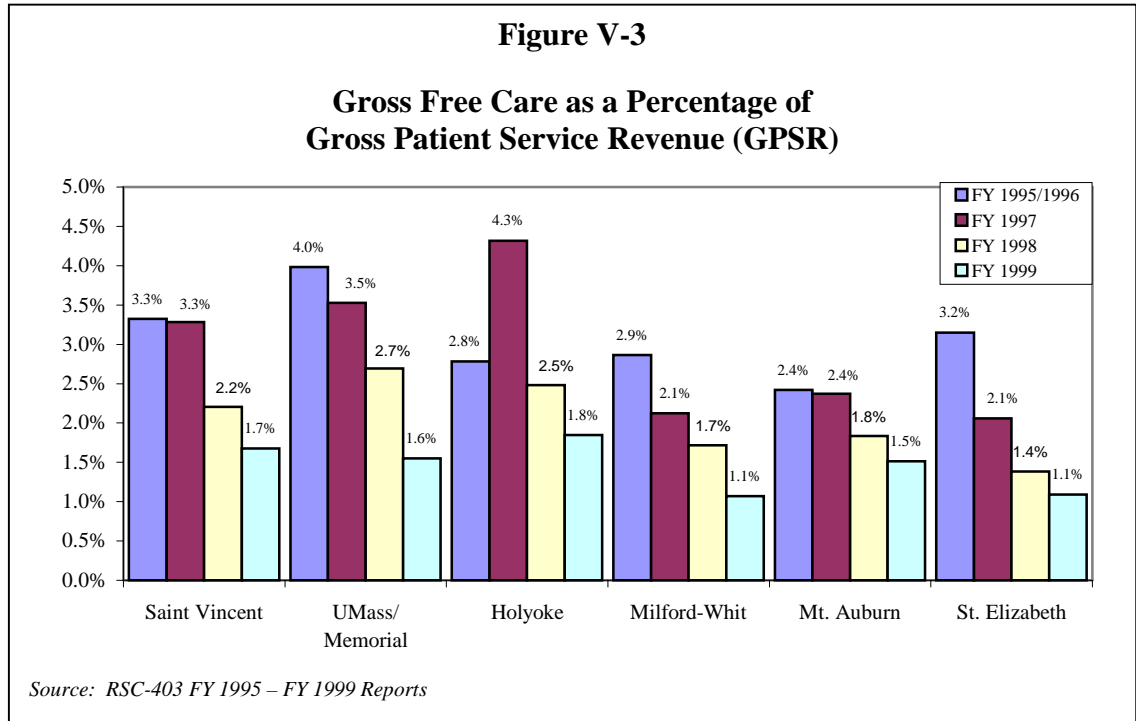
Free care accounts showed a very different trend. After a small increase from baseline levels, the number of free care accounts dropped steeply to a level 63% below the baseline. This decline in non-emergency free care accounts is considerably steeper than that experienced in free care as a percent of patient service revenue (see Figure V-1).

<b>Table V-2</b>				
<b>Saint Vincent Hospital Accounts Written-Off</b>				
<b>Account Write-Offs</b>	<b>FY 1995-1996</b>	<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
	<b>Avg. # of Accounts</b>	<b># of Accounts</b>	<b># of Accounts</b>	<b># of Accounts</b>
Emergency Bad-Debt	6,926	7,064	9,943	9,085
Free Care	7,554	7,738	6,507	2,772
<b>Total</b>	14,479	14,802	16,450	11,857
<i>Source: Department of Medical Security Forms UC-95 through UC-99</i>				

## 2. Uncompensated Care Compared to Peer Hospitals

Figure V-3, *Gross Free Care as a Percentage of Gross Patient Service Revenue (GPSR)*, shows that between FY 1997 and FY 1998 all hospitals, including Saint Vincent Hospital, experienced significant decreases in free care as a percentage

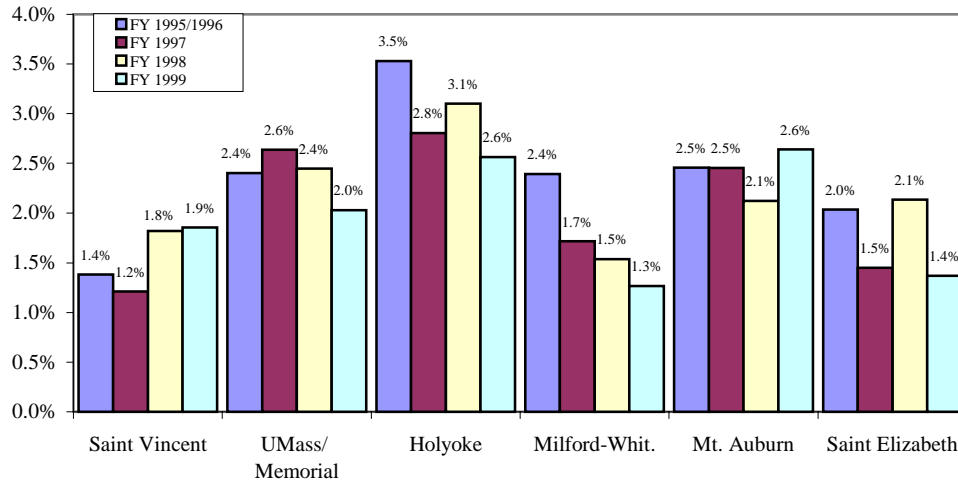
of gross patient service revenue. Saint Vincent was approximately in the middle of the hospitals we followed, with three hospitals experiencing greater decreases in their percentage of gross free care between the baseline and Year 3, and 2 hospitals experiencing smaller decreases. This shared experience strongly suggests that it reflects the expected effects of changes in financing the free care pool and increased statewide levels of insurance coverage.



Trends in bad debt as a percentage of GPSR were less consistent. Saint Vincent Hospital was unusual in experiencing increases in bad debt in Years 2 and 3 from baseline levels. Mount Auburn also increased from the baseline in Year 3. The other hospitals showed a mix of increases and decreases. All experienced a declining trend in Years 2 and 3 and had smaller percentages of bad debt as a percentage of gross patient service revenue in Year 3 than in the baseline.

**Figure V-4**

**Bad Debt Write-Off as a Percentage of Gross Patient Service Revenue (GPSR)**



Source: RSC-403 FY 1995 – FY 1999 Reports

### 3. Free Care Policies and Procedures

We were unable to interview a representative of Saint Vincent Hospital’s Business Office to determine what may have changed about the procedures for identifying patients and assisting them to apply for free care during FY 1999. In both the baseline and first two years of the analysis period, these policies and procedures called for actively notifying patients of their eligibility to apply for free care, and follow-up on that information during the patient’s registration for service. During FY 1998, the Department had added more interpretation services, including the use of the AT&T language line and outside interpreters. In that year, the department reported that 99% of free care applicants received some level of free care support.

During the baseline and first two years of the analysis period, staff responsible for carrying out these functions remained constant. In FY 98 and FY 99, the Business Office staff included Polish and Spanish speakers. In FY 98 over 20 of its staff were familiar with free care requirements and one was an expert in Medicaid eligibility.

Our Year 3 interviews with community informants indicated that Saint Vincent Hospital is good at signing up uninsured clients for insurance when they are eligible, and are effective in getting those who are not eligible for insurance all the free care they are entitled to. They praised the ambulatory care free clinics and the pharmacy program.

## **B. COMMUNITY BENEFITS**

### **1. Community Benefit Program**

Saint Vincent Hospital maintained its commitment to the Community Benefit Plan developed under the Attorney General's Guidelines for Non-profit Hospital Community Benefits during Year 3. The Community Benefit Plan Subcommittee is chaired by a representative of the Central Massachusetts Community Healthcare Coalition, which also has three other representatives on the Subcommittee. Four other committee members are drawn from the community, one is from the Hospital Board, and the last member is the Subcommittee chair. The Subcommittee met monthly throughout the year. They reviewed funding requests from community agencies, made recommendations to the Board for fulfilling or declining those requests, determined the priorities for allocation of \$36,000 of uncommitted funds, sponsored a community needs assessment performed by surveying community agencies, and established some priorities and principles for the use of community benefit funds.

Community informants had mixed opinions of this subcommittee. Several questioned whether the subcommittee had sufficient information, prior notice, and independence to truly consider alternatives to community benefit decisions that the hospital had already made. Our review of the minutes of the meetings of this committee for FY 1999 show a committee in early formative stages and slowed by the resignation of the first chair mid-way through the year. The Committee's work was divided between reviewing ongoing requests for community benefit funds and developing policies for making further funding decisions, including initiating a needs assessment process. Notably, during 1999, they did not discuss Saint Vincent Hospital's substance abuse program, though its staff was cut, decreasing the amount of service provided.

### **2. Community Benefit Expenditures**

The following two tables display amounts and types of funding given to community programs by Saint Vincent Hospital over the two baseline years and in the three years following the acquisition of the hospital. Table V-3, *Saint Vincent Hospital Community Benefit Projected Expenditures*, shows the amounts distributed through Saint Vincent Hospital's various community benefit programs, including Community Linkage funds that meet DPH's requirements.

Saint Vincent Hospital's discretionary contributions to community based health programs increased substantially from Year 2, and from the baseline average. Most significantly, the amount of contributions given by Saint Vincent Hospital in response to general fundraising events of community organizations more than doubled from \$60,000 in Year 2 to almost \$150,000 in Year 3, accounting for most of the increase in sponsored programs and services. These donations are



not always related to health care. Grants to similar community organizations targeted to specific uses remained at about the same level, as did Saint Vincent's contribution to the Minority Business Council (formerly supported by Fallon as well) and in-kind services. Programs targeted to at risk populations decreased by about 17%. Community Linkage funds fulfill a condition related to the Department of Health's determination of need finding for the new Worcester Medical Center requiring contributions to specified community agencies in the amount of \$5.8 million. Subsequently, the Hospital made a further commitment related to agreements with the City of Worcester, to contribute a hospital building and \$1.02 million for its renovations to the Senior Center. The designated recipients for these funds have some ability to request monies as they are needed. Over \$5.9 million of this \$6.8 million commitment has been fulfilled between FY 1995 and FY 1999. An additional \$1.2 million is budgeted for donation in FY 2000. Should these budgeted donations be completed, the hospital will have exceeded its commitments.

<b>Table V-3</b>				
<b>Saint Vincent Hospital Community Benefit Projected Expenditures</b>				
<b>Program</b>	<b>FY 1995-1996* Avg. Expenditure</b>	<b>FY 1997* Expenditure</b>	<b>FY 1998* Expenditure</b>	<b>FY 1999 Expenditure</b>
Sponsored Programs/Services	118,100	101,000	96,476	249,582
Minority Business Council †	109,000	70,000	70,000	66,666
Programs Targeting At Risk Populations	90,855	175,148	151,365	125,419
In-kind and Support Services	15,000	30,000	30,000	30,000
<i>Sub-Total Community Based Health Programs</i>	<i>332,955</i>	<i>376,148</i>	<i>347,841</i>	<i>471,667</i>
Community Linkage**	1,253,236	1,369,336	1,207,916	861,738
<b>Total</b>	<b>1,586,191</b>	<b>1,745,484</b>	<b>1,555,757</b>	<b>1,333,405</b>
<p>* Expenditure data based on calendar year  ** FY 1996 total includes an additional \$14,005 for the Salvation Army Shelter not included in the Baseline Report  † Titled 'Joint Efforts with Fallon (Saint Vincent Hosp. share)' in previous reports  Source: Saint Vincent Hospital, Community Benefit Reports 1995 – FY 1999.</p>				

Table V-4, *Saint Vincent Hospital Community Benefit Expenditures by Program*, shows these expenditures classified according to the type of program supported. Overall, contributions dropped by 17%, reflecting the net increase in discretionary contributions and the decrease in linkage contributions as many pledges were completed. The biggest apparent change was seen in funds contributed to elderly programs, which dropped considerably. However, a budgeted pledge of \$637,000 due to be fulfilled in FY 2000 reflects a continued commitment to support of programs for the elderly. The decreases in

contributions to mental health and substance abuse treatment programs were notable, and reflect the completion of linkage pledges to mental health providers, and the decreases in Saint Vincent Hospital's contributions to its own substance abuse services. Youth and adolescent services experienced a reduction in funding, but an increase in the number of programs supported. Contributions to general health programs increased back to baseline levels after two years of decrease.

**Table V-4**  
**Saint Vincent Hospital Community Benefit Expenditures by Program**

Programs	FY 1995-1996		FY 1997		FY 1998		FY 1999	
	Avg. No. of Programs	Average Expenditure	No. of Programs	Expenditure	No. of Programs	Expenditure	No. of Programs	Expenditure
Elderly Programs	6	\$415,278	6	\$806,717	6	\$609,514	4	\$360,614
Homeless Programs**	6	\$129,924	3	\$88,051	3	\$100,000	4	\$127,659
Maternal and Infant Health Services	2	\$180,000	2	\$150,871	3	\$159,308	4	\$158,300
Youth & Adolescent Programs	6	\$163,701	4	\$122,822	6	\$182,758	12	\$135,610
Mental Health Services	3	\$291,200	2	\$115,000	3	\$145,000	2	\$105,000
Drug and Alcohol	1	\$47,439	1	\$111,023	1	\$92,367	1	\$68,813
AIDS Awareness - AIDS Project Worcester	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
General Health	6	\$243,150	5	\$216,000	5+	\$141,810	5	\$240,003
Employment	1	\$70,000	1	\$70,000	1	\$70,000	1	\$66,666
Miscellaneous	1	\$5,500	0	\$10,000	0	\$0	2	\$18,100
<b>Total – Community Based Health Programs***</b>	<b>31</b>	<b>\$1,571,191</b>	<b>25</b>	<b>\$1,715,484</b>	<b>24</b>	<b>\$1,525,757</b>	<b>36</b>	<b>\$1,303,405</b>

\* Expenditure data based on calendar year

\*\* FY 1996 total includes an additional \$14,005 for the Salvation Army Shelter not included in the Baseline Report

\*\*\* Excludes in-kind benefits of \$30,000 in FY 1996, FY 1997, FY 1998, and FY 1999.

Source: Saint Vincent Hospital, Community Benefit Plan, Linkage Expenditure Report 2/3/97 and Community Benefit Report 3/4/98 and 8/3/00

Many of the same organizations continued to receive funding from Saint Vincent Hospital, in many cases continuing a multi-year commitment made for Community Linkage funds. For planning purposes, many of the Community Linkage grants are budgeted at equal amounts over the five-year period. However, some grantees have chosen to receive greater or lesser amounts depending on their needs in each year. This accounts for some of the apparent variation in the amount provided to program categories between years. The recipients of some of the major programs are described below:

- **Elderly Outreach:** Almost \$290,000 was donated in-kind for the operations of the Elderly Outreach Clinics operated by the hospital's Extended Care Division.
- **Other Elder Services:** An additional \$72,350 was allocated among five other programs for elders. A donation of \$637,052 is scheduled for 2000 to assist in the renovation of the Senior Center.
- **Maternal and Child Health Services:** Approximately \$158,000 supported the programs run by Family Health and Social Services and by Pernet Family Services, as described in Chapter III, Section B.3.h, and supported childbirth education.
- **Mental Health Services:** Saint Vincent Hospital completed a \$500,000 community linkage commitment to Community HealthLink and continued its annual donation of \$5,000 to Genesis Club as described in Chapter III, Section B.2.h.
- **Youth and Adolescent Programs:** Over \$135,000 was donated to a variety of youth and adolescent programs, including some located in the immediate vicinity of the hospital. The hospital donated these funds for minority youth programs, such as Girls, Inc., and scouting and recreational programs, and for programs serving troubled youth, such as YOU, Inc., and the McCauley Nazareth Home.
- **Employment:** Saint Vincent Hospital completed a four-year pledge to the Worcester Minority Business Council, made jointly with Fallon Healthcare, of which the hospital's share was \$70,000. In Year 3, the hospital chose to continue this commitment alone, at the level of \$66,666.

In addition, the hospital provided a number of in-kind community benefits through health fairs, educational programs in schools, and the like. Saint Vincent Hospital estimates the value of such benefits to be \$30,000, the same as in the previous three years.

### **C. EDUCATION AND RESEARCH**

Because Saint Vincent Hospital is a research and teaching institution, it conducts a variety of research studies. The number of studies declined from 52 to 22 during the baseline period. According to the hospital, this was mainly due to limitations in administrative capacities and reviewing policies. In Years 1 and 2, the number of studies remained at approximately the same level as in the second baseline year. In Year 3, the number of studies increased somewhat, to 29. Despite fewer research projects, total resources supporting research increased from the baseline in Years 1 and 2. Corrected figures based on audited changes to Saint Vincent Hospital's RSC-403 report since our last review show \$483,211 spent in Year 1, and \$648,562 spent in Year 2. However, in Year 3, spending on research dropped by more than 50% to \$279,649, significantly lower than the average of approximately \$350,000 spent on research annually during the baseline period.

Table V-5, *Saint Vincent Hospital Full-Time (FTE) Residents*, shows the various specialties for residencies and fellowship programs between 1995 and FY 1999. In Year 3, the number of residents decreased to slightly below the baseline level, after exceeding that level during Years 1 and 2. There were slight increases in Emergency Medicine and Gastroenterology, and more significant decreases in Family Practice, Critical Care Medicine, and Neurosurgery.

<b>Table V-5</b>				
<b>Saint Vincent Hospital</b>				
<b>Full-Time Equivalent (FTE) Residents</b>				
<b>Residency Program</b>	<b>Full Time Equivalents</b>			
	<b>Avg. FY 1995-1996</b>	<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999*</b>
Emergency Medicine	8.4	10.3	10.0	10.5
Family Practice	6.6	5.1	6.0	4.5
Internal Medicine	51.5	53.5	54.0	54.0
Cardiology	7.0	7.0	7.0	7.0
Critical Care Medicine	2.0	2.0	2.0	0.0
Gastroenterology	1.0	1.0	1.0	1.5
Neurology	3.8	2.6	3.0	3.0
Obstetrics/GYN	1.8	3.0	3.0	3.0
Orthopedics	3.6	1.0	1.0	1.0
Radiology	8.0	7.8	8.0	8.0
Surgery	11.7	12.2	12.0	11.5
Thoracic Surgery	1.0	1.0	1.0	1.0
Urology	1.0	1.0	1.0	1.0
Podiatry	3.4	4.0	4.0	4.0
Neurosurgery	1.0	0.4	1.0	0.0
<b>Total</b>	<b>111.7</b>	<b>111.9</b>	<b>114.0</b>	<b>110.0</b>
<i>Source: RSC-403 FY 1995-FY 1999 Reports</i>				
<i>* Critical Care is shared and included in Family Practice and Internal Medicine.</i>				

#### **D. TAXES**

As a non-profit facility in 1996, Saint Vincent Hospital paid only social security taxes and \$136,000 in unemployment taxes. As a for-profit, Saint Vincent became responsible for unemployment taxes assessed using a methodology that resulted in higher rates, local real estate taxes and federal taxes.

Saint Vincent Hospital paid a total of \$9.8 million in taxes in Year 3, up from the previous year, but considerably less than the \$15 million it paid in Year 1. Real estate taxes paid to the city of Worcester decreased somewhat, but remained above \$500,000. The level of unemployment taxes fell somewhat from Year 2. The considerably larger total paid in Year 1 was due to a one-time experience of paying two years' of unemployment taxes during a single reporting period. Federal income

taxes increased to \$8 million, but remained below the Year 1 payment which exceeded \$12 million. (See Table IV-6, *Saint Vincent Hospital Taxes Paid*.)<sup>5</sup>

<b>Table V-6</b>			
<b>Saint Vincent Hospital Taxes Paid</b>			
<b>Type of Taxes</b>	<b>FY 1997 Tax</b>	<b>FY 1998 Tax</b>	<b>FY 1999 Tax</b>
Total Unemployment Taxes	\$2,471,166	\$1,221,491	\$1,034,438
Real Estate Taxes	\$436,923	\$524,039	\$510,411
Federal Taxes	\$12,146,337	\$6,361,788	\$8,336,953
<b>Total</b>	<b>\$15,052,429</b>	<b>\$8,105,319</b>	<b>\$9,881,802</b>
<i>Source: Saint Vincent Hospital Internal Financial Reports</i>			

## E. SUMMARY

Saint Vincent Hospital's provision of free care and community benefits changed markedly after Year 1. Most notably, gross free care dropped considerably, the number of free-care accounts dropped by two-thirds, and the hospital became a net receiver from the uncompensated care pool. However, Saint Vincent Hospital was not alone; almost all other comparison hospitals exhibited decreases in gross free care, likely due to changes in Medicaid eligibility and the financing of the free care pool. In contrast, the value of write-offs of bad debt as a percent of net and gross patient service revenue was higher than in previous years, as was the number of emergency bad debt accounts written off, suggesting that uninsured individuals continue to be served in the emergency department.

In all three years of the assessment period, Saint Vincent Hospital's discretionary contributions (contributions other than Community Linkage commitments) to community-based programs were higher than in the baseline average, reaching a high of \$471,000 in Year 3. There was a shift in donations from provision of subsidized services to general donations to community organizations for purposes not necessarily related to health care. In FY 1999, the hospital had almost completed disbursement of its combined commitment for community linkage and building and renovations to the City of Worcester of \$6.8 million. A Community Benefit subcommittee, responsible for guiding the hospital's contributions, one component of its community benefit plan, was slow to be established and was still in its formative stages during Year 3.

<sup>5</sup> It is difficult to predict how much Saint Vincent Hospital will pay in taxes in subsequent years. Unemployment taxes will depend on the rate of layoffs, of which several were scheduled. Federal taxes depend on profitability. Real estate taxes paid to the city of Worcester will be based on both the existing facility, which continues to house the psychiatry unit and some other services, and the newly built facility. The new facility benefits from an 18-year Tax Increment Financing agreement with the city, which provides reduced taxes in return for providing specified levels of continuing and new employment.

The hospital's contributions to research significantly exceeded baseline levels in Years 1 and 2, but dropped by over 50% to a level below baseline levels in Year 3. The residency program was similar in size throughout the assessment period, slightly exceeding baseline levels in Years 1 and 2, and dropping slightly below them in Year 3. As a for-profit organization, the hospital became subject to certain taxes totaling more than \$33 million over the three-year period. The city of Worcester received almost \$1.5 million in real estate taxes. The hospital paid \$4.7 million in unemployment taxes and almost \$27 million in federal taxes in Years 1 through 3.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**VI. CONCLUSION**

## VI. CONCLUSION

This assessment process has provided an independent analysis of certain aspects of the provision of care by Saint Vincent Hospital in its first three years as a for-profit organization. This analysis has limitations; it could not feasibly encompass all hospital services nor collect all data necessary to reach definitive conclusions on all topics analyzed. In addition, it does not account for the effect of significant events that have occurred since the assessment period, and which may significantly affect the hospital's overall provision of service, and its service of vulnerable client groups.

However, this report synthesizes information from multiple sources on the hospital's overall provision of services and on its provision of services of special importance to Worcester's vulnerable populations, as identified by the Office of the Attorney General and the Central Massachusetts Community Health Coalition. The available information has been sufficient to identify areas of expansion and improvement, services that have been maintained, and a few areas where service provision has been eroded or cut back. Data on comparison hospitals has been helpful in identifying changes likely due to industry-wide trends.

Overall, Saint Vincent Hospital continued to provide and enhance its services to Worcester County during its first three years as a for-profit organization. Areas of strength and improvement in comparison to baseline operations include:

- Achieving a higher level of accreditation
- Increase in clinical staff who are African-American
- Expanded cardiology services with high compliance with access standards
- New nursing level beds
- Increase in overall outpatient services
- Increases in provision of interpretation
- Increases in levels of elderly outreach and effectiveness in assisting those who are uninsured to access coverage
- Increases in value of discretionary community benefit donations
- Plans to exceed Community Linkage commitments
- Slight staffing expansion in ambulatory clinic and a well coordinated process for assisting uninsured clients to apply for Medicaid and free care
- Payments of taxes not assessed on non-profit organizations.

Other aspects of hospital operations were maintained at similar levels to the baseline period or changed in ways similar to changes at comparison hospitals include:

- Overall inpatient services declined somewhat, but did so in proportion to industry trends for more use of ambulatory surgery and shorter stays
- Obstetric services declined somewhat, but increased the already significant level of service to ethnic minorities



- Maintenance of overall emergency visit volume and access for uninsured clients, often however, with long wait times
- The Residency program continued at a similar level throughout the three year period
- Research that exceeded baseline levels for two out of the three years, but was significantly reduced in the third year.

Aspects of hospital operations that did not maintain baseline levels include:

- Psychiatric inpatient services remained substantially below baseline levels throughout the period, despite attempts to address changes in the psychiatric market and add new services
- Substance abuse treatment services were significantly cut to below baseline levels in the third assessment year.
- Social services staff were cut throughout the period.
- Reduction in Hispanic and Asian clinical staff
- More reductions in client satisfaction with hospital performance than increases.

The hospital's provision of free care and service to Medicaid recipients were more difficult to interpret. However, information from a number of sources leads us to conclude that declines in gross free care were shared by comparison hospitals and were likely due to changes in Medicaid eligibility, the financing of the free care pool, and the hospital's efforts to assist uninsured individuals to enroll in Medicaid or other coverage. Cost reports show that Saint Vincent Hospital Medicaid inpatient share declined somewhat while Medicaid outpatient share increased and Medicaid emergency share remained constant. Several other hospitals showed Medicaid increases for all these services. Our interpretation is that Saint Vincent Hospital continued to serve Medicaid recipients at a similar level as in the baseline, but serves a healthier mix of Medicaid recipients than it did in the baseline, and than those hospitals which showed overall increases in Medicaid share. While we believe that this is the most likely explanation of this pattern of Medicaid service provision, other explanations are possible and we do not have sufficient information to definitively determine the cause.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**APPENDIX A**

**BASELINE REPORT  
CHAPTER II: METHODOLOGY**

## **II. METHODOLOGY**

This chapter describes the methodology used to conduct the analysis of Saint Vincent Hospital's provision of services during the baseline period. These methods will be repeated as consistently as possible, using the same data sources, in Years 1, 2 and 3 to provide valid comparisons of Saint Vincent Hospital's operation as a for-profit entity to its last two years as a non-profit.

This section describes the period of analysis, sources of data, criteria for selection of comparison hospitals, criteria for selecting indicators of access and quality, and the process used to collect data.

### **A. PERIOD OF ANALYSIS**

This document reports DMA's assessment of the Saint Vincent Hospital for a baseline period including Fiscal Year 1995, October 1, 1994 through September 30, 1995 and Fiscal Year 1996, October 1, 1995 to September 30, 1996. DMA will also assess Saint Vincent Hospital, LLC for the period from October 1, 1996 to September 30, 1997, Year One of operation after the sale of Saint Vincent Hospital. That report will be available in September 1998. Subsequent reports will address the second and third years of operation, from October 1, 1997 to September 30, 1998, and from October 1, 1998 to September 30, 1999, respectively.

Though the hospital's sale actually took place on September 13, 1996, several weeks before the end of the baseline period, the Attorney General, the hospital, and DMA agreed that the availability of standard reports for both Saint Vincent and comparison hospitals for the October through September Fiscal Year and the extremely small overlapping time period warranted using the September 30 year-end.

### **B. DATA SOURCES**

A variety of data were used to complete this baseline assessment. These include data from the public domain, data gathered by Saint Vincent Hospital, LLC, and data gathered from members of the community. This section of the report briefly describes each of these sources of data.

#### **1. Public Data Sources**

Data from public sources within the state was used as much as possible. These included data from the Massachusetts Attorney General's Office, Massachusetts Department of Public Health, the Massachusetts Division of Health Care Finance and Policy, Massachusetts Health Data Consortium, and the Massachusetts Division of Medical Assistance. The specific sources of data included:

a. *RSC-403 Reports*

These reports are also known as cost reports, and are filed by hospitals with the Division of Health Care Finance and Policy 120 days after the close of the hospital's Fiscal Year. Data gathered from these reports include patient day statistics, payor information, patient service revenue, expenditures, gross free care, bad debt write-offs, and occupancy information.

b. *Hospital Report of Uncompensated Care (UC Reports)*

Hospitals file Uncompensated Care Reports with the Division of Health Care Finance and Policy. These reports include data on hospital bad-debt write-offs, free care write-offs and private sector charges. The reports are used in conjunction with the cost reports, to determine allowable charges to the Hospital Free Care Pool maintained by the state.

c. *Health Status Indicators*

The Department of Public Health compiles a report consisting of demographic and health status indicators. DMA obtained this report for Worcester County. It provides information on population size, age ranges, per capita income, and various indicators of health status. The data represent 1990 through 1995 totals and rates depending on the original source.

d. *Medicaid Enrollment*

DMA requested information from the Division of Medical Assistance about Medicaid enrollment and health plan penetration rates in the Worcester region.

e. *Massachusetts Health Data Consortium*

DMA acquired information on hospital discharges for Saint Vincent Hospital and for a group of comparison hospitals from the Health Data Consortium. This information is compiled from data reports filed with the Division of Health Care Finance and Policy and include patient origin, race, payor, age distribution, and service category, such as obstetrics, psychiatry, and pediatrics.

f. *Community Benefits Reports*

The Attorney General's Office provided written materials pertaining to hospital community benefit practices, community benefit guidelines, and the Attorney General's report on hospital community benefits.

## **2. Data from Saint Vincent Hospital**

A variety of data for this baseline report were obtained from Saint Vincent Hospital. These data include results of interviews conducted with hospital staff, results of patient satisfaction surveys, utilization and demographic statistics by

department, hospital staffing records, and written policies and procedures from the hospital. Each of these data sources is further described below.

*a. Interviews*

Members of the assessment team conducted in-depth interviews with individuals who work in a variety of capacities at Saint Vincent Hospital. Individuals were asked questions about the services provided by the hospital, policies and procedures at the hospital, perception of the impact of the sale of the hospital on access to care, perceptions of the impact of growth in managed care and Medicaid managed care on the hospital, and related topics. Interviews were guided by a semi-structured interview protocol, and conducted by at least one member of the project team. Some interviews were conducted by telephone. Representatives of the following hospital units and departments were interviewed.

- Psychiatry
- Obstetrics/Gynecology
- Ambulatory/Clinic
- Emergency Services
- Cardiology
- Neurology
- Division of Alcohol and Substance Abuse Services
- Pharmacy
- Interpreter Services
- Social Services
- Patient Business Services
- Patient Access
- Institutional Review Board
- Public Relations
- Strategic Planning
- Financial Office
- President's Office

*b. Patient Satisfaction Surveys*

Saint Vincent Hospital contracts with Press, Ganey, Associates Inc. to analyze patient satisfaction survey responses on a quarterly basis. Press, Ganey provides a standard survey to which Saint Vincent Hospital has added several of its own questions. There are separate surveys for inpatient services, outpatient services, emergency services, and ambulatory surgery. Saint Vincent Hospital mails and receives surveys, reviewing and following up on all written comments. All inpatients are surveyed, and surveys are sent to outpatients for almost all visits. The survey packet includes a notice that the interpreter department can assist non-English speakers to complete the survey.

Press, Ganey conducts similar surveys for a variety of hospitals across the country. The firm uses this database to create a peer group for each hospital

in the database. Survey results for each hospital are then benchmarked to this peer group. The hospital receives a detailed analysis of patient ratings of satisfaction. This report includes satisfaction ratings are for certain services.

*c. Hospital Utilization Data*

Information about utilization of hospital outpatient services was obtained from the hospital, stratified by emergency and ambulatory/clinic services, and indicating town of residence, ethnic group, primary language, and age.

*d. Hospital Staffing Records*

Selected information about hospital staffing is included in this report. Information gathered included the number of admitting physicians, and the ethnic identification of staff. The number of staff with language capabilities was sought, but was not available for the baseline period.

*e. Hospital Access Data*

Each hospital department sets standards for the maximum time from request to visit for emergent, urgent, and non-urgent conditions, and maintains data on their ability to comply with these standards. This data was requested for the specific departments selected for special focus in this report.

*e. Other Written Materials*

In addition to the data described above, DMA also gathered various written materials relevant to the independent assessment. These included:

- Free Care Policies
- Interpreter Policies
- Joint Commission on Accreditation of Hospital Organizations (JCAHO) Report
- Community Benefits Plan and Reports
- Graduate Medical Education Description

### **3. Community Data Collection**

An important aspect of the independent evaluation of Saint Vincent Hospital is the perspective of individuals in the community who may have been affected by the sale of the hospital.

*a. Interviews*

Members of the DMA team conducted telephonic, semi-structured interviews with representatives of different community groups that were represented on the Central Massachusetts Community Health Coalition. These representatives were asked questions about the populations they serve, and the types of services they provide. They described the linkages between their organizations and Saint Vincent Hospital, and described any aspects of the

hospital's practice that they thought might have impact on the baseline or first year assessments. They also identified important health care needs in Worcester that should be considered in these assessments. DMA incorporated this information and recommendations into the selection of access indicators.

*b. Community Survey*

In addition to interviews with representatives of the community coalition, DMA will develop a survey for administration by telephone for the Year One report. This survey will be administered to provider representatives and consumer advocacy representatives during the first year assessment. The survey will address access to health services at Saint Vincent Hospital in a number of areas, including mental health, substance abuse, services for people with disabilities, and others. The survey will be repeated in subsequent years.

*c. Consumer Focus Groups*

DMA will conduct at least three focus groups with consumers for the Year One report. These groups will be targeted to non-English speakers, individuals who use behavioral health services and individuals with physical disabilities. Focus groups participants will be asked to discuss access to health services in Worcester and at Saint Vincent Hospital, and how the sale of the hospital has affected access to health care. Similar focus groups will be held in subsequent years.

**C. CRITERIA FOR DETERMINATION OF COMPARISON HOSPITALS**

Some changes that occurs between the baseline and subsequent periods in Saint Vincent Hospital service provision may be due to changes in the external environment rather than the impact of the sale. In order to identify such changes, DMA gathered data about other hospitals in Massachusetts that provide a basis for identifying trends affecting hospitals generally. First, a group of fifteen hospitals was identified that shared specific characteristics with Saint Vincent Hospital such as geographic service area, levels of charity care, levels of patient service revenue, and/or numbers of admissions.

Additional publicly available data for a four-year period was analyzed to compare trends in key areas. The selection criteria utilized to identify trends similar to Saint Vincent hospital included the levels of Medicaid spending, the changes in percentage of Medicaid admissions and spending, and the changes in percentage of Free Care spending. The levels and direction of change that occurred in these key indicators were examined. Additional characteristics, such as whether or not a hospital is a teaching facility, were also considered in the selection process. As a result of this analysis, a final comparison group of seven was chosen.

The two hospitals that are located in Worcester and share Saint Vincent Hospital's primary service area in Worcester County were selected. These are Memorial Healthcare Inc. (previously known as the Medical Center of Central Massachusetts) and University of Massachusetts Medical Center. Five other hospitals were chosen because they had

experienced similar trends over a three-year period. Milford-Whitinsville Hospital in Milford was chosen because it is also located in Saint Vincent Hospital's service area and it was found to have similar trends. Holyoke Hospital in Holyoke, Leominster-Health Alliance Hospital in Leominster, Mount Auburn Hospital in Cambridge, and Saint Elizabeth Hospital in Brighton were chosen because similar levels and direction of change to Saint Vincent Hospital were identified in selection criteria. In addition to these trend similarities, four out of these five hospitals, like Saint Vincent, provide graduate medical education through teaching affiliations with area medical schools (Holyoke Hospital does not have a medical school teaching program). In the following analysis, these five hospitals are referred to as peer hospitals.

#### **D. CRITERIA FOR SELECTING INDICATORS OF ACCESS**

##### **1. List of Indicators**

DMA developed a comprehensive set of indicators that could be used at baseline and in subsequent years to measure and then track changes in access to health care and community benefits at Saint Vincent Hospital. Access to care is a difficult concept to define. The Institute of Medicine suggests that access reflect the degree to which consumers are able to obtain health care services when needed (HEDIS 3.0). Because access is not fully defined by a generally agreed upon set of criteria, DMA developed a set of indicators that would measure different aspects of individual's ability to obtain needed services. These indicators fall into three broad areas: 1) indicators that help us understand the Worcester Health Care Market; 2) indicators obtained from hospital financial records; and, 3) other indicators of Access. This section of the report identifies the indicators that will be monitored in each area.

##### *a. The Worcester Health Care Market*

Indicators provide information about the broader health care market in which Saint Vincent Hospital operates include indicators about the population living in the service area, obtained from census data:

- Population by town
- Age distribution
- Ethnicity
- Income distribution

Data about indicators of health insurance coverage from Department of Public Health and Division of Medical Assistance include:

- Medicaid covered population
- Medicaid and free care patients served by Saint Vincent Hospital and other Worcester hospitals

Indicators of general public health in the Worcester area include:

- Rate of preventive services
- Rate of selected preventable conditions



- Rates of morbidity and mortality

Finally, discharge data for Worcester hospitals was analyzed and key stakeholders were interviewed to gain a better understanding of trends in the market area. Indicators examined for trends included:

- Payor mix
- Admission sources
- Discharge disposition
- Length of hospital stay

*b. Hospital Financial Records*

Financial records maintained by Massachusetts hospitals and reported to the Massachusetts Division for Health Care Finance and Policy included measures of service utilization, free care, and bad debt that indicate overall levels of care to low income patients. Indicators of general utilization included:

- Patient days by payor
- Inpatient discharges by type
- Occupancy and average daily census
- Discharges by town, ethnicity and age
- Discharge destination
- Outpatient service volume
- Outpatient visits by ethnicity, age

Indicators of free care included the following:

- Free care and bad debt as percents of gross patient service revenue and net patient service revenue, for Saint Vincent and a group of peer hospitals<sup>6</sup>
- Contributions to and reimbursement from the uncompensated care pool, for Saint Vincent Hospital
- Utilization by Medicaid recipients

*c. Other Indicators of Access*

Finally, hospital cost reports and interviews with key stakeholders, provided other indicators of access to services at Saint Vincent Hospital. DMA analyzed the comprehensiveness of services provided by Saint Vincent Hospital, access to services of special importance to Worcester's general and vulnerable populations, programs of special significance to vulnerable populations, the provision of community benefits, research conducted at the hospital and hospital tax contributions.

Specific indicators include:

- Changes in services provided by the hospital

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<sup>6</sup> Saint Vincent Hospital does not compute net patient service revenue for certain financial categories. For such measures, only gross patient service revenue comparisons are made.

- Use of emergency services by payor and demographic characteristics
- Use of obstetric services by payor and demographic characteristics
- Use of psychiatric services by payor and demographic characteristics
- Use of ambulatory clinic services by payor and demographic characteristics
- Characteristics of outreach and prevention programs, especially for special populations
- Interpretation services provided to patients who don't speak English
- Contributions to community benefit programs
- Physical access to hospital services
- Staff training related to cultural competency or special needs of people with physical disabilities

## **2. Rationale for Selecting These Indicators and Discussion of Limitations**

DMA's task is to assess whether individuals in the Saint Vincent Hospital catchment area have experienced changes in access to health services after the sale of the hospital. Access to care is a multi-dimensional concept that includes availability of services, patient knowledge of the services, and patient ability to obtain the service, taking into account physical, cultural, or societal characteristics that may either impede or promote these factors. There is no one best way to measure access. Some attributes of access can be measured directly, such as presence or absence of wheelchair accessible ramps into a building. Other attributes of access are much more difficult to measure, for example, patient perceptions of staff responses to race or ethnicity.

In addition to indicators of overall hospital services, DMA selected several specific hospital services because of their importance to the Worcester community.

- Worcester's death rate from cardiology stands out as higher than both the state rate and other causes of death in Worcester. On this basis DMA determined that Saint Vincent cardiology services were of special significance to the community.
- Saint Vincent hospital literature indicates that their neurology department is the largest service west of Boston and is therefore of significance to the community.

Interviews with community respondents, public health data on Worcester city and county, and the literature about health care for vulnerable populations identified the following vulnerable populations of special importance in the Worcester community:

- Non-English speakers
- People with mental illness
- People with substance abuse problems

- Elders
- People with physical disabilities

In addition, Medicaid provides medical insurance for people with low income, some of whom also have significant disabling conditions. Most fall into the following two groups:

- TANF (AFDC during the baseline period) recipients and their children; and
- SSI recipients, who have a variety of mental and/or physical disabling conditions, many of which require extra medical care.

The Saint Vincent services of special importance to these groups include:

- Obstetric services - used disproportionately by Medicaid recipients
- Emergency services - used disproportionately by Medicaid recipients
- Psychiatry services
- Substance Abuse treatment
- Interpreter service
- Social Services
- Free Pharmacy

DMA's analysis of access focused on indicators that could be measured using available data or data that could reasonably be gathered during the baseline period including public sources and data that could be gathered from key stakeholders during semi-structured interviews. This comprehensive list of access indicators will be monitored over time. (The complete list of indicators is available in Appendix A.)

Some indicators used in this report can be measured more reliably than others. Most notably, indicators of race, ethnicity, and language are sensitive items not always completed by patients. If the patient does not complete the field for race, ethnicity, or language, the admitting clerk then completes this information based on place of birth, visual determination, or degree of English fluency. Because of the importance of this data we have included it in our analysis. While comparisons between hospital departments are likely to be meaningful since any inaccuracies from the method of collection will affect all patients, we caution on comparing this data to demographic information from other sources.

This assessment does not include every possible indicator of access, and will not provide information about every type of hospital service of importance to the Worcester community. Nonetheless, DMA has provided a thorough report on significant aspects of Saint Vincent Hospital's overall service provision, and provision of services to significant vulnerable populations in the Worcester community. This information will allow various constituencies to monitor Saint Vincent Hospital's maintenance of care for the poor and uninsured.

## **E. DATA COLLECTION PROCESS**

Data collection for the baseline period of this report began in October of 1997 with requests to Saint Vincent Hospital, Massachusetts state agencies, and other data sources previously mentioned, such as the Massachusetts Health Data Consortium. Wherever possible during the collection process, the analysis confirmed and verified comparable data from different sources to ensure accuracy.<sup>7</sup> Interviews addressing the baseline period and year one were conducted during December, January and February. In general, DMA requested verification and/or documentation of information collected during interviews, since respondents were recalling events and policies up to two years in the past.

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<sup>7</sup> Data sources are listed on all exhibits in order to explain any discrepancies that may result from utilizing various sources.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**APPENDIX B**  
**BASELINE REPORT**  
**EXCERPTS FROM**  
**CHAPTER III: OVERVIEW OF THE WORCESTER HEALTH CARE**  
**MARKET**

### **III. OVERVIEW OF THE WORCESTER HEALTH CARE MARKET**

As described above, an important focus of this baseline report has been to analyze data that describes the health care market in which Saint Vincent Hospital operates. This section of the report provides basic information about the hospital, describes recent changes in the market, and presents information about the population residing in the service area, including health insurance coverage and public health indicators.

#### **A. SAINT VINCENT HOSPITAL**

Saint Vincent Hospital LLC and its subsidiaries, three skilled nursing facilities, a home health agency and a clinical laboratory, comprise a diversified medical-delivery system. The hospital, established in Worcester in 1893, decreased from 432 licensed beds in 1995 to 365 in 1996. It is an acute care teaching hospital, with eleven independent and joint residency programs. Over 673 physicians and 618 registered nurses are associated with Saint Vincent Hospital. The hospital offers comprehensive inpatient and ambulatory medical, surgical, primary care and specialty services as well as psychiatric services and a small pediatric unit.

Saint Vincent Hospital was established, owned and operated by the Sisters of Providence until its merger with Fallon Community Health Plan in 1990. At that time, it became part of the non-profit Fallon Healthcare System, constituting one part of that organization, and continuing as both a Catholic and a non-profit organization. The other constituent parts of Fallon Healthcare System were Fallon Clinic, Inc., a for-profit physician's practice, and the non-profit Fallon Foundation, which was the parent of the non-profit Fallon Community Health Plan, a Health Maintenance Organization. This organizational structure was in place during the baseline period of this report.

The hospital is also subject to requirements set by the Department of Public Health (DPH) in connection to the Worcester Medical Center project. (This project has been known until recently as Medical City.) Planning for this new hospital and medical complex located on undeveloped property in the heart of Worcester began while Saint Vincent Hospital was part of the Fallon Healthcare System, and is now a project of Saint Vincent Hospital and Tenet Health System. In granting a Determination of Need (DON) for Worcester Medical Center, the Department of Public Health (DPH) required a commitment of \$5.8 million in "community linkage" funds over a five-year period. These funds are to be provided to community health care agencies to meet health care needs identified by DPH. In addition, DPH required Saint Vincent Hospital to improve interpreter services for non-English speakers and the deaf community. Dougherty Management Associates, Inc. is not required to monitor these requirements, but has reported on them as aspects of community benefit and service provision.

## **B. OVERVIEW OF CHANGES IN THE WORCESTER HEALTH CARE MARKET**

Just as Saint Vincent Hospital has changed before and during the baseline years of our review, so have other Worcester health care providers. In 1989, Holden Hospital merged with Hahnemann Hospital and with Worcester Memorial Hospital to create the Medical Center of Central Massachusetts. In late 1996 the organization was renamed Memorial Health Care, primarily providing hospital services at Memorial Hospital. This merger consolidated services but did not appreciably decrease the total number of hospital beds. In the early 1990s, Worcester City Hospital closed, resulting in the transition of providers and low income patients they served into other hospitals and health centers. The University of Massachusetts Medical Center (UMass), a tertiary care teaching and research hospital, was the other major Worcester hospital.

Worcester also has two major health centers that are a major source of health care for poor and disadvantaged populations. Great Brook Valley Health Center admits mostly to Memorial Hospital, and Family Health and Social Services admits to Saint Vincent Hospital and refers patients<sup>8</sup> to UMass. Both organizations participate in the UMass family practice residency program, as does Saint Vincent Hospital.

Fallon Community Health Plan (FCHP) is a managed care plan with a long history in the Worcester community. It has longstanding ties to Saint Vincent Hospital and the relationship between the two organizations continues to be close. FCHP continues its status as an independent non-profit HMO. Other managed care organizations now enroll individuals in the Worcester market, as managed care penetration in the state has increased.

There have been significant changes in the Medicaid program beginning in the early 1990s. These changes have occurred as an increasing number of Medicaid recipients have been enrolled in managed care programs. Those Medicaid recipients selecting Fallon HMO may be served at Saint Vincent Hospital, while recipients choosing other HMOs who do not admit to Saint Vincent will be served in other hospitals for routine and urgent care. The Division of Medical Assistance also operates its own managed care program, known as the Primary Care Clinician program in which hospital admissions are determined by the hospital affiliation of the PCC. The behavioral health services for PCC enrollees are carved out and managed by a mental health / substance abuse managed care organization. Though Saint Vincent Hospital has twice applied to be a network provider for inpatient psychiatric services, it was not selected, and therefore has provided inpatient psychiatric services to Medicaid recipients only on a non-network basis since 1993. During the baseline period, in mid-1996, crisis and inpatient services for indigent clients meeting Department of Mental Health eligibility criteria were included in the carve out. This could reduce the number of free care clients served by Saint Vincent Hospital's emergency room and psychiatric unit. Saint Vincent does have a contract with the Medicaid mental health / substance abuse carve out to provide outpatient substance abuse services.

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<sup>8</sup> Family Health and Social Services cannot admit to UMass (9/22/98).

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**APPENDIX C**

**COMMUNITY INTERVIEW TOOL CONSUMER FOCUS GROUP  
GUIDE**



## St.Vincent Hospital

### Independent Analyst

#### Survey of Providers and Advocates

We are conducting this telephone survey to gather information about services available to consumers in St.Vincent Hospital's catchment area, both before and after the hospital was sold to Tenet Health Care in 1996. We would like to ask you a series of questions about your agency, your position within the agency, the population you serve, and your relationship to St.Vincent Hospital.

#### I. General Questions

1. Name of Respondent \_\_\_\_\_
2. Agency Affiliation \_\_\_\_\_
3. Title \_\_\_\_\_
4. Tenure in Position \_\_\_\_\_
5. What services does your agency provide? Check all that apply.  
 Primary Care  
 Home Care or Personal Care Services  
 Prevention Services  
 Behavioral Health Services  
 Other Social Services. Please Describe \_\_\_\_\_  
 Specialty Services. Please Describe \_\_\_\_\_  
 Other \_\_\_\_\_
6. What is the relationship between your agency and St. Vincent Hospital? Check all that apply.  
 Refer to St. Vincent  
 Receive referrals from St. Vincent  
 Agency physicians admit to St. Vincent  
 Share medical residents with St. Vincent

\_\_\_\_\_ Other. Please Describe \_\_\_\_\_

7. Describe the population your agency serves and its major health care needs:

<b>Population</b>	<b>Major Health Care Needs</b>
_____ Elders	_____
_____ People with Mental Health Problems	_____
_____ People with Substance Abuse Problems	_____
_____ Women and Children	_____
_____ People with Physical Disabilities	_____
_____ The Latino Community _____	
_____ Low income populations	_____
_____ Other _____	

8. Is St. Vincent a major health care provider for this population?

\_\_\_\_\_yes      \_\_\_\_\_no

Please explain.

For the remainder of this survey, we will ask you a series of questions about access to services at St. Vincent for the population you serve. We are focusing on the time period before the hospital was sold to Tenet HealthCare in 1996, and also after the sale of the hospital. In some cases, we will ask you to respond using a seven point scale, with one being the lowest rating and seven being the highest rating for each question. If there are any areas in which you do not feel that you have sufficient information to make a rating, or the question is not applicable, we will record Don't Know or Not Applicable for those questions. For each question, please feel free to also describe an example that demonstrates the reason you have responded to the question as you did.

## **II. Overview**

1. Please rate the following factors in order of their importance in terms of how they have impacted your agency in the last year.

\_\_\_\_\_ The sale of St. Vincent Hospital

\_\_\_\_\_ Growth of Managed Care enrollment in the Worcester area

- \_\_\_\_\_ Changes in the way physicians are organized in the Worcester area
- \_\_\_\_\_ Changes in the medical residency programs in the Worcester area
- \_\_\_\_\_ MassHealth expansion and reduction in the need for free care
- \_\_\_\_\_ The merger of UMASS Medical Center and Memorial Hospital
- \_\_\_\_\_ Other. Please Explain. \_\_\_\_\_

4. Please rate how easily the population you serve could get to St. Vincent Hospital before and after the sale of the hospital. Please consider such factors as transportation, parking, and location of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

5. Please rate how friendly and welcoming St. Vincent Hospital was to the population you serve before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

6. Before and after the sale of the hospital, please rate how easy it was for members of the population you serve to arrange for health care at St. Vincent, including such factors as the appointment-making process and waiting time.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

**I. General Access to Services at St.Vincent’s**

1. For any of the following services that apply, please rate the ease with which the population you serve has been able to access each service before and after the sale of the hospital. If possible, use objective measures.

	Before the sale	After the sale
_____ Emergency Services	_____	_____
_____ Inpatient Obstetrics	_____	_____

_____ Inpatient Psychiatric Services	_____	_____
_____ Primary Care	_____	_____
_____ Pre and post natal care	_____	_____
_____ Outpatient Substance abuse treatment	_____	_____
_____ Other Ambulatory Care	_____	_____
_____ Specialty Services;	_____	_____
Please Identify _____		
_____ Pharmacy	_____	_____
_____ Other	_____	_____
Please Identify _____		

2. For any of the following services that apply, please rate your overall satisfaction with each service.

_____ Emergency Services
_____ Inpatient Obstetrics
_____ Inpatient Psychiatric Services
_____ Primary Care
_____ Pre and post natal care
_____ Outpatient Substance abuse treatment
_____ Other Ambulatory Care
_____ Specialty Services; Please Identify _____
_____ Pharmacy
_____ Other; Please Identify _____

4. Describe any particularly positive or negative experiences you or the population you serve has had accessing these services both before and after the sale of the hospital.

5. In the last year, has St. Vincent added or stopped offering a program or service that was important for your population? Please explain. For services that the hospital no longer offers, are members of your population able to access these services elsewhere in Worcester?

## II. Access for Special Populations

### A. Non-English Speakers or Hearing Impaired (check \_\_\_ if section not applicable)

Please indicate whether your responses refer to individuals who do not speak English or to people with hearing impairments. \_\_\_\_\_

1. How easy was it for the population you serve to get interpreter services at St. Vincent before and after the sale of the hospital?

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

2. How satisfied was the population you serve with interpreter services at St. Vincent before and after the sale of the hospital?

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

3. Please rate the sensitivity and awareness of St. Vincent staff to the cultural needs of the population you serve before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

### B. People with Physical Disabilities (check \_\_\_ if section not applicable)

1. Please rate the degree to which St. Vincent has reasonable accommodations to enhance physical access for people with physical disabilities before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

2. Please rate how knowledgeable St. Vincent staff was about health care issues that are important to people with physical disabilities before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

**C. Elders** (check \_\_\_ if section not applicable)

1. Please rate access to the services provided by St. Vincent for elders before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

2. Please rate the satisfaction of your elderly client group with St. Vincent Hospital outreach clinics before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

**D. Mental Health and Substance Abuse Services** (check \_\_\_ if section not applicable)

1. Please rate access for the population you serve to behavioral health services at St. Vincent before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

2. Please rate your satisfaction with behavioral health services at St. Vincent Hospital before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

**III. Other Hospital Services**

1. Please rate the ease with which individuals who need it could access free care at St. Vincent Hospital before and after the sale of the hospital.

\_\_\_\_\_ before the sale      \_\_\_\_\_ after the sale

2. Please describe outreach activities conducted by St. Vincent for people needing access to free care before and after the sale of the hospital.

1. Please rate the adequacy of these efforts before and after the sale of the hospital.

\_\_\_\_\_ before the sale \_\_\_\_\_ after the sale

2. Please describe any Community Benefits support your agency received from St. Vincent during 1995, 1996 and 1997.

## **V. Conclusion**

1. Is there any other issue related to access to care at St. Vincent Hospital or the sale of the hospital of the hospital that you would like to comment on?

1. Please describe your overall impressions of St. Vincent before the sale of the hospital.

2. Please describe your impressions of St. Vincent after the sale of the hospital, including any changes you have noted that you would attribute to the sale of the hospital.

**HEALTH CARE ACCESS AT  
SAINT VINCENT HOSPITAL:  
AN INDEPENDENT ANALYSIS**

**APPENDIX D**

**CONSUMER FOCUS GROUP GUIDE  
COMMUNITY INTERVIEW TOOL**



## **St.Vincent's Hospital**

### **Consumer Focus Group Guide**

#### **Introduction**

Two years ago, in September 1996, Saint Vincent Hospital was sold to a for-profit hospital chain. The Office of the Massachusetts Attorney General studied the terms of the sale, and set some conditions that the hospital would have to continue to meet after the sale. One of those conditions was to hire an independent health care analyst to monitor Saint Vincent Hospital's continued provision of free care and general health care services to the Worcester community. We were selected by the Attorney General, the Hospital, and the Community Care Coalition to serve as that independent analyst. We are talking to you today to find out whether the sale of the hospital has caused any changes in your access to services at Saint Vincent Hospital. We are interested in your experiences in getting services from Saint Vincent Hospital.

All information gathered at this focus group will be kept strictly confidential.

#### **Questions about Your Use of Health Care Services**

1. Where do you usually go when you need health care services and what type of insurance coverage do you have for these services?
2. When was the first time you received health care services at St. Vincent? When was the most recent time you received health care there? What type of services have you received?

#### **Questions about St. Vincent Hospital**

1. What do you know about the sale of St. Vincent Hospital?
2. Have you noticed any changes at St. Vincent Hospital before and after the sale of the hospital (between 1995 and now)?
3. Describe your overall perceptions of St. Vincent Hospital, including any positive or negative experiences you have had accessing services at St. Vincent. Have your perceptions changed before and after the sale of the Hospital?
4. How easy is it for you or your family to access services at St. Vincent Hospital when you need them? Have the following factors changed before and after the sale of the Hospital?
  - arranging for appointments at Saint Vincent?
  - using Saint Vincent's emergency room?

- accessing free care if needed?
  - physical access to services?
5. Are there services you would like to access at St. Vincent but haven't been able to? Please explain. Can you get these services elsewhere in Worcester?
  6. When you go to St. Vincent's for health care, is staff there sensitive and respectful of you as a person? Is staff there aware and knowledgeable about your illness or disability? Has this changed since the sale of the Hospital?
  7. Have you ever had to be transferred to another hospital, or referred to outpatient providers from Saint Vincent's? Please describe how that process worked for you.