

P.1 Organizational Description

P.1a Organizational Environment: There was a time when being last, or close to it, stopped surprising or even disappointing residents of Mississippi. For too long, Mississippi placed last or near last among the nation in education, income and health. No longer. NORTH MISSISSIPPI MEDICAL CENTER (NMMC*), established in 1937 as Tupelo’s solitary “hospital on the hill,” is now a health care organization prepared to inspire all health care organizations in the United States to higher levels of performance. Nestled in a rural community, NMMC is driven by the passion to break through the barriers of low expectations that have allowed us to provide and accept less than what is possible. Through our relentless commitment, we have successfully and distinctively become a compassionate operational, clinical and technological organization of excellence.

NMMC, as the region’s dominant health care provider, has embraced the responsibility to commit the entirety of its \$706 million in assets and its annual operating revenue of more than \$443 million to provide the most accurate, safe and sensitive health care for the people whose lives and livelihood depend on us. NMMC’s commitment to higher performance transcends the challenge from our competitors. Rather, it is based on the simple idea: people deserve the best health care services professionals can provide. Not less. Period.

P.1a(1) Main Health Care Services: NMMC is the flagship hospital and tertiary referral center for NORTH MISSISSIPPI HEALTH SERVICES (NMHS), a NOT-FOR-PROFIT (NFP), integrated health care delivery system that serves 24 rural counties in northeast Mississippi and northwest Alabama. At 650 beds, NMMC is the largest non-government hospital in Mississippi and the largest rural hospital in the country. NMMC provides a wide array of acute inpatient, outpatient and emergency services. A continuum of high quality and safe health care services stretches from high-tech trauma and/or cardiac care to compassionate home/hospice or LONG-TERM CARE (LTC). NMMC is the region’s referral center and provides expertise in 17 different subspecialties. To accommodate specific patient needs, NMMC provides women’s health, behavioral health, cancer treatment and rehabilitation services at dedicated facilities on the Tupelo campus. Providing acute care is NMMC’s primary service and it generates 65% of NMMC’s revenue.

NMMC coordinates clinical services through five SERVICE LINES (SLs): Cardiovascular, Emergency & Surgery, Medicine, Oncology & Behavioral Health, Women & Children. We study our patient population and develop services specifically targeted to their needs. For example, the rural region NMMC serves is plagued by high rates of cardiovascular disease and motor vehicular accidents. NMMC developed a state-of-the-art, comprehensive CARDIOVASCULAR (CV) care program which offers a service continuum from acute care through rehabilitation. We provide the region’s only Level-Two Trauma Center and aeromedical service.

At NMMC treating disease and injury is not enough. The Mississippi population is among the least healthy and the most medically underserved in the United States with adverse lifestyle choices as a major factor in personal wellness. Although we know that changing lifestyles is among the most difficult of challenges, NMMC is committed to helping people make the right choices

* WORDS AND ABBREVIATIONS IN SMALL CAPS ARE IN THE GLOSSARY.

through a variety of educational and prevention mechanisms. NMMC provides wellness centers, health fairs, certified athletic trainers at area schools, behavioral health evaluations, nurse practitioners on-site in factories, mobile mammography services, certified health educators in schools, school nurses, and a CHURCH HEALTH MINISTRY program. Health education and screening programs include prevention of CV conditions and trauma.

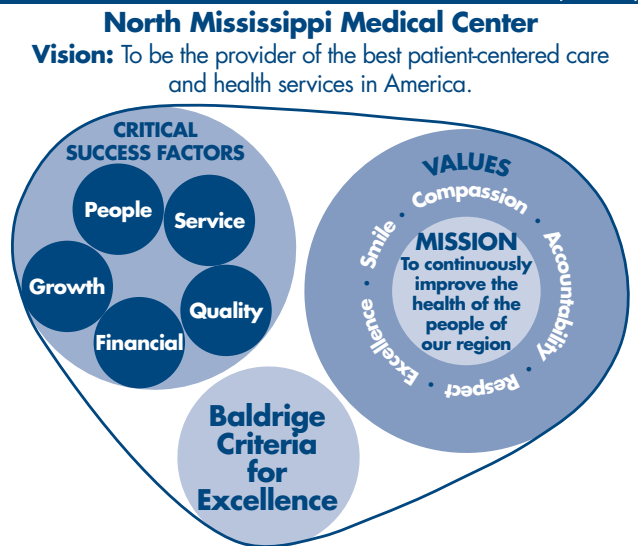
NMMC’s FAMILY MEDICINE RESIDENCY CENTER (FMRC) is a strategy to address the medically underserved by providing ambulatory (outpatient) care. This strategy provides for physicians’ training, serves as a recruitment/development tool for our market and provides needed service to our residents.

P.1a(2) Organizational Culture: NMMC has a strong culture of compassion and caring focused on performance results. Northeast Mississippi has a relatively stable population and it is common for employees to be long-time residents of the community. It is their hospital – it is where they work and where their family and friends receive health care. Pride in one’s work has created a PATIENT-CENTERED CARE (PCC) culture in which employees have a vested interest in making it the best hospital it can be by striving for excellence in every encounter with every patient.

NMMC’s leaders live by SERVANT LEADERSHIP concepts and provide a NO-SECRETS, open communication environment. These leaders emphasize high quality and compassionate care. Tools for improvement are pervasive from an employee’s orientation throughout his or her tenure. Our culture is also results oriented, based on evidence and not excuses. Our clinical and operational results are already strong compared to other health care organizations; yet, our continuous effort to improve comes from our belief that they are never good enough. We are never done. Other hospitals routinely visit NMMC to understand and try to recreate the culture responsible for its successful CLINICAL OUTCOMES (CO).

NMMC’s purpose is to provide compassionate health care with optimal outcomes and NMMC’s Mission reflects the organization’s secure roots in the communities it serves. Its ambitious Vision reflects a deeply-held commitment to excellence in every activity. The CARES Values acronym (Compassion • Accountability •

Figure P.1-1 **NMMC Mission, Vision & Values (MVV)**



Respect • Excellence • Smile) expresses NMMC's focus on exceptional customer service. (Fig. P.1-1) The Mission and Vision are translated into measurable actions through the CRITICAL SUCCESS FACTORS (CSFs): PEOPLE, SERVICE, QUALITY, FINANCIAL, GROWTH. The order of the CSFs is intentional. It starts with creating an environment that draws and nurtures the best PEOPLE to provide the best SERVICE. Great SERVICE results in happy customers and excellent QUALITY. High QUALITY and efficiency produces good FINANCIAL results and requests for more services which results in GROWTH. All activities are organized and managed according to the CSFs, thereby creating organizational alignment and a comprehensive structure for operational excellence.

P.1a(3) Staff Profile: With 3,875 employees, NMMC is the largest employer in its service area (and the second largest private employer in the state). No employees belong to unions and contract workers are used infrequently. The vast majority (81%) of NMMC's staff is employed full time with the remaining staff employed in part time (7%), on-call (9%), or on family or educational leave (3%). Average tenure is 8.6 years.

As expected in a highly technical industry, NMMC's staff represents a broad range of expertise and skills. NMMC provides practice privileges to 277 physicians - directly employing 31 physicians (including 20 medical residents) and partnering with 246 independent physicians (210 with full and 36 with limited privileges) to deliver excellent and efficient care. More than 48% of NMMC's full-time staff are licensed health care professionals including nurses, pharmacists, dietitians and others. Technicians supporting services such as laboratory, radiology and biomedical services account for 15% of staff. Twenty-two percent of staff provide support services such as administrative, dietary, housekeeping and plant operations and 15% provide clerical support. The staff composition is 82% female and 22% minority with 7% of staff designated as supervisory and the remaining as non-supervisory. Each year NMMC is a training site for more than 800 health care students. NMMC's volunteers include more than 90 adults and 60 students. Volunteers undergo orientation and training for positions that best suit their skills and/or needs.

NMMC addresses employee health through its innovative LIVE WELL EMPLOYEE INCENTIVE PLAN, which encourages healthy lifestyles and reimburses employees for completing health improvement goals. In addition, the following areas of staff safety are routinely addressed: secure environment, hazardous materials, emergency, fire prevention, medical equipment and utility systems.

P.1a(4) Major Technologies, Equipment, Facilities: The majority of NMMC is located on the 111-acre Tupelo campus, with 43 structures and another 15 structures on 20 acres at OFF-CAMPUS LOCATIONS (OCL). The inpatient facilities include the primary hospital (453 acute care beds and 29 skilled nursing facility beds), Women's Hospital (102 beds) and Behavioral Health Center (66 beds). NMMC also includes one nursing home (107 beds), FMRC, seven home health care offices, three wellness centers, support service buildings and the following dedicated centers: breast care, rehabilitation, cancer care, diabetes treatment, infectious disease and outpatient infusion.

NMMC invests in the most advanced diagnostic and treatment technologies, such as PET scanning, MRI, kidney lithotripsy, surgical lasers, CT angiography, 64-slice CT and intensity modulated radiation therapy in order to address the intensity and frequency of illness in Mississippi. Through a unique collaboration with the DEPARTMENT OF DEFENSE (DOD), NMMC links the campus' radiology services through PICTURE ARCHIVE AND COMMUNICATION SYSTEM (PACS) which provides rapid, digital transmission and storage of radiological studies. NMMC is involved in more than 80 clinical research protocols in cancer, cardiology, gastroenterology and other patients. Telemedicine links both specialists and primary health care providers with remote sites of care. Neonatal cardiologists in Memphis consult on babies in NMMC's neonatal intensive care unit. A physician in the FMRC may "see" a patient in a school or LTC setting. Home care nurses use telemedicine to create an even stronger connection to their high-risk homebound patients.

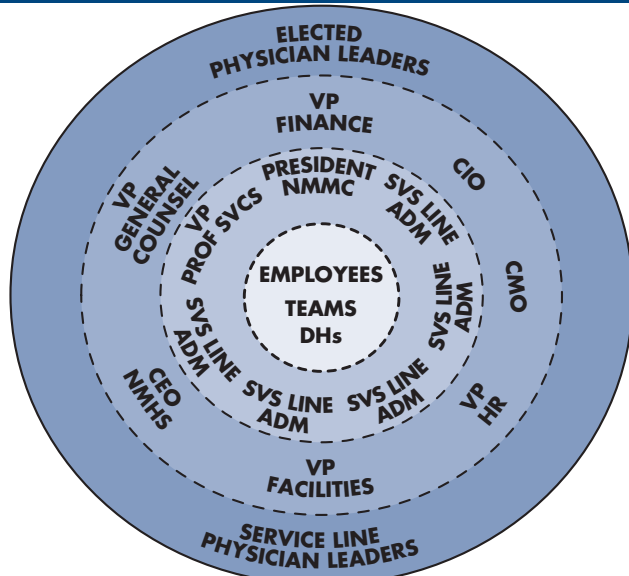
These buildings and services are linked through a role model MANAGEMENT INFORMATION SYSTEM (MIS) (Fig 4.1-1). NMMC began building its comprehensive MIS in 1975 and the system includes more than 2,600 PCs, more than 500 printers, a WIDE AREA NETWORK (WAN), auto paging and faxing services, remote dial-up access, wireless notebook computers and system wide e-mail. The system wide integrated MIS and networks link patients' personal health, service utilization and financial information across all NMMC and NMHS facilities, non-affiliated clinics and schools with NMMC's school health nurses. All electronic medical information is filed by episode and linked to each patient's unique identifying number. In addition to the patient care and patient safety benefits, the ELECTRONIC MEDICAL RECORD (EMR) also allows for the creation of an extensive research database that is utilized in NMMC's PERFORMANCE IMPROVEMENT (PI) processes and has contributed to dramatic CO results (7.1). Being on the leading edge of interoperable information technology systems has led to providing site-visit demonstrations to other health care organizations, recognition for its innovation by winning the DAVIES AWARD, the MOST WIRED AWARD and MOST WIRELESS AWARD, and being highly ranked in *P.C. Week's Fast Track 500*.

P.1a(5) Legal/Regulatory Environment: NMMC operates in a highly regulated industry and complies with and exceeds federal, state and local requirements that cover a range of patient care and safety, employee safety, fair employment and environmental and financial regulations. Most significant among these are the CMS, OSHA, CDC, ADA, FMLA, MDOH, and MDEQ. NMMC ensures high practice standards and undergoes voluntary accreditation by numerous professional organizations including the ACR and the ACS. NMMC has been accredited by the JCAHO since 1952.

P.1b(1) Organizational Structure and Governance System: NMMC uses a SL organizational structure for clinical services. NMMC is a subsidiary of NMHS which is a not-for-profit membership corporation composed of 200 volunteer community leaders recruited from throughout the 24-county service area. The membership meets annually and approves a 12-member BOARD OF DIRECTORS (BOD) for NMHS and a 14-member BOD for NMMC. These Boards have separate memberships except for three community member directors who serve on both the NMMC and the NMHS Boards. Both Boards meet monthly. The NMMC Board reports to the NMHS BOD as do other subsidiary corporations.

Figure P.1-2

Organization Chart



Members of the management team report to the CEO or PRESIDENT according to the organizational structure (organizational charts – Tab C). The NMMC BOD guides and approves the strategic, operational and clinical affairs of the organization by means of a structured committee system, the annual LEADERSHIP PLANNING RETREAT (LPR) and the EVIDENCE-BASED PLANNING PROCESS (EPP) (Fig.2.1-1).

Although there are traditional organization charts, the Leadership system of NMMC functions in the manner depicted in Fig. P.1-2. The inner most ring represents the DEPARTMENT HEADS (DHs), employees and teams who take care of our patient and/or provide services to those who do. The second ring represents the leaders responsible for the day-to-day operation of NMMC, known as the SENIOR LEADERSHIP TEAM (SLT). The third ring represents leaders who spend approximately 70% of their time focusing on NMMC and 30% of their time on NMHS. NMMC purchases the services of those in the third ring from NMHS. The leadership system was designed in this manner for operational and financial efficiency. These two rings make up the SYSTEM LEADERSHIP TEAM (SYSLT).

The outer most ring comprises elected or appointed admitting physicians who are integrally involved in the strategic and operational direction through formal and informal mechanisms (Fig.2.1-1). Formal mechanisms include membership on the BOD, the MEDICAL EXECUTIVE COMMITTEE (MEC), medical directorships, SERVICE LINE OPERATION GROUP (SLOG) and a multitude of committees (3.2a(1)). Informal mechanisms include systematic, intentional strategies in which leaders are visible where physicians congregate and work as well as an OPEN DOOR POLICY in which physicians are encouraged to provide feedback to senior leaders.

Placing employees and teams in the center reflects our realization of the importance of a motivated, engaged workforce in accomplishing our mission and ensuring a sustainable organization. The delineation between the different groups is represented by dashed lines which demonstrate the leadership system's fluidity, agility and independence of the traditional chain of command.

P.1b(2) Key Patient/Customer Groups and/or Market Segments:

NMMC's key customer and stakeholder groups are

described in Fig. P.1-3. We view patient- customers as current and potential patients and we have identified four major health care market segments.

- *service setting*: wellness, emergency, inpatient, outpatient, home care, rehabilitation and LTC.
- *geographic region*: NMMC's market spans 20 counties in Northeast Mississippi and four counties in Northwest Alabama with a population of more than 700,000 segmented into two service areas – a seven-county primary area closest to NMMC and a secondary service area of the remaining 17 counties. NMMC focuses on providing emergency, outpatient, basic acute and specialized inpatient care to residents in the primary service area and specialized trauma, outpatient and inpatient care to residents of the secondary service area (Fig. P.1-4).
- *service lines*: cardiovascular, emergency & surgery, medicine, oncology & behavioral health, women & children
- *payor source*: Medicare/Medicaid, insurance, self-pay

All patient-customers expect affordable, accessible, comprehensive and world-class health care services. We identify and outline our stakeholder groups' key requirements in Fig.P.1-3.

Figure P.1-3

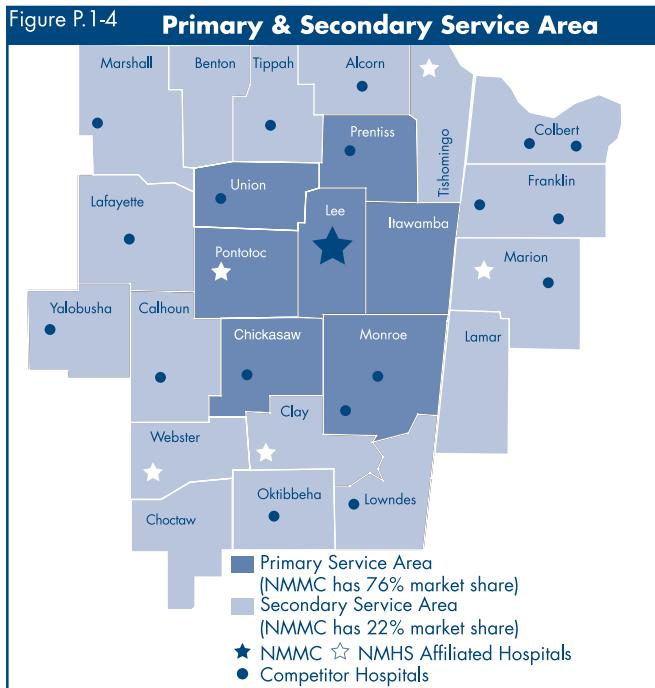
Stakeholders	Key Requirements
Customers	
•Patients & families	Compassion, respect, efficient, effective & safe care
•Community	Access to services, health information
Internal Partners	
•Active medical staff*	Access & timeliness, efficient, effective & safe processes, high patient satisfaction
•NMMC Governance	Ethical behavior, efficient & cost-effective service, community responsiveness
External Partners	
•Local employers & third-party payors*	Access, quality outcomes, reasonable prices
•Major suppliers**	Right product, place, time, price & efficiency
Collaborators	
•Referring physicians	Access, quality outcomes, timely reports
•School Health Ed programs	Health educational & screening programs
•Grant/appropriation agencies	Fulfillment of research/project commitments
•Health-related colleges	Meet education/experiential requirements

*Also customers **NMMC's requirements of suppliers

P.1b(3) Supplier and Partner Roles: The medical staff is NMMC's most important partner and is essential to several key processes: direct provision of effective and efficient medical care; integration of care management with other providers across the health care continuum; and system governance and leadership. As key members of each SL, they are instrumental in identifying and/or managing innovative practices and processes.

Suppliers of clinical goods and services work closely with NMMC managers on the product evaluation and selection process. Each product category undergoes a risk-benefit analysis based on set criteria. This process involves both physicians and suppliers, with physicians and staff providing product requirements and assessment, and suppliers working to meet the overall product (Fig. P1-3), and training requirements. Suppliers of capital equipment participate in a structured analysis.

NMMC collaborates with numerous colleges and health-related schools in the training process for nurses, pharmacists, physical therapists, dietitians and other clinical staff. NMMC has been inno-



vative by funding nursing and allied health faculty positions which has resulted in increased student enrollment and a larger pool of health care workers.

P.1b(4) Supplier and Partnering Relationships & Communication:

Physicians are thoroughly integrated into the development of strategy and in operations – with budget authority and the shared belief that their and NMMC’s futures are conjoined. The vice chairman of the BOD is a physician who also chairs the External Development Committee. Physicians are integral members of the SL teams – collaborating on health care delivery, outcome goals and budgets. Physicians attend regularly scheduled section meetings, which are specific to their practice and provide opportunities to directly interact on clinical management issues. Information is shared with physicians through the Intranet and regular electronic and surface mailings. Physicians are privileged to perform certain procedures in caring for patients and are expected to adhere to certain expectations in return. As part of the ongoing credentialing process, NMMC provides each physician with an individualized profile of his or her performance. NMMC contracts with physician groups to provide ESD, radiology, pathology and anesthesia services. These physicians are fully integrated in clinical and operational planning (Fig. 2.1-1).

NMMC has integrated purchasing programs for capital equipment, medical and surgical supplies, pharmaceuticals, dietary goods and laboratory supplies. NMMC works closely with its group purchasing organization, MedAssets, and its major supplier partners. NMMC has formal partnering with several of its suppliers that include mutual requirements for performance. It also has limited direct contracts with manufacturers, distributors and wholesalers. Managers communicate with suppliers in person and over the phone, but the majority of ordering interactions are managed online.

P.2 Organizational Challenges

P.2a(1) Competitive Position: NMMC is in an unusual competitive situation by virtue of its relative geographic isolation. Tupelo, Miss. (population – 35,000) is the hub city of this sparsely populat-

ed, 7,500 square mile, 24-county rural region in which 2-lane roads dominate. The nearest hospitals of comparable size, and offering a comparable range of services, are headquartered in urban locations at least 100 miles away (Memphis, Tenn., Birmingham, Ala., and Jackson, Miss.). However, NMMC’s primary competitors for providing specialized outpatient and acute care services are two of the Baptist Memorial System’s medical centers in Oxford and Columbus, Miss., (NMMC’s secondary service area). Figure P.1-4 illustrates the location of competitor and partner hospitals. The Baptist Hospitals in Columbus and Oxford have 20% and 18% market shares, respectively, of NMMC’s secondary service area.

NMMC collaborates with Le Bonheur Children’s Medical Center in Memphis, which provides neonatal cardiology consults, and the GOOD SAMARITAN FREE CLINIC (GSFC), which provides health care services to the working poor. NMMC has established referral relationships to other facilities for those services it does not provide.

P.2a(2) Principal Factors Determining Success: NMMC is successful because of its ingrained culture of caring and its focus on clinical excellence. Alignment and deployment of MVV and the CSFs into all of NMMC’s planning and management activities, as well as its PERFORMANCE SCORECARD (PSC) and comparative data, have resulted in operational excellence. CSF-based strategies contribute to differentiating NMMC from other health care organizations (Fig. P.2-1 – left column).

P.2a(3) Key Available Sources of Comparative Data: NMMC has a structured PI system that enables us to effectively compare our CSF-based performance with benchmarks and to establish consistently higher performing targets (Fig. P.2-1 – right column). The health care industry is protective of its clinical practice data and finding benchmark data is challenging, and somewhat of a limitation.

P.2b Strategic Challenges: NMMC, like other hospitals, faces strategic challenges such as shortages of health care providers. Challenges unique to Mississippi and this service area concern the population we serve. Our community has a high poverty level and lack of health care insurance which results in a heavy charity care burden (NMMC provided more than \$58 million in 2005) as well as significant bad debt load (over \$39 million in 2005). In addition, Mississippi’s residents are less educated and their overall health status is among the worst in the nation (based on preliminary 2003 data, Mississippi had the highest age-adjusted mortality rate in the U.S.) (Fig. P.2-2).

NMMC’s challenges are organized by CSF:

- **PEOPLE** – Maintain and enhance our employees’ satisfaction, skills and engagement. Recruit and retain skilled staff. Develop staff and physician leaders.
- **SERVICE** – Increase our patients’ and physicians’ satisfaction. Enhance our patient-customer loyalty.
- **QUALITY** – Provide high level, evidence-based, quality care and maintain patient safety.
- **FINANCIAL** – Generate the financial resources necessary to support the organization in an environment of reimbursement pressures and increasing charity care.
- **GROWTH** – Continue to expand in areas consistent with our Mission.

Figure P.2-1

FACTORS DETERMINING SUCCESS

SOURCES OF COMPARABLE DATA

PEOPLE • Maintain high quality workforce

- Assuring a highly motivated, satisfied, safe and well-trained workforce that is committed to providing care with compassion and dignity.
- Deploying EXCEL, a performance management system that links CSFs with personal goals.

NMMC contracts HRI to perform an employee opinion survey and provide national benchmarks every two years. As necessary, NMMC seeks comparative human resource, safety, educational and charity giving data from sources outside of the health care industry.

SERVICE • Improve customer service

- Organizing around SLs which place responsibility, authority and accountability to leaders closest to the care delivery process.
- Monitoring and responding to patient satisfaction.
- Committing to community health initiatives that provide comprehensive health education and preventive health services.

NMMC contracts Press-Ganey, a national company, to conduct ongoing patient satisfaction surveys and provide comparative national data. NMMC collaborates with Mississippi State University (MSU) to conduct a community health assessment (CHA) every three years.

QUALITY • Improve prevention and health education services • Improve health outcomes

- Providing a safe patient care environment.
- Creating care-based cost management (CBCM) to reduce costs while providing excellent clinical outcomes.
- Linking clinical outcome (CO) goals to continuing medical and nursing education programs.
- Developing a highly-interoperable MIS that permits patients to travel seamlessly through the continuum of care and provides clinical, financial and operational data throughout the system.
- Integrating medical sub-specialists and advanced technology.

NMMC uses an internal system, the Cost Information Decision Support (CIDS) system, and an external database, CareScience, a software company with approximately 200 facilities representing a database of over 3.5 million patient records. NMMC participates in the JCAHO Core Measures program and measures itself against the national 90th percentile. NMMC enters its care-specific data into numerous national registries. NMMC participates in the quality initiatives of the Information and Quality Healthcare (IQH), Mississippi's agency for Medicare compliance and quality improvement. NMMC also participates in patient safety-focused systems such as AHRQ and and IHI 100K Lives Campaign.

FINANCIAL • Produce financial resources required to support mission and vision

- Combining market data with top-down strategic planning and bottom-up operational planning to produce an EPP.
- Merging industrial engineering and clinical expertise to produce optimal operational efficiency.
- Managing finances to produce financial strength (AA bond rating).

NMMC uses both an internal database, the Management Reporting System (MRS), and an external database, Solucient, the largest comparative database in the United States providing operational and financial benchmarking of peer organizations. NMMC uses Standard and Poor's to benchmark its financial performance.

GROWTH • Expand access to health services

The above factors enable NMMC to provide a wide range of leading-edge clinical technologies and services as well as:

- Expanding services and access;
- Focusing on community health; and
- Adapting to the changing environment.

NMMC uses a cooperative data sharing program, coordinated by Solucient, for market share and growth planning. Only Mississippi hospitals participate in the program and the majority of hospitals in NMMC 20-county service area contribute data.

P.2c Performance Improvement System: In 1983, NMMC implemented Quality Circles, which were succeeded by Quality Improvement Teams and the implementation of the PLAN-DO-CHECK-ACT (PDCA) model as the overall approach to improvement efforts. In 1992, NMMC developed the CLINICAL PRACTICE ANALYSIS (CPA) process which provided physicians with individualized performance profiles of their care management and outcomes that were compared to local and national benchmarks. Sharing comparative data engaged physicians in PI and set the stage for the development of the CARE-BASED COST MANAGEMENT (CBCM) approach. CBCM links health care quality and cost containment by looking beyond traditional cost drivers (people, equipment, supplies) to the care issues that have a much greater impact on the actual cost of care, namely: practice variation, complications and social issues. The CBCM approach has produced significant results (7.1), has been featured in numerous national forums and has

resulted in national recognition and awards, including the 2003, 2004 and 2005 Solucient's 100 Top Hospital Performance Improvement Leaders and first prize in the 2005 American Hospital Association McKesson Quest for Quality Prize.

In 1996, NMMC began using Baldrige Criteria to identify OPPORTUNITIES FOR IMPROVEMENT (OFIS). The state of Mississippi Baldrige program awarded NMMC the Excellence Award in 1997 and the Governor's Award in 2000. NMMC continues to use Baldrige criteria to critically examine its approaches and processes.

NMMC's systematic evaluation and improvement of key processes have evolved from our Baldrige-based performance analysis. SL teams meet monthly and use PSCs to assess performance. Each team's PSC is organized by the CSFs and each key process indicator has a target and a benchmark and is tracked (monthly in most cases).

In addition, each SL and department produces a monthly BUDGET ACCOUNTABILITY REPORT (BAR) that incorporates the unit's revenues, expenses and productivity into an overall measure. If the measure is below the established threshold, then an ACTION PLAN (AP) is required. NMMC also uses the PSC system for organizational learning by routinely sharing these results and the lessons from them with the staff and BOD.

Figure P.2-2

Demographic Information

Indicator	MS	US Average
Median household income	\$33,659	\$44,473
Poverty (% below level)	17.70%	12.40%
Health insurance (% without)	17.20%	15.50%
Education - high school diploma	72.90%	80.40%
College grad (bachelors degree)	16.90%	24.40%
Mortality (age-adjusted/100k)	1,015.2	831.20
Physicians/100k (NMMC area)	123.3	152.1

1.1 Senior Leadership:

1.1a(1) Vision and Values: We believe that leadership is an honor and an obligation: a responsibility to “enable” the ability of every employee, physician and volunteer who chooses to spend their careers with us. NMMC’s leadership system is designed to leverage the potential of every leader, front-line employee and key partner. Inherent to this is the relentless focus on the MVV and CSFs of PEOPLE, SERVICE, QUALITY, FINANCIAL and GROWTH (Fig. P1-1).

Vision and innovation are woven into the very fabric of our culture. The setting of MVV is far more than senior leaders, gathering information and emerging with statements to be etched into the foundation of the organization. The MVVs at NMMC are the evolutionary result of an organization created by people of vision in the early 1930s. Senior leaders are obliged to extend forward that tradition and accomplishment. We reaffirm and refresh the intentions of our community’s founding leaders: to address current needs and anticipate the future state of health care. We do this through a carefully crafted and continuously refined process of strategic planning that correlates current and future health care needs with the current capability and the future promise of the art and science of medicine. The SYSLT annually revisits the MVV at the beginning of and upon completion of each EPP cycle (Fig. 2.1-1). The EPP dialogues focus on ensuring that the MVV are not just words but messages that inspire a diverse workforce to achieve our full potential. Results, like those presented in Category 7, are used during the EPP to validate our MVV success or failure. The BOD and the SYSLT set the current Mission statement in 1994 to reflect the growing refusal to accept the pervasiveness of disease which continued to debilitate our region. In 2001, this process led to the Values statement based on input from employees, physicians and the community. Since 1996, as a result of our work with the Baldrige criteria, we set our sights on organizational performance that far exceeds merely the acceptable.

Senior leaders personally communicate organizational vision and values to staff, key customers and partners and align the organization through:

- EMPLOYEE COMMUNICATION SESSIONS (ECS);
- opening session led by the CEO (1.5 hours), and one hour presentation by the PRESIDENT, at NEW EMPLOYEE ORIENTATION (NEO);
- posters depicting the MVV and CSF prominently displayed throughout the organization;
- meeting agendas and results organized by the CSFs;
- thank-you notes sent to employee’s homes;
- thank-you-for-choosing NMMC letters to patients;
- meetings & regular communication with medical staff, third-party payors, local employers and major suppliers;
- involvement of a major supplier in the EPP (Fig. 2.1-1); and
- adoption of and role modeling the philosophies of:
 - SERVANT LEADERSHIP,
 - OPEN DOOR communication,
 - NO SECRETS culture,
 - NO EXCUSES/RESULTS ORIENTATION, and
 - PATIENT-CENTERED CARE.

The SYSLT-established EXCEL process (Fig. 5.1-2) engages each employee to set individual performance plans based on organizational values and CSF-based targets. Throughout the year, each

leader communicates the organization-wide, SL and departmental performance expectations and employees’ role in the process. KNOWLEDGE BOARDS displayed in each department are organized by CSF to communicate departmental and organization results and important information. The Values and implied expectations are routinely reinforced in ongoing customer service training (Figure 5.2-2), with routine updates via newsletters, the Intranet, weekly e-mails and department meetings (Fig. 4.1-2). This deliberate, relentless focus on the MVV and CSFs by the SYSLT ensures that they are deployed throughout the organization to enable staff to function at their highest potential. Figure P.1-3 presents graphical-ly the open, fluid nature of our leadership system.

1.1a(2) Ethical and Legal Behavior: Recognizing that culture fosters ethical and legal behavior, and that it flows from the top, senior leaders continuously reinforce what is acceptable and what is not. In conjunction with the Corporate Compliance Committee of the NMMC BOD, the SYSLT established a strict zero-tolerance policy for unethical or illegal activities by any member of the organization. The SYSLT developed and is guided by the NMMC Compliance Plan. The deployment, learning and integration of this plan are described in 1.2.b(2). The SLT personally promotes ethical behavior through its NO SECRETS culture and by intentionally raising ethical issues during their leadership rounds.

1.1a(3) Sustainability, Performance Improvement, Agility and Learning: The SYSLT’s systematic approach to creating a sustainable organization is to align all of its systems and processes with the MVVs through the CSFs. By being relentlessly focused on the CSFs, a culture is created which ensures progress toward achieving our mission, strategic objectives, innovation and agility. This CSF-focused approach was adopted by the SYSLT after extensive research of the literature, world-class performing organizations, previous Baldrige Award recipients and has been corroborated by our organizational experience. This focus forces the SYSLT not to be tempted to implement “programs” which garner initial attention but are soon forgotten.

Senior leaders drive five principal strategies to assure sustainability:

- **PEOPLE:** improving employee and physician satisfaction/engagement (Fig. 5.1-2, 7.4);
- **SERVICE:** improving customer service (Fig. 3.1-1, 7.2);
- **QUALITY:** achieving breakthrough clinical quality improvement (Fig. 6.1-3, 7.1);
- **FINANCIAL:** creating financial resources necessary to support the MVV (6.2b(1), 7.3); and
- **GROWTH:** development of services consistent with our MVV (7.3-13 & 14, 7.6-1).

These strategies are “hardwired” into our leadership system by setting and monitoring targets for each CSF-based goal (Fig. 2.1-4 & 4.1b (1)).

The SYSLT uses the EPP system of workshops and retreats (Fig. 2.1-1) as its primary method of developing and communicating sustainable short and long-term strategies and goals. The EPP is key to the SYSLT’s efforts to clarify strategy, identify improvement objectives and stimulate innovation through widespread participation. The senior leaders designed the EPP to assure NMMC’s sustain-

ability by emphasizing clear roll down of goals and objectives to the department/SL level whereby each department/SL works with its employees, physicians and business partners to establish annual ACTION PLANS (APS) and measurement targets which are in turn used to create departmental/SL PSCs. The APS are implemented by individual staff members who utilize their department/SL's PSC to set their own goals and indicators through EXCEL. Employees keep a copy of their performance plan on their person through their KEYS TO SUCCESS CARDS, which are aligned by the CSFs and include continual reminders of the MVVs, CSFs and departmental goals. The CSFs provide a strategic framework that encourages agility, innovation and empowerment by allowing departments and SLs to create their own operational plans and targets which are aligned with the strategic directions of NMMC.

At NMMC, the CSFs do not reside only at the senior leadership level—they are thoroughly deployed to departments where the work of health care is done. Through this systematic deployment the SLT ensures NMMC's sustainability. These plans and targets roll up to the organization-wide PSC, a tool, aligned by the CSFs, that is used to report monthly progress toward achievement of yearly goals (Fig. 2.1-4). The PSC system is dynamic and promotes agility and innovation. It includes indicators responsive to changes and current needs, along with goals designed to GROW THE BUSINESS (GB) and RUN THE BUSINESS (RB).

Performance improvement and agility are intentional organization competencies directly managed by the SLT. Key strategic and competitive attributes are essential if NMMC is to be successful in improving the health of people who for too long have been the nation's most illness prone. We accomplish this each month as SLT members perform a dual review of departmental/SL performance and the overall CSF performance via roll up of the PSC. Through the PSC, 90-DAY ACTION PLAN (90-DAY AP) and BAR processes (7.3-10), SLT members review department/SL performance relative to targets and established competitive or comparative benchmarks. If the performance is below target, the 90-DAY AP is refined to reflect mid-term corrective action. The department's/SL's performance on that indicator is then reassessed monthly via the PSC. Qualitative goals are also reviewed at this time to ensure progress toward intended outcomes and supply of required resources.

The PEOPLE CSF is pivotal to our success and we understand and value well-educated and trained employees. To create an environment of staff learning the SYSLT develops learning expectations, commits funding and provides educational opportunities. EXCEL is a carefully designed system that plans employees' training to enable them to achieve new competencies or reach stretch goals (Fig. 5.1-1). At the direction of the SYSLT, the Education Department provides more than 53 hours of training per employee per year (7.4-6) and the HUMAN RESOURCE (HR) Department provides a career counselor to help employees determine aptitude and apply for external educational programs (Fig. 5.2-3). Since 2002, 196 employees have received bachelor's or master's degrees through the LEADERSHIP DEVELOPMENT/SUCCESSION PLANNING (LD/SP) tuition reimbursement initiative. Finally, the SYSLT incorporates educational opportunities into its annual budgeting process and spends more than \$1.4 million per year on employee education.

The SLT facilitates learning about innovation and empowerment by actively engaging in innovative clinical outcomes projects and integrating these activities into the system through the SLT-commissioned CBCM philosophy (P.2.c & Fig. 6.1-3). CBCM has produced significant results essential to sustainability (7.3-11). NMMC has been nationally recognized for its leadership in quality management, and the SLT utilizes these awards as external validation of our progress and innovation. The SLT recently received the following recognitions for the PI environment it has cultivated (7.5-16).

- Recognized as a Solucient 100 Top Hospitals Performance Improvement Leaders in 2003, 2004 and 2005. This honor recognizes hospitals whose leaders have instilled a true PI culture across their organization over the previous five years. NMMC was one of only four hospitals nationally to be recognized for this distinction three years in a row, placing it in the top 1% of hospitals in the country. NMMC did not apply for this recognition. Solucient analyzed their extensive Medicare database of quality indicators, and selected NMMC for this honor.
- The 2005 American Hospital Association McKesson Quest for Quality Prize for organizational commitment to highly reliable, exceptional quality, patient-centered care.
- The 2006 Hospital of the Year by the Mississippi Nurses Association and Mississippi Nurses Foundation.

The SYSLT recognizes the organization's sustained success is dependent upon its leaders. Accordingly, a rigorous LD/SP (5.1.c.3) process was commissioned in 1984 and is funded annually by the SYSLT. The SYSLT manages this rigorous, forward-looking process to ensure that we have backup leaders in the case of an emergency, that we are prepared for an orderly transition as people retire or relocate and to provide leader job satisfaction. The SYSLT reviews the LD/SP each year and develops APS based on current and expected needs. The LD/SP APS may include formal education as well as other components. One example is the aggressive effort to increase the percentage of leadership with master's degrees, with the result that, in addition to 196 bachelor's and master's degrees, 19 staff members have completed or are currently enrolled in graduate degree programs in Health Care Administration. NMHS'S LEADERSHIP DEVELOPMENT INSTITUTE (LDI), provides leaders throughout NMMC timely, focused education on topics ranging from current operational issues to personal leadership competencies (Figs. 5.1-4 & 5). SYSLT members regularly teach LDI sessions. To enhance our commitment to SERVANT LEADERSHIP principles we refined the LDI offerings and are rolling out a structured SERVANT LEADERSHIP program. The SYSLT was the first group to read the Jim Hunter books ON SERVANT LEADERSHIP, undergo self- and 360°- assessments, attend a session conducted by Mr. Hunter and develop individual APS for improvement. They will soon undergo six-month assessments on their improvements. Twelve medical staff leaders are currently undergoing the process and three other levels of leaders will cycle through the process within the next fiscal year.

In 1997, NMMC established the Physician Leadership Training Initiative and since 2001, 37 physician-leaders have attended 54 physician leadership seminars as a key component of our physician partnership strategy that is vital to sustainability. Physician leaders also participate in the five-phase leadership development process which includes specific training for each phase. Successful section leaders become SL leaders who may be select-

ed for a clinical department head position, then elected as chairman of the medical staff and the highest level of leadership is membership on the BOD.

1.1b(1) Communication, Empowerment & Motivation:

The order of the CSFs (PEOPLE, SERVICE, QUALITY, FINANCIAL and GROWTH) is deliberate. PEOPLE drive everything. Therefore, the SYSLT intentionally developed a unique and comprehensive system of interactions to create a culture of empowerment, inspiration and agility. The system includes the following components.

- **NEW EMPLOYEE ORIENTATION:** extensive training by the CEO and the PRESIDENT creates an environment in which our staff is motivated, engaged and excited to come to work. Every NEO session includes brainstorming to capture our newest employees' ideas on "what makes a great culture/environment" and "what are the characteristics of a great leader." The responses are shared weekly with all leaders and are incorporated into our leadership system.
- **Formal behavioral interviewing:** job applicants are selected for their fit within our culture which encourages empowerment and innovation (Fig. 5.1-3).
- **Freedom-to-act:** encourages empowerment within the employee's skill range. The senior leaders role model NMMC's culture by performing Value-based activities: if a patient needs assistance, provide it or find someone who can; if a visitor appears lost or upset, offer help; if paper is on the floor, pick it up, etc.
- **The EXCEL process** through which each employee identifies empowerment opportunities and examples (Fig. 5.1-1).
- **IDEAS FOR EXCELLENCE (IE):** Senior leaders and all management actively manage and encourage employees to submit ideas for improvement. Every employee suggestion is responded to and 301 were implemented and recognized in 2005 (7.4-16).
- **STARS ON-LINE:** Reward and recognition initiative honors empowered employees who provide exceptional service (Fig. 5.1-2).
- **CEO's and PRESIDENT'S weekly e-mails:** communications and updates (including Baldrige criteria).
- **Team Orientation:** more than 50 teams are in place and serve as motivational and communication mechanisms.
- **NO-SECRETS** and an **OPEN-DOOR** environment.
- **Two-way dialogues with senior leaders through:**
 - **SENIOR LEADER ROUNDING**
 - **Lunch in cafeteria:** The SLT deliberately eats with random employees.
 - **ECS:** Conducted four times per year by the SYSLT, these "town hall meetings" are open sharing dialogues on NMMC results by CSF and include education on current topics as needed.
- **STAT FACTS:** communication of real-time results in each of the five CSFs via the Intranet, departmental meetings and employee news television.
- **Volunteers** undergo extensive orientation and receive a regular newsletter.

The SLT communicates with NMMC's most important partners—physicians through traditional methods such as direct communication with physician members of the BOD, the System Medical Staff Committee, MEC, medical staff section meetings, SL meetings, and quarterly meetings of the entire medical staff. The SLT also employs proactive methods by intentionally making rounds in

work areas and lounges where physicians congregate. Not only are SLT members visible, they are accessible as well. The SLT communicates with physicians on specific topics as an intentional deployment method. In order to increase this interaction, the offices of several members of the SYSLT were relocated to create a physician lounge adjacent to the PRESIDENT, VP of Professional and Support Services and CMO's offices.

The SYSLT's commitment to communication extends beyond the internal audience in a number of ways:

- every inpatient receives a letter from the CEO and the PRESIDENT thanking them for choosing NMMC and assuring them that PCC and service are our goals. Their direct-line telephone numbers are provided should the patient's expectations not be met;
- a weekly e-mail is sent to 200 corporation members throughout the community to inform them of key events taking place at NMMC;
- the SYSLT hosts an annual communication session with area political leaders to share information concerning current health care issues and to obtain feedback from their constituents;
- a **COMMUNITY RELATIONS FACILITATOR (CRF)** holds frank, two-way discussions with the communities we serve and relays information gleaned to the SLT (3.1.a(2)). The SLT, in turn, trends the information and creates APS based on the feedback; and
- the SYSLT communicates with its payor-customers via bimonthly visits made by senior leaders with local employers and through quarterly meetings of the Occupational Health Advisory Committee, comprised of representative employer groups and **WORK LINK**, NMMC's occupational health service.

Celebration is a palpable component of our culture. The SLT uses methods, beyond the previously mentioned personal presence motivational methods, to recognize staff for their contributions and to encourage them to perform at ever higher levels. The criteria and rewards for recognition initiatives are described in Fig. 5.1-2.

1.1b(2) Actions, Creating & Balancing Value: The SLT's focus on action is based on a **NO EXCUSES/RESULTS ORIENTATION**. The incorporation of facts and results identified via key reporting mechanisms enable an evidence-based focus (Fig. 2.1-3). Issues identified through these reports often become subjects of PI teams and may become PSC indicators. Once an OFI is identified, the SLT determines the approach to the OFI and its priority. If it is a minor project, the SLT will assign the problem assessment and process improvement to the appropriate leader or (PI) team. If, however, the PI project is expected to affect the CSF-based goals or require substantial financial commitment, the PI initiative is reviewed by the BOD. The SLT sets and monitors deadlines for all improvements.

The SLT's approach to creating and balancing value for patients, other customers and other stakeholders is inherent in the deployment of the five balancing CSFs. We align the entire organization along the CSFs from which we set strategies, performance indicators (Fig. 2.1-4), **90-DAY APS** (Fig. 2.2-1), opportunities, education, meeting agendas, and results reporting. The CSFs ensure balance in our thinking, discussions and culture. We refuse to let financial performance dominate our decision making.

1.2 Governance and Social Responsibilities

1.2a(1) Accountability, transparency, independence, protection of stakeholders:

As a charitable organization owned by the community, NMMC is accountable to its community and has extended its NO SECRETS policy to our public. The community is kept actively informed of plans and performance through its representation on the BOD. Open Letters to the Community provide transparency and communication with our community. These paid advertisements appear in the newspaper and address many issues including the operational performance, BOD construct and accountabilities, trends in health care and community concerns identified through our community listening and learning efforts (Fig 3.1-2). The Open Letters as well as the operating statement are placed on the Internet site. The CRF (1.1.b(1)) formally meets with representatives from each community in our region for frank two-way communication.

The BOD is highly engaged, agile and exercises its oversight and leadership through participation in the EPP, monthly review of the reports mentioned in Fig. 2.1-3 and an active BOD committee structure. Fiscal accountability is ensured through a BOD structure intentionally designed to enable cross-checking, multiple reviews and accountability via the Finance, Compensation, Investment, Audit, Corporate Compliance and Risk Management Committees. The BOD receives continuous feedback from these activities through monthly or quarterly reporting.

The BOD CONFLICT OF INTEREST (COI) POLICY includes two components: 1) BOD members sign a statement indicating they have read the policy and have no conflicts, or if they do, they must divulge the conflict; and any member of the BOD who has a financial interest related to the topic of discussion must leave the BOD meeting during the discussion and approval/denial process. 2) We take an additional step by requiring that BOD's decisions, in cases of potential COI, be forwarded to the Conflicts Committee (comprised of members of the BOD who have no conflicts with the organization) for review and recommendation.

The COMPLIANCE OFFICER (COFFICER) and the VP-finance work with KPMG that conducts an annual independent audit of NMMC. NMMC has adopted the Sarbanes-Oxley (SOX) sections as recommended by the Fitch report on SOX AND NOT FOR PROFIT HOSPITALS. While NMMC is not required to comply with SOX, we benchmark against its requirements in order to exceed currently acceptable ethical standards for NFP organizations (7.6-11).

1.2a(2) Senior Leader and BOD Evaluation: The EXCEL system (5.1b) is used to assess the performance of both administrative and health care leaders. Each leader is also evaluated using the eight SERVANT LEADERSHIP character attributes. The BOD performs the PRESIDENT'S EXCEL and, in turn, the PRESIDENT evaluates the SLT. If the leader does not meet the goals established in the EXCEL plan, an AP is developed and the results are reviewed at a time interval appropriate to the intervention. As part of EXCEL, leaders identify additional training or education that may be necessary.

Information for these evaluations is gathered from six sources. 1) Administrative and clinical leaders are required to perform an annual self assessment that focuses on PSC results. 2) The EXCEL Performance Review Process includes 360-degree input from fel-

low employees and physician partners. 3) The EMPLOYEE OPINION SURVEY (EOS) (5.3b(1)), contains a section on leadership effectiveness. 4) The medical staff opinion survey, conducted every year, also assesses NMMC leadership effectiveness. 5) The formal physician survey is supplemented by the intentional leadership rounds in areas where physicians congregate. 6) At the end of each ECS, employees are asked to complete surveys in which the SLT includes questions related to senior leader performance.

Physician leaders are evaluated and opportunities are identified through the use of the LD/SP process. As noted in 1.1.a(3), physicians progress through five-phases of leadership. The Physician Leadership Committee and/or the Physician Nomination Committee assess their success in terms of engagement (additional training and involvement) and performance (clinical outcomes) at each level before progressing to the next level.

Senior leaders use the PSC, along with results from system PI team activities, to improve their own and the organization's leadership system effectiveness. For example, in reviewing the monthly PSC, we may identify that patient satisfaction has decreased. The SLT uses PDCA to determine the contributing reasons and takes action—including coaching members of the SLT, if, for example, a leader's visibility rounds have declined.

The BOD conducts an annual self-evaluation (7.6-5). BOD members complete written self-appraisals and the results are tabulated. The results are reviewed by the BOD and appropriate changes are incorporated into the governance system. Each new BOD member undergoes an extensive orientation and the annual LPR includes educational seminars.

1.2b(1) Public Concerns: The analysis of future impact of existing and proposed changes in programs and operations is addressed in S1-3 of the EPP (Fig. 2.1-1). Implications are factored and addressed, along with other priority considerations, in our APS. We understand the adverse impact of the high cost of health care and are working aggressively to reduce the rate of increase through our CBCM approach (6.1a(3), 7.3-11). We anticipate public concerns by utilizing multiple listening methods and developing proactive responses appropriate to the particular concern (Fig. 1.2-1).

The community owns us and we take their concerns with routine operations very seriously. The Director of Safety Management coordinates efforts to protect the community and environment from the hazards of waste disposal including chemical, radiation, air quality and solid waste. NMMC uses the latest technology to dispose of liquid waste, to solidify bio-hazard liquid waste for safer handling and to ship waste for incineration. The Biological Preparedness Task Force, a multidisciplinary group that includes community emergency service representatives, meets monthly and has identified specific risks and developed comprehensive plans for managing bio-hazard disasters in the community and at NMMC (5.3a (1 & 2)). NMMC's service area is a leader in upholstered furniture manufacturing and polyfoam is necessary for the upholstery. Polyfoam requires toluene diisocyanate and this chemical is transported by tank car through Tupelo almost daily, creating the possibility for leakage or rupture in a collision. Preparations and drills for these types of incidents as well as terrorist acts and other types of emergencies are systematic and on-

Figure 1.2-1

Listening & Responding to Public Concerns		
Listening Method	Sample Public Concerns	Proactive Response
Community Relations Facilitator (CRF)	ESD wait-time confusion, bills are too complicated	Explain ESD triage procedures, create user-friendly billing notices
Community Health Assessment (CHA)	Regional health factor risks	Establish programs to promote weight control, smoking cessation, active lifestyles
National Health Issues	High cost of care, patient safety, outpatient services needs	Develop CBCM, manage patient safety, establish centers for digestive health, pain, HIV/AIDS
Community focus groups	Poor local access	Establish primary care clinics in under-served area, heart institute, cancer diagnostics & treatment services
Governing Board	Services NMMC does best	Outsource renal dialysis services
Community Development Requests	NMMC leaders' expertise availability	Share expertise through participation in Junior Achievement, business & community education
Board-appointed Women's Task Force	Breast cancer & teenage health needs	Establish Breast Care Center, develop TeenScene information on Internet
Institutional Review Board	Risk of patient-subjects in studies not clear	Create clear, standard consent form explanations

going. In 2002, NMMC was designated the region's Weapons of Mass Destruction Center of Excellence and procured one of 42 federal grants to develop a regional Medical Reserves Corps (Fig. 7.6-8). In 2005, NMMC and the Lee County Medical Reserves Corp collaborated to assist Hurricane Katrina evacuees with health care, medical and pharmaceutical supplies, as well as decontamination and clothing. In 2006, NMMC became one of the CDC's Chempack sites and was provided with a stockpile of treatments for five types of chemical poisoning. In addition, NMMC has stockpiled personal protective equipment for first responders in preparation for a regional pandemic requiring isolation and possible quarantine. NMMC is the region's designated "Mass Casualty Center."

The BOD and SYSLT are committed to environmental sensitivity in all NMMC's activities and operations. NMMC applies the Leadership in Energy and Environmental Design (LEED) concepts to new building design and renovations. Each month we recycle more than 80,000 pounds of paper, 18,000 pounds of cardboard and 7,000 pounds of plastic. NMMC utilizes energy efficient systems. For example, the NMMC laundry partnered with the Tennessee Valley Authority (TVA) to be the first to install an ozone system that uses hydrogen peroxide bleach instead of chlorine bleach. This ozonation process lowers washing temperatures from 170 degrees to 95 degrees, is more energy efficient, reduces the need to rewash and is better for fabrics (7.5-10).

We respond to regulatory, legal and accreditation requirements with full compliance (Fig. 1.2-2, 7.6-11). We often exceed requirements or meet them early. For example, NMMC exceeds federal safety requirements by having background checks performed on its volunteers and we are fully compliant with the recently implemented USP 797 Clean Room Regulations, dealing with sterile intravenous preparations, well before the 2008 deadline.

We use sentinel alerts from the JCAHO, equipment alerts from ECR, ISMP, and our high risk insurer survey to identify potential failure modes. The PI Coordinator conducts annual and as needed FMEAs of high risk processes whereby the current process is placed on a flow chart with each step evaluated and scored. (Fig. 1.2-2) The potential failure points are identified and risk reduction strategies are developed. Once processes are changed, the scores are retabulated (6.1a(6)).

When a SENTINEL EVENT occurs, a team performs a RCA and the department or SL of occurrence must submit an AP in response. The AP may include process improvement, policy changes or education.

1.2b(2) Ethical Behavior: Ethical decision making permeates the organization's culture. Our leaders proactively address ethics and compliance during the NEO, reinforce ethical behavior through the employee's tenure, and ask each employee in the exit interview if he or she had ever witnessed unethical behavior. During NEO each employee is provided with a copy of the NMMC Compliance Plan and completes an ethics COMPUTER-BASED TRAINING (CBT) program (5.2a(2)). Soon afterwards, they sign an ethics commitment with their immediate work site supervisor. Ethical behavior is a component of every employee's annual review. A summary Code of Conduct is on the HR bulletin board with a reminder to report any illegal or unethical behavior to supervisors or the COFFICER. In addition, all managers receive training on ethical topics. Compliance activities include a COMPLIANCE HOTLINE and an audit program. This hotline has received more than 110 calls since its inception in 1999 (7.6-3). The COFFICER reviews, investigates and manages the case or forwards it to the most appropriate DH/SLA or SLT member. For example, cases involving employee complaints of mistreatment would be

Figure 1.2-2

Regulatory, Legal, Accreditation & Risk Management			
Requirements	Key Processes	Indicators	Goals
Regulatory	Licensure - State	Licensure	100%
Legal	Contracts	Contract Review	100%
Accreditation	JCAHO, CAP, ACS, ACH	Accreditation	Full Accreditation
Risk Management	Patient Safety	Restraints Falls with injury Medication errors Pressure ulcers Claims filed	Decrease hrs per 100 pt days <0.03 per 100 pt days <0.04 per 100 pt days <0.10 ulcers per 100 pt days <National per 1000 ratable beds
Applications:			
Internal	Failure mode & effect analysis (FMEA) Root-cause analysis (RCA)	High risk processes Sentinel events	0 Failures 0 Future occurrences
External	Insurance audits	High risk systems	0 Deviations

forwarded to HR. The resolutions and any outstanding issues go to the BOD's Compliance Committee quarterly.

The Patients Rights and Responsibilities Handbook is issued to every NMMC patient. Patient and family members are able to voice their concerns and complaints through CARELINE, a customer service hotline, or through the daily NURSE MANAGER (NM) rounds (Fig. 3.2-2).

NMMC's Medical Ethics Committee provides as-needed consults on ethical issues for patients and staff. This multidisciplinary committee includes community members and routinely surveys staff to determine which ethical topics are most significant to them. The Committee uses this feedback to provide a monthly educational forum on ethical, medical, psychological, administrative and legal issues.

The NMHS INSTITUTIONAL REVIEW BOARD (IRB) monitors research activities and focuses on protecting human subjects. All IRB members, clinical professionals and community members, as well as investigators undergo annual human subjects training. The IRB conducts audits of research activities and also approves and monitors research-based studies of NMMC's practices.

The Manager of Systems and Auditing develops an audit plan each year, with input from leadership and the CFO, to accomplish approximately 95-120 separate audits of routine operations, policy and procedures, and special requests. Specific audit criteria are established including whether the audit is periodic/routine or random. Completed audit findings and recommendations are provided to the accountable DH/SLA for action. Each issue is re-audited in 6-8 weeks to assure resolution of the issue. All reports are provided to the Audit Committee of the BOD. Special audits may be requested by patients and third-party payers as well as by internal operational staff, leadership and the board.

NMMC routinely audits the ethical component of its care (such as organ donation capture, palliative care at the end-of-life, and patient safety culture) and these clinical quality-based audits report to the Quality Standards Committee.

Figure 1.2-3 describes NMMC's key processes for enabling standard and spontaneous indicators for monitoring ethical behavior. We share our strengths and weaknesses with our community by participating in voluntary public reporting (7.1-15, 16 & 19).

1.2c Support of Key Communities and Community Health: Mississippi's high prevalence of health problems such as heart disease, obesity and poor utilization of prenatal care is compounded by a high prevalence of social problems such as poverty which contribute to the state's poor overall health status ranking (Fig. P.2-3). We have a multitude of opportunities to improve the health of our communities and are challenged to focus on the most

critical needs. During S1-3 of the EPP (Fig. 2.1-1) the BOD and SYSLT utilize *Healthy People 2010's* ten leading health indicators and the CHA (3.1a(2)), to identify its key populations and community health issues (e.g., smokers and smoking), to establish a baseline and track progress and to help refine interventional tactics. For example, we are modifying our approach to children wearing bicycle helmets since response to our initial tactic was disappointing (7.6-15). *Healthy People 2010* provides guidelines and benchmarks for developing and measuring programs. We address the public health challenges to our commitment to our Mission by forming and supporting the comprehensive NMMC LIVE WELL COMMUNITY HEALTH INITIATIVE. This initiative employs non-traditional means of serving NMMC's key communities - by donating services and equipment to the community, by partnering with community groups and by developing community-focused health services.

NMMC helps area residents take charge of their health through three primary mechanisms:

- Providing outreach and care;
- Improving self-care competency; and
- Providing early detection and prevention.

A number of initiatives, such as community health fairs, use two or three mechanisms (7.6-14). Outcomes of these efforts are provided in 7.6-15 & 16.

Outreach and Care

- **SCHOOL HEALTH CENTER INITIATIVE:** 17 school nurses assigned to 23 schools in seven counties serve 16,000 K-8th grade students. In 2000, NMMC created a permanent computerized health record for students enabling better communication and care between school nurses and ESD/FMRC physicians. In 2002, we used federal grant funds to implement a pilot telemedicine project in several of the schools (P.1.a(4)).
- **Certified Health Educators** serve K-5th grade students in three area schools.
- **Certified Athletic Trainers** in 13 area schools (7.6-14).
- **Free Clinic:** GSFC relies on NMMC employee volunteers.
- **Immunization Rate Improvement Initiative** takes an aggressive approach and has administered more than 34,000 free immunizations since 1999.
- **Heart Safe Community Initiative** has placed 28 automated external defibrillators (AEDs) throughout our service area and trained more than 200 individuals in AED use and CPR.

Improving Self-Care Competency

- **Church Health Ministry:** more than 60 NMMC staff nurses perform screening services and teach fellow church members to take control of their own health.
- **Health Education Classes** include, but are not limited to: smoking cessation, abstinence, nutritional counseling, CPR, first aid, Safe Sitter, diabetes management, and stress management (7.6-14).
- **Speakers Bureau** on timely health topics and issues.
- **LIVE WELL EMPLOYEE INCENTIVE PLAN** (Fig. 5.3-1, 7.4-13)

Figure 1.2-3

Monitoring Ethical Behavior		
Application	Processes	Indicators
Governance	Decision making	Number of Independent Board Members, COI process
Employees	Operations (e.g., patient care, purchasing)	EOS questions, exit interview, compliance hotline, EEOC submissions
Patients	Experience of care	Careline & NM ethical complaints, and IRB's human subject violations
Organization	Compliance with policy	Internal & external audits
Community	Public reporting	JCAHO, CMS, AHRQ patient safety indicators

- *Support Groups* are available to individuals with chronic conditions and/or concerns.
- *WOMEN’S NETWORK 9* and the *SPIRIT OF WOMEN*.
- *SIXTY SECOND HOUSECALL* reaches >140,000 households.
- *We Can* is a public service campaign focused on children’s health issues (>140,000 households).

Early Detection and Prevention

- *Community and Industrial Health Fairs*: more than 150 health screening events in diabetes, hypertension, hearing, skin cancer, prostate-specific antigen (PSA) (7.6-14).
- *Mobile Mammography* (7.6-14).

We also reach out to the community by donating equipment and computers. The Second Time Around program accepts and donates new and used durable medical equipment to patients who may not have the funds to purchase needed equipment. As NMMC routinely replaces its computers these computers are donated to schools and local not-for-profit organizations (7.6-13). NMMC also develops community partnerships with local organizations through corporate contributions, employee donations and volunteer hours (7.6-5 for list of organizations).

2.1 Strategy Development

2.1a(1) Strategic Planning Process: Our approach to strategic planning, the EPP, is a sequential and comprehensive annual eight-step process. The EPP allows NMMC to learn from the environment, develop comprehensive plans, fully deploy and integrate them into daily operations (Fig. 2.1-1).

The first step (S1) occurs over two-to-three months and is a comprehensive process of gathering and organizing diverse evidence (data and information) to use in planning. The DEPARTMENT OF STRATEGY (DOS) begins this process by reviewing the prior year’s EPP evaluations and compiling the systematic external and internal stakeholder surveys. After reviewing the Baldrige Feedback Report, the SYSLT, SLT and DHS determine performance improvement opportunities.

- NMMC actively seeks input from external and internal stakeholders about directions the medical center needs to take and intentionally feeds that information into the planning process. Each survey consists of asking constituencies for specific suggestions for improvement and future directions for NMMC.
- Employees are surveyed at the quarterly ECS with responses aggregated and presented to the SYSLT, SLT and DHS who use the information in shaping our strategic plan.
- SOLUCIENT’s Market Planner Plus product provides demographic, inpatient demand, outpatient procedure, insurance coverage, cancer, heart disease and emergency department estimates which assists in planning the future demand of services.
- The TECHNOLOGY ADVISORY COMMITTEE (TAC) provides reports and ratings on current and new technology.

All of this information is organized into an ENVIRONMENTAL ASSESSMENT (EA) that provides DHS, SYSLT and SLT with self-assessment strategic questions and actual external demographic, technology, reimbursement and market trend data (Fig. 2.1-2). These data are used in S2 by each DH and SLA to create five-year LONG-RANGE PLANS (LRP) and create a CSF-based STRENGTH, WEAKNESS, OPPORTUNITY, THREAT (SWOT) assessment. Both of these documents are essential to bottom-up planning.

In S3, the SYSLT and SLT participate in a SYSLT/SLT Workshop Week after analyzing the comprehensive evidence obtained from the EA, SWOT analyses and LRPs to identify NMMC’s key challenges and priorities. The goal is that by the end of the designated week the SYSLT and SLT create CSF-based short-term goals, a five-year strategic plan and five-year SRPs assumptions for both NMHS and NMMC. Prior to Workshop Week, SYSLT and SLT members complete surveys and use GROUPSYSTEMS to determine strategic priorities and planning assumptions, which are compiled into planning packets and distributed back to the group.

In S4, the entire BOD (NMMC and NMHS) along with a key supplier, medical staff, SYSLT and SLT attend the annual LEADERSHIP PLANNING RETREAT (LPR) which is the forum to incorporate their per-

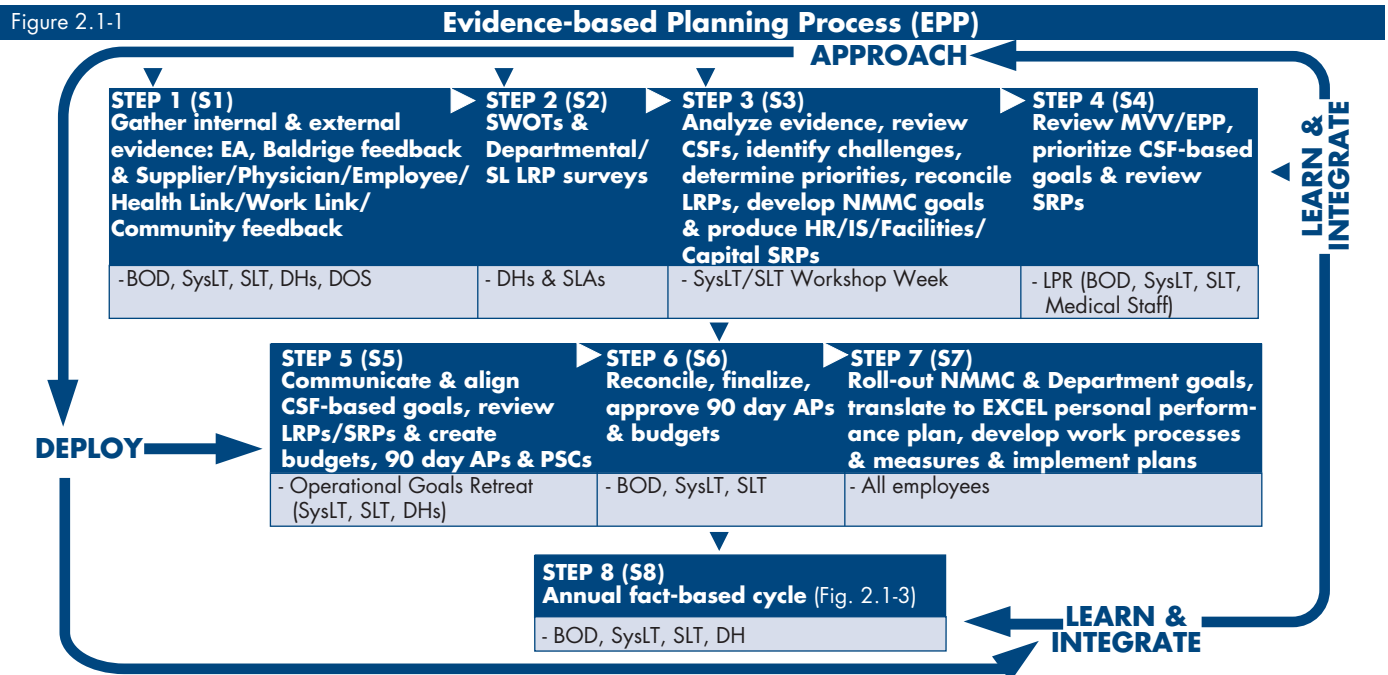


Figure 2.1-2 **Environmental Assessment (Factors & Data to Support EPP)**

Internal Assessment (self-evaluation question topics)		
• Inventory of services	• Work force issues	
• Utilization trends	• Medical staff profiles	
• Use rate trends	• Physician practice trends	
• Services offered	• Payor mix	
External Assessment		
Topics	Types of Info	Source
• Socio-economic profile	Population projections, household growth, median income & age groups estimates	Solucient MPP
• Community health status	Healthy People 2010, access to care	CHA
• External environment	Market share	Solucient Polaris
	Competitor profiles	Jensen Survey
	External constituency feedback	Surveys
	Technological environment	The Advisory Board
	Reimbursement	Solucient MPP
	AHA Environmental Assessment	AHA
	Healthcare trends & implications	Futurescan 2006-2011

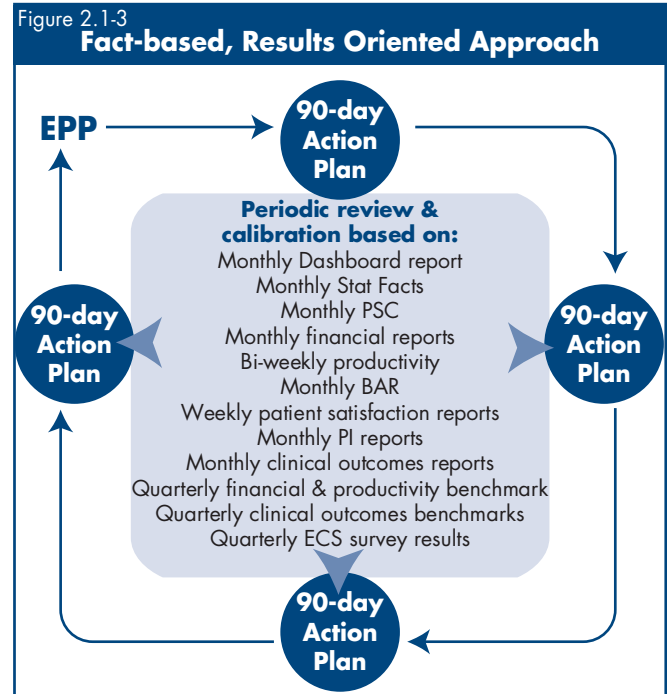
spective and expertise into the proposed CSF-based short-term goals, five-year SRPs and five-year strategic plan.

Deployment begins in S5 with the annual Operational Goals Retreat in which the SLT and DH convene to communicate the CSF-based short-term NMMC goals, five-year strategic plan and SRPs. Following the retreat, the DHS and SLAS armed with NMMC CSF-based goals and five-year strategic plan begin creating the upcoming year's budget and align their departmental and SL CSF-based short-term goals with the NMMC CSF-based goals and create 90-DAY APS. The Financial Department reconciles these budgets and the SLT presents them to the NMMC BOD for approval (S6). Once the funding for operations and APS is approved, the CSF-based goals and 90-DAY APS are communicated to the staff by DH/SLA via departmental meetings (S7) prior to the beginning of the new FISCAL YEAR (FY), October 1. Implementation begins in S7 and the EXCEL planning process creates alignment between the departments/SL goals and the employee performance plans (5.1b). The annual cycle occurs over 12 months and includes a learning component, which evaluates the efficacy of the planning process (S8). The DOS uses the results from the EA, LRP, Workshop Week, LPR, Operational Goals Retreat and EPP evaluations to improve the EPP processes (S1-S8). The EPP Intranet site was created as a result of last year's EPP evaluation.

The key participants in the EPP are the SYSLT, SLT, DHS, BOD, medical staff and suppliers whose roles are identified throughout the eight-step process. Physicians serve as key members of the BOD, the TAC, and the SLOG which require their professional expertise and also have direct budget authority. Physicians have continuous input in the development of strategies and translation of strategies into APS through the MEC, CPA process, surveys, credentialing and section meetings.

Identification of potential blind spots occurs through the Fact-based, Results Oriented Approach (Fig. 2.1-3) and through daily/weekly reviews of key operational data (admissions, discharges, census, revenues and expenses). The frequent review of data allows NMMC to adjust strategies as our environment changes and feeds into the 90-DAY APS, allowing SLAS and DHS to monitor the success of their plans.

The time horizons for the EPP were established at the 1999 LPR and re-evaluated in S4 and S8 each year (Fig. 2.1-1). The short-term



(operational) horizon is one year, which is the minimum time frame to produce and track significant change. The long-term (strategic) horizon is five years, which is tied to the typical technological and financial life cycles for major projects. Because it is difficult to anticipate technological changes beyond five years, we use a rolling five-year planning cycle to adjust for the changes in the art and science of health care when committing financial capital.

2.1a(2) Strategic Planning Factors: As noted, the SYSLT, SLT and DHS prepare their CSF-based SWOT analyses in S2. During S3, the DOS summarizes and compiles all the SWOT analyses to share during the Workshop Week, LPR and Operational Goals Retreat. We focus on the “Ss,” “Ws,” “Os” and “Ts” to stretch us to look beyond our current delivery of health care services and operational effectiveness. In 2004, we identified one of NMMC’s strengths as the enhanced patient-centered focus provided by specific services: Women’s, Cardiology, Emergency and Behavioral Health. These high-functioning, natural SLs have strong outcomes (7.1) and served as the impetus and model for converting to a full SL structure.

We combine topic-focused analysis and the SLA/DH scheduled (daily-annual) reviews to identify major shifts. All reviews are organized according to the CSFs thereby creating structure for the SL teams and DHS to assess early indications of the major shifts that effect them.

- technology (SERVICE/QUALITY).
- health care markets (GROWTH).
- competitive and collaborative environment (SERVICE/GROWTH).
- regulatory (PEOPLE/QUALITY).

Using SOLUCIENT data the OPERATIONS IMPROVEMENT (OI) department provides SLAS with quarterly updates on their market shares relative to their collaborators and competitors (3.1a(2)). In addition, OI provides SLAS and DHS with bi-weekly MANAGEMENT REPORTING SYSTEM (MRS) productivity reports and quarterly trend and comparison reports, which compare their department to simi-

Figure 2.1-4

NMMC Performance Scorecard

CSF	Goals	Performance Indicators	Benchmark	2006 Target	2011 Target
People	Maintain a high quality workforce	Retention Rate (RB) (7.4-2)	94.4%	89%	93%
Service	Improve Customer Service	Inpatient Satisfaction (RB) (7.2-1)	90th %tile	90th %tile	95th %tile
		Outpatient Satisfaction (RB) (7.2-6)	90th %tile	85th %tile	90th %tile
		ESD Satisfaction (RB) (7.2-7)	90th %tile	75th %tile	80th %tile
Quality	Improve prevention & health education services				
	Improve health outcomes	Composite Quality Score (RB) (7.1-20)	90th %tile	90th %tile	95th %tile
Financial	Produce financial resources required to support mission & vision	BAR (RB) (7.3-10)	N/A	80	80
		Productivity by Pay Period (RB) (7.5-2)	5.22	5.5	5.0
		Cost per Adjusted Discharge (RB) (7.3-9)	\$9,178	\$9,900	\$8,500
Growth	Expand access to health services	Inpatient Total Market Share (GB) (7.3-15)	N/A	45%	47%
		Outpatient Primary Market Share (GB)	N/A	56%	58%
		Active Medical Staff Members (GB) (7.6-1)	N/A	260	280

lar facilities. The DHS/SLAS notify the SLT of early indications of major shifts for overall analysis.

Our approach to creating long-term organizational sustainability occurs through the use of 90-DAY APS and the PSC. The one-year targets are set at high industry comparative performance levels (4.1a(2)) that lead to equally aggressive long-term targets (Fig. 2.1-4). Targets designed to assure sustainability are backed by the Financial Department's capital plan target set at the AA bond rating, producing the cash-flow necessary to support growth and new services, and to cover financial emergencies (Fig. 6.2-2).

We assess our sustainability by performing CSF-based feasibility studies of new services, expansions and existing services, health care wide elements and strategic challenges. This comprehensive review weighs multiple factors and requires a trade-off and balancing of organizational sustainability (profitability) and Mission (service to those who need it). The following examples illustrate actions driven by our analyses.

- NMMC provided outpatient renal dialysis services at six locations, but identified it as a weakness (S3). Per a full analysis, we found that we were not providing the service as effectively or efficiently as specialized outpatient dialysis companies and sold it to one of these companies.
- In contrast, NMMC opened a 29-bed Skilled Nursing Facility within the medical center in January 2006, because of the lack of Skilled Nursing Facility beds within our service area.
- We perform internal and external in-depth analyses as issues arise. With the demands for charity care exceeding past trends, we collaborated with the health economists at MISSISSIPPI STATE UNIVERSITY (MSU) to conduct a comprehensive analysis to enhance our view of future needs and our ability to plan for them.

The SLT's process of weekly operational, financial and productivity reviews and monthly review of the PSC and DASHBOARD REPORT enables us to respond rapidly to unexpected changes and emergencies. The DASHBOARD REPORT serves as a graphical representation of the PSC and illustrates the most important performance indicator for each CSF. We utilize the PDCA cycle to implement and analyze our ability to execute our strategic plans (6.1a(3)). SLAS develop 90-DAY APS and review weekly with the NMMC PRESIDENT. DHS review their 90-DAY APS at monthly meetings with the appropriate senior leader. We assess what was planned for, what was accomplished and why plans were incompletely executed. Financial plans incorporate contingencies for urgent technology and market changes. The Director of Safety and the CIO both participate in the EPP with

a specific commitment to ensuring the communication of our continuity and emergency plans. Our processes for responding to emergencies are described in 4.2a(3) and 6.2b(2).

2.1b(1) Strategic Objectives: Identifying the balancing CSFs as our key strategic objectives and challenges are core to organizing, aligning and linking our meetings, analyses, challenges, goals, performance indicators and APS. During the EPP (S3 & S5) we identify two types of goals for each CSF:

- RUN-THE-BUSINESS (RB) goals which improve or maintain established functions, address long-standing challenges and utilize key process indicators; and
- GROW-THE-BUSINESS (GB) goals which stretch the organization with a new service, a monumental improvement in an existing service or address a new challenge.

NMMC's RB and GB goals are used to select a balanced set of performance indicators for the PSCs (Fig. 2.1-4). The performance indicators for the most important goals are placed on the DASHBOARD REPORT, which provides a quick, CSF-based overview of organizational performance.

2.1b(2) Challenges: The challenges included in P2b are identified in S1-S4. S5 through S8 are devoted to developing the strategies, goals and one-to-five year targets to address them. The five CSFs and their intentional sequencing are the construct for NMMC's balanced strategies that address the needs of all internal and external stakeholders. Since the CSF framework is fully deployed to all DHS and SLAS, the balancing continues through to the development of APS (2.2a(1)) and individual employee performance plans via EXCEL (5.1b).

2.2 Strategy Deployment

2.2a(1) Planning Action: Action plans are developed through a systematic process by using a standard 90-DAY AP content template (Fig. 2.2-1). The template components are selecting the CSF that pertains to the issue, setting a goal, listing the action steps as well as the resources that are needed to carry out the changes and completing a 90-DAY AP report.

We initiate deployment of the strategic plan by communicating the SRPS and the CSF-based goals to the SLAS/DHS at their annual Operational Goals Retreat (S5). These leaders provide their input into the planning process with their SWOTS and their LRP surveys (S2) and receive the integrated and prioritized summation of their collective efforts. The DHS develop CSF-based short-term goals and 90-DAY APS that are aligned with the overall NMMC CSF-based short-

Figure 2.2-1 **Sample 90-day Action Plan • Women’s & Children’s Service Line (1/06-3/06)**

CSF	Goal	Action Steps	90 Day Result Report
People	Maintain FT Turnover rate	<ul style="list-style-type: none"> • Leader rounding x2 areas each day • Review rounding information at weekly manager meetings. • Implement 90-day AP with direct reports. 	<ul style="list-style-type: none"> • Turnover rate at <1.6%
Service	Achieve 90th percentile on inpatient satisfaction	<ul style="list-style-type: none"> • Nurse rounding • Bi-weekly meeting with Women/Children’s patient satisfaction team 	<ul style="list-style-type: none"> • One 90-day AP per unit • 90th percentile or higher in patient satisfaction
Quality	Reduce practice variation in DRG 372, 373	<ul style="list-style-type: none"> • Physician champion identified • OM to perform CPA DRG 372-373 • PA to perform documentation analysis 	<ul style="list-style-type: none"> • Decrease DRG 372 LOS • Assure appropriate DRG assignment
	Pediatric asthma	<ul style="list-style-type: none"> • Physician champion identified • Perform CPA on asthma DRG 	<ul style="list-style-type: none"> • Decrease readmissions for pediatric asthma patients
Financial	Maintain expenses within budget	<ul style="list-style-type: none"> • Review OB/GYN financials with OB’s • Nurse managers analyze & report OT needs to SLL 	<ul style="list-style-type: none"> • BAR at or above 80 • Overtime below 3.0% • Expenses below budget
Growth	Develop a vision for pediatric services	<ul style="list-style-type: none"> • Set up meeting with LeBonheur Children’s Hospital to discuss increase in pediatric subspecialties • Develop cost benefit analysis with marketing for branding of pediatric services 	<ul style="list-style-type: none"> • Presented draft of vision to March SLOG • Pediatric branding identified and cost/benefit reported to SLOG w/in 30 days
	Implement Women/Children’s Community Advisory Board	<ul style="list-style-type: none"> • Recruit Advisory Board members • Develop agenda for 1st meeting 	<ul style="list-style-type: none"> • First Advisory Board meeting March, 2006

term goals (Fig. 2.2-1). Key partners and suppliers are frequently included in developing 90-DAY APS as a delegated empowerment of the DHS/SLAS. The VP of Finance and staff review these budget projections and reconcile them with each other. The SYSLT and SLT work with the DHS/SLAS to create 90-DAY APS that will achieve the CSF-based goals and also meet the capital SRP. This process ensures achievable, fully funded and sustainable action plans.

The 90-DAY APS are deployed once the budgets are finalized and approved (S6). S7 is a carefully executed four-phase process of inclusiveness to assure alignment, consistency and staff ownership of NMMC’s strategy.

- **Communication:** The CSF-based short-term goals and the primary APS are shared with the full staff at LEADERSHIP, the ECSS and other knowledge sharing forums (1.1a(1) & Fig. 4.1-2).
- **EXCEL alignment:** Each staff member translates the departmental or SL goals to his/her individual CSF-based personal performance plan. Each goal has a measurable result or observable behavior. Goal-setting and measurement are a part of the EXCEL process (Fig. 5.1-1); and each employee carries their personal performance plan on their KEYS TO SUCCESS CARDS (5.1b).
- **Work process development:** Work processes are developed to assure consistent deployment of the 90-DAY APS (5.1a(1)).
- **Measurement:** Indicators are identified, targets are established, information is collected and 90-DAY APS are systematically assessed via the PSC process (4.1b(1)).

The allocation of resources occurs during S5 & S6 via a highly interactive process between the SLT, DHS and SLAS. The frequent monitoring of results also provides constant learning about the effectiveness of our 90-DAY APS (Fig. 2.1-4). The BOD is ultimately responsible for NMMC’s financial viability and the SLT provides the BOD with precise budget information including comparisons to current year, capital plan projections, major influences, price increases and other information. The key action plans are discussed in 2.2a(3).

2.2a(2) Modifying Action Plans: One of the benefits of converting to an overall SL structure is empowering those closest to

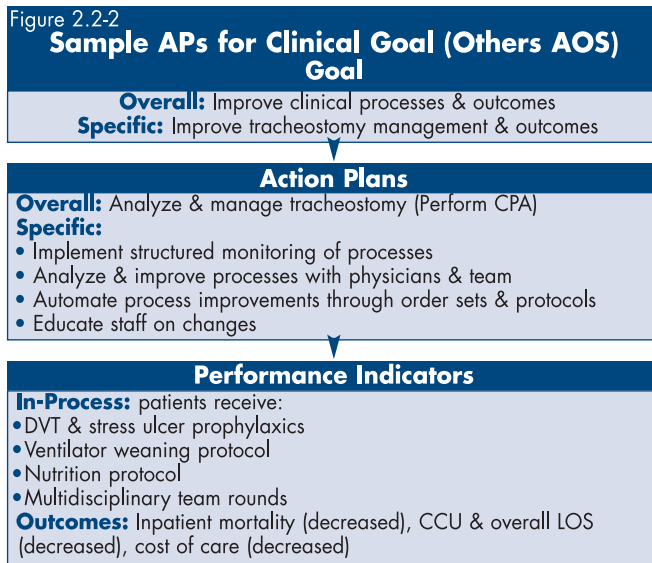
the patient population to analyze their needs, develop, modify and execute their 90-DAY APS. Continuous monitoring of actual results compared to budget can lead to changes in resource allocation throughout the year. This 12-month budget plan allows NMMC agility and empowers leaders to make changes based on new developments. DHS/SLAS have a significant amount of responsibility and empowerment in decision making for their departments/SLs and therefore have accountability for planned changes in operations. The appropriate senior leader monitors their 90-DAY APS to assure changes are sustained and budgets on a monthly basis, but the spending authority within the budget remains delegated to the SLOGS. The EXCEL process assures that all employees have responsibility and accountability for making planned changes as well.

Staffing plans and capital expenditures are monitored and responded to monthly; consequently, when circumstances change, whether external or internal, the SLT, DHS/SLAS modify the 90-DAY APS. They use the same four phases (communication, EXCEL alignment, work process development and measurement) to deploy the modified 90-DAY APS as they deployed the original 90-DAY APS. The DHS/SLAS have a high degree of autonomy because they negotiate targets and outcomes, as well as a high degree of flexibility in reaching them. For example, in response to the recent spike in charity care and bad debt, the SLT provided the DHS/SLAS with the required percentage cost decrease and empowered the DHS/SLAS to reduce costs in their areas based on productivity and supply cost statistics.

2.2a(3) Key Action Plans: As described in 2.2a(1), each CSF-based goal has single or multiple APS associated with it. Every month each DH and SLA must complete a BAR, which takes each department’s/SL’s monthly revenue, expense, and productivity then compares it to a flexed budget (a budget in which the revenues and expenses move or “flex” in relation to actual volume). If the department/SL scores below 80 for the month, the SLA or DH must submit a BAR action plan to the appropriate SLT member (1.1a(3) and 7.3-10).

The performance indicators associated with the goals in Fig. 2.1-4 are indicators of the AP outcomes. Broad goals are translated to

specific project goals, which generate broad and specific APS. These APS are measured with both process and outcome performance indicators (Fig. 2.2-2). Results of this process are demonstrated in the process-and-outcome graphs in 7.1.



As described in Fig. 3.1-2, we have multiple listening and learning methods to identify key changes in our customers and market; furthermore, this information is incorporated into the EA (Fig. 2.1-2) and used to identify changes. For example, one key change deals with the dramatic increase in the number of patients requesting charity care as well as the number of uninsured patients. As noted, we are working with academic health economists to estimate the future impact of charity care and bad debt. Once we fully understand the magnitude of the need, we'll develop short and long-range action plans to meet our mission and assure future sustainability.

2.2.a(4) Staffing Plans: The rolling five-year HUMAN RESOURCE STRATEGIC RESOURCE PLAN (HRSRP) is one of the SRPs, which are reviewed and revised by the SYSLT and SLT as part of the EPP (S3). The HR plan is described in 5.1c(1). When a strategic objective requires a new service or adoption of a new technology the DH/SLA works with HR to identify new skills and a timeline and strategy for acquiring them. The HRSRP includes specific plans for training staff on new skills (5.2a(1) & (2)).

2.2.a(5) Performance Indicators: Each goal is assigned one or more performance indicators and these indicators are tracked through the PSCs (Fig. 2.1-4), DASHBOARD REPORT and STAT FACTS. Because each department and SL creates goals, APS, performance indicators and targets based on NMMC's CSF-based goals and 90-DAY APS, there is alignment of the AP measurement system. The CSFs are used to identify these goals and they provide a comprehensive structure for all deployment areas and stakeholders.

2.2b Performance Projections: NMMC uses multiple PSCs to measure its performance (departmental, SL, JCAHO CORE MEASURES), and these PSCs roll up to NMMC's overall monthly PSC (Fig. 2.1-4). Each performance indicator has a baseline, which is the previous year's performance and current year target. Our targets are our performance projections and the ultimate goal is to be above the 90th percentile or the top 10 percent. The SYSLT, SLT and DHS with assistance from the outcomes managers, OI department, CLINICAL OUTCOMES (CO) department and CLINICAL QUALITY (CQ)

department search their respective sources for world-class benchmarks (4.1a(2)). The current year targets have performance ranges and if the monthly performance indicator is in the OFI range, then an analysis and AP is expected. The corrective APS are tracked via their performance indicators during the monthly PSC review and the weekly/monthly review of 90-DAY APS (S8).

3.1 Patient, Other Customers and Market Knowledge

3.1a(1) Customer Segmentation and Selection: During the annual EPP, the senior leaders utilize the collected information (S-1) to identify new and reaffirm existing key customer groups and market segments (S2 to S3) (Fig. P.1-3). As a NFP hospital, and in keeping with our Mission of providing health care services to the people of our region, the first customer group is patients and their families, who are identified as current (received service within two years) and potential (not currently receiving our health care services). The senior leaders analyze the following factors when selecting patient-customer segments (EPP, S4):

- prevalence of disease process,
- financial sustainability,
- availability and specialization of medical staff, and
- competitor's strength in the area.

Because of the success of the natural SLs (women's services, cardiology, behavioral health), we extended our SL segmentation concept to additional specialties (2.1a(2)).

As a result of the EPP, we categorize patients into four major segments:

- service setting – wellness, emergency, inpatient, outpatient, home care, rehabilitation and LTC – the patient moves through a seamless continuum of care and may, over the course of his/her illness, receive services in multiple, possibly all, settings
- geographic region – based on primary or secondary service area (Fig. P.1-4 and P.2(a)(1))
- service line – (P.1a(1))
- payor source – including Medicare, Medicaid, HEALTH LINK, other insurance and self pay.

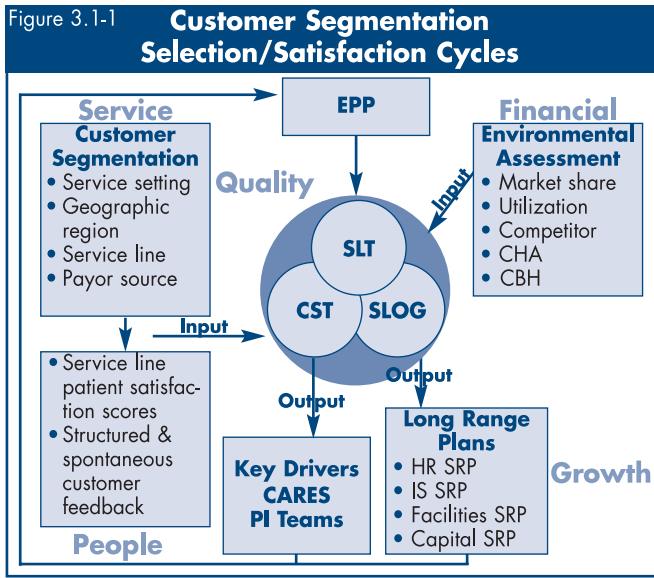
Patients will often overlap within a segment. For example, "Mr. I.M. Sick," a patient from the secondary service area requires the services of an endocrinologist (Medicine SL) and a cardiologist (CV SL), receives treatment in inpatient, outpatient and emergency services and the payor is Medicare. These four segments may be considered and analyzed as individual elements as well as dimensions of the overall health care market.

Physicians are considered partners as well as customers, and we identify them as active medical staff (physicians who are credentialed to practice at NMMC) and physicians who refer their patients to NMMC. Our partnership and customer relationships with medical staff will be addressed in this category for the purposes of this application. Finally, employers/insurers (payors) are considered the third group of partner/customers. NMMC strives to serve all payors with careful stewardship of their health care dollars and wise fiduciary management of health care resources.

3.1a(2) Listening and Learning: NMMC has developed a comprehensive approach for listening and learning from customers. The SLT delegates the development of listening and learning methods to specific groups to utilize their expertise and to align their

efforts into a comprehensive listening and learning approach: CUSTOMER SERVICE TEAM (CST), CRF, Community Health and Marketing departments, CENTER FOR BUSINESS HEALTH (CBH) and MIS. Information flows through the CST and is used to build customer profiles (Fig. 3.1-1). The SLOGs are multidisciplinary teams that meet monthly and examine patient satisfaction, patient complaints, clinical outcomes, patient volume and staffing, market share and referral patterns. Each SLOG determines their patient-customers' needs and requirements and makes recommendations to the SLT. The SLT systematically utilizes the CST and SLOG information, as well as other available resources, in a CSF-based review (EPP S2-3) to accomplish the following functions:

- determine key customer and partner groups, health care market segments and SLs;
- assess customer and partner satisfaction and needs;
- develop strategies to customize products and services; and
- target groups through focused media campaigns.



We incorporate both structured and spontaneous listening and learning methods while deploying our MVV throughout our diverse customer base and service area. The approach is broad and systematic, but the methods are tailored to the customer group and the setting (Fig. 3.1-2). Data and information are incorporated into the EA (Fig 2.1-2), the EPP and reviewed by the SLOGs and SLT (Fig 3.1-1). The SLT determined that this combination approach creates a thorough requirement and expectation profile.

Patients and Families: The CST, comprised of four SLT members, key operational leaders and the CRF, meets monthly and analyzes patient satisfaction, patient complaints and other customer satisfaction data. The CST integrates operations of seven focused service-setting sub-teams: inpatient, outpatient, emergency services, LTC, wellness center, behavioral health and home health. Each team examines patient satisfaction elements/processes pertinent to their setting (e.g., inpatient includes: admission, room, meal, nurses, tests and treatment, visitors and family, physician and discharge).

- *Patient Satisfaction Surveys:* NMMC relies on regularly conducted satisfaction surveys as the primary structured method for assessing current patient-customers. PRESS-GANEY ASSOCIATES (PGA) conducts these surveys which are tailored to specific patient groups. Survey results are available online and in real

Figure 3.1-2 **Listening & Learning Methods**

Current Patients	
	Outpatient, inpatient, home care, LTC, ESD, wellness, behavioral health
Structured	Ongoing patient satisfaction surveys per service, discharge phone calls, nurse manager rounds
Spontaneous	Careline, personal contacts, DH/SLA rounds
Current & Potential Patients (Community)	
Structured	CHA, market research, focus groups, quarterly survey of Nurse Link customers, health care boards (e.g., home health, HIV), task forces (e.g., Women's Health), CRF, Health Link members
Spontaneous	Feedback cards from mailings, health fairs, Internet web site, Community Advocate Helpline, Appointment Desk calls analysis, civic organizations, community and church involvement, CRF
Physicians	
Structured	Satisfaction survey, manpower studies, survey of and quarterly visits with Health Link PPO providers
Spontaneous	Medical staff committees, physician support services
Payors	
Structured	Quarterly employer roundtable discussions, bi-annual survey of Health Link employers, bi-annual survey of Acclaim customers, senior leaders visit key employers bimonthly
Spontaneous	Helpline, database, quarterly visits with Health Link employer clients

time and PGA produces weekly, monthly and quarterly reports (Fig. 3.1-3). PGA's weekly report is reviewed by both element/process-focused teams (e.g., admission, room, meals, tests and treatment) and service-setting subteams. During the weekly meetings high scoring units share their successful methods and low scoring units are encouraged. To assure survey input is taken seriously, NMMC links each service's incentive reimbursement to patient satisfaction scores (5.1b).

- *Patient Complaints/Compliments:* NMMC closely follows spontaneous messages by responding to and entering helpline contacts into databases. For example, NURSE LINK receives CARELINE complaint and compliment calls which they hand-off for appropriate management and then log the call and its resolution into the E-CARELINE database (Fig. 3.2-2).

Current and Potential Patients (Community): NMMC utilizes varied but complimentary methods to procure relevant information and feedback.

- *Community Health Assessment:* The 1995 Reliastar Health Rankings ranked the health status of Mississippians as 50th in the nation. To drill down into the region's health status, utilization of health services and health beliefs, NMMC contracted with the University of Mississippi in 1996 to perform a comprehensive CHA. The CHA, the second largest health status research project of its kind in the nation, compared people of our service area to other Southerners and found that the NMMC region population was less healthy in numerous ways. This was the genesis of a new market segment, community wellness. The LIVE WELL COMMUNITY HEALTH INITIATIVE was developed to address it. The value gained led NMMC to establish a systematic process, co-funded and partnered now with MISSISSIPPI STATE UNIVERSITY'S SOCIAL SCIENCE RESEARCH CENTER (SSRC), to conduct periodic CHAs beginning in 2001, and repeated every three years. NMMC uses the CHA to examine existing wellness initiatives and the SSRC's summation of key indicators to plan its community health programs and close the loop by measuring impact.
- *Informal Surveys & Feedback:* The CRF developed a series of

Figure 3.1-3

PGA Process

Timeframe	Report	Action
Weekly	<ul style="list-style-type: none"> Each division receives the satisfaction scores for all units within their division (e.g., all inpatient units). Each unit receives a per unit variance report 	<ul style="list-style-type: none"> Review at weekly patient satisfaction meeting Discuss/share APs Post on Knowledge Board
Monthly	<ul style="list-style-type: none"> Each unit's top-10 priorities Each unit's five greatest increases & decreases 	<ul style="list-style-type: none"> Assess progress Post on Knowledge Board
Quarterly	<ul style="list-style-type: none"> Each unit's in-depth quarterly analysis Quarterly Priority Index of top-10 items that correlate to patient satisfaction 	<ul style="list-style-type: none"> NM/DH assesses progress and identifies unit's top-3 priorities (key drivers) Develop unit's key driver-based APs and rolls out to staff

qualitative survey questions for routine visits with our internal and external stakeholders (2.1a(1)). The monthly analysis of these surveys is useful in determining our community-customers' needs (Fig. 1.2-1). We also solicit feedback regarding customer's health service needs and interests through readership surveys in "VIM AND VIGOR," NMMC's quarterly family health magazine, as well as "calls to action" in all marketing materials. We utilize this feedback to determine the content of future magazines and marketing material.

- **Task Force:** A community-based WOMEN'S HEALTH TASK FORCE provides input to our Women's SL. This task force has sparked several innovative projects, including: Breast Care Center, Lactation Center, Breastfeeding Support Program and a Newborn Follow-up Clinic. The successful application of PDCA (6.1a(3)) for development of the Women's SL has become the role model for initiating additional SLS.
- **Preference:** Marketing contracts with Jensen, an independent consulting agency, to perform patient preference studies every three to five years. The DOS has contracted with Message Factors, Inc. to conduct a focused loyalty survey in spring, 2006 (AOS).

Physicians: We listen to physicians by engaging them in our planning process (EPP) as well through surveys, visits, tracking usage patterns and other methods.

- **Surveys:** PGA now conducts physician satisfaction surveys annually to identify physician issues (7.2-14 & 15).
- **Committees:** The BOD established the PHYSICIAN ALIGNMENT COMMITTEE to address physician issues and to represent more than 300 physicians in 40 medical and surgical specialties. Feedback from this group helped streamline the referral process, which utilized the existing PHYSICIAN CONSULT LINE, to provide referring physicians immediate and toll-free access to physician specialists (Fig. 3.2-1).
- **Visits:** Physician Support liaisons visit physicians in their offices and ask them about their specific needs and concerns. They also routinely distribute information about NMMC's programs and services, including timely and pertinent CONTINUING MEDICAL EDUCATION (CME) programs.
- **Referrals:** CBH tracks which physician referred the patient, to whom and for what reason, and uses this information to target patient communities, their needs and physicians' patterns.
- **Focus groups:** Specific health care populations or issues may require focus group research to identify subtle or detailed requirements and expectations. NMMC utilizes a decision support laboratory, GROUPSYSTEMS, and trained focus group facilitators to conduct sessions with patient-customers, physicians and our employees.

Employers/Payors: NMMC assesses the needs of employers/payors by conducting surveys and visits and analyzing market share data.

- **Surveys and visits:** HEALTH LINK, our PREFERRED PROVIDER ORGANIZATION (PPO), is a subsidiary of NMHS and a component of the CBH. HEALTH LINK, the largest PPO in Mississippi, conducts annual surveys of members, employers and providers (7.2-11). NURSE LINK customers are queried quarterly (7.2-8). In conjunction with the surveys, the CBH's customer service representatives visit employers (payors) and providers every quarter. The needs, concerns and complaints identified during these visits are managed and/or forwarded and logged into a database that is reviewed weekly by the CBH senior leader. HEALTH LINK also conducts roundtable discussions with business and community leaders to assess health care needs, plans and trends. In the last year, declining attendance at these roundtable discussions prompted senior leaders to begin bi-monthly visits with key employers to solicit these decision makers' input. HEALTH LINK survey responses, complaints and roundtable/visit feedback are used to determine customer health care service requirements and expectations, and to understand health care purchasing decisions.
- **Contracts:** CBH also monitors its payor and employer customer for new and lost contracts. An analysis by zip code enables HEALTH LINK to target its support and sales approaches accordingly.
- **Market Share:** The OI Department contracts with SOLUCIENT to receive quarterly reports of our payors claims data to determine market share.

3.1a(3) Currency of Listening and Learning Methods: The SLT and CST keep our listening and learning methods current through ongoing analysis of methods and information we obtain by the listening and learning groups mentioned in 3.1a(2). This analysis examines: frequency of use of the method, benefit of the information, new techniques learned from attending national meetings and the application of new technologies. External consultants are retained to validate the quality and timeliness in terms of innovative approaches, achievement of expected results, discontinuation of collection of information that no longer provides insight and modifications necessitated by new services or issues. Three changes made recently are listed below.

- The role of a CRF was designed to foster two-way communication with and advocacy for our public (1.1b(1)), the CRF surveys community members (3.1a(2)) and these results are included in the CST analysis.
- Every two weeks two senior leaders visit key employers in the region.
- In 2005, NMMC selected a new vendor, PGA. PGA has the nation's largest comparative database of patient satisfaction and offers broader capabilities.

3.2 Customer Relationships and Satisfaction

3.2a Patient and Other Customer Relationship Building

3.2a(1): Patient/customer relationships: Our MVV demon-

strates our focus on providing excellent patient care and improving the health of our community. Three of our five CARES values (compassion, respect, smile) focus on directly building relationships with our patient customers. The remaining CARES values (accountability and excellence) address building relationships with our physician and employer customers, since these values focus on delivering the care these customers want for their patients/employees.

Although we routinely track patient satisfaction as a key CSF (service) RB indicator, we also measure patient loyalty and consider it a surrogate to returns/referrals and a GB indicator. By providing excellent PCC, we have engendered patient-customer loyalty (7.2-11). For example, referring to patient “I.M. Sick” (3.1a(1)), who presents at his local hospital with chest pain but requests transfer to NMMC because he has heard positive things about us. We’ve focused on meeting our customers’ key requirements (Fig. P.1-3) so his employer’s insurance coverage includes NMMC and his physician makes the referral.

Patients and families: NMMC builds relationships by involving the patient in his care and keeping the patient’s primary physician informed. We assure involvement through the following systematic approaches.

- PLAN OF CARE (POC) review - nurses formulate a multidisciplinary POC which they review with patients and update every shift on a communication board in the patient’s room. The patient is included in decisions about his care and course of treatment (6.1a(4)).
- The CARES philosophy and front line staff empowerment – employees providing direct-care have the freedom to act upon patient concerns (1.1b(1), 5.2a(1,2), Fig. 6.1-4).
- NURSE MANAGERS (NM) visit all patients and inquire about the patient’s and family’s concerns. They identify opportunities for improving the patient’s health care experience, and systematically share these concerns and outcomes with the SLA.
- Discharge: The patient receives extensive discharge instructions and follow-up (perhaps rehab, home care or LTC) to provide seamless care.
- The patient’s hometown physician receives a discharge summary of the patient’s experience.

Community: In addition to treating disease and trauma, NMMC also builds relationships by focusing on wellness. LIVE WELL COMMUNITY HEALTH INITIATIVE schedules healthy lifestyle classes, offers lectures on specific health concerns, hosts support groups and sponsors health fairs with free health screenings and influenza vaccinations (7.6-14). In 2005, the INITIATIVE touched more than one-quarter of the entire region’s population. Recognizing early intervention is the most effective, we partnered with the region’s school systems to develop NMMC’s SCHOOL HEALTH CENTER INITIATIVE and allotted extensive resources to support the community contact described in 1.2c. In addition to improving prevention and health education, these initiatives reach out to potential customers to secure future interactions as well as increase customer loyalty.

Physicians: NMMC builds relationships with physicians by listening to and partnering with them to provide safe, efficient and effective patient care processes.

- We fully engage our physician-partners in all steps of the EPP and deployment of patient-customer segmentation, selection and satisfaction cycles (Fig 3.1-1).
- Physicians are leading members of the SLOGS and are represented on committees with varied foci, including Pharmacy and Therapeutics, Blood Utilization and Medical Records.
- In addition to planning, we partner with physicians in daily operations.
 - We have six full-time hospitalists who provide 24/7 care to patients referred to their service. These hospital-based internists provide optimal care and have an excellent rapport with referring physicians.
 - To facilitate rapid, accurate and convenient transfer of patients from other facilities we recently implemented a transfer center. The center utilizes a critical care-trained nurse who discusses the patient with the referring physician and determines the optimal placement of the transferred patient
- NMMC’s CME coordinator arranges niche educational seminars and large-scale, disease-focused annual symposiums (e.g., cardiology, diabetes, trauma). As an approved provider of CME, NMMC’s Education Department provided 143 offerings and awarded a record high of 2,760 CME credits to physicians in 2005 (5.1a(1)).
- NMMC employs two full-time physician recruiters and has a strategic physician manpower plan to recruit new physicians to the region.

Employers/Payers: We build relationships with employer-customers through HEALTH LINK marketing and service calls. We analyze and utilize this information to mesh our employer-customers with our patient-customers and our physician-customers. Our goal is to provide employers with a high quality, cost-efficient PPO that directs enrolled employees to enrolled providers. We also work with employer-customers through WORK LINK (1.1b(1)) to control employers’ overall health care expenses, allowing them to maintain a competitive edge in their respective marketplaces by controlling their health care expenditures.

We partner with our competitors and other health care organizations outside our market area to provide optimal patient care and referrals by maintaining transfer agreements that ensure patients have prompt access to services. NMMC readily accepts trauma patients from competing facilities unequipped to provide the necessary care. We also develop partnerships for services not offered within NMMC. NMMC transfers critical pediatric patients to Le Bonheur Children’s Medical Center in Memphis, Tenn. This symbiotic relationship among regional facilities demonstrates the common mission of providing quality health care to the service area.

Patient satisfaction is a key indicator of our relationship with patients, and as part of the Baldrige process, NMMC performed a comprehensive review of its patient satisfaction. In turn, NMMC revised its core values to be easy to remember, CARES, and developed a combination strategy for a highly qualified workforce to provide excellent customer service (high-tech/high-touch). The CST deployed a comprehensive training program to introduce CARES in September 2003. The program outlined employee knowledge, skills and behavior and has generic as well as unit-tailored components, both of which are reinforced through the EXCEL

process (Fig. 5.1-2). We continuously teach how to show compassion, be accountable and respectful and provide excellent service to all staff through this program.

Figure 3.2-1 Customer & Partner Contact Resources To Seek Assistance & Information

- **Direct Contact** - physicians, hospital, clinic, administrative and other staff
- **Nurse Link** - a triage & medical information telephone line 17/7
- **Communication Center** - responds to incoming calls 24/7
- **NMMC Internet Web Site** - services, access and medical information
- **Live Well** - free, community health education programs, health screenings and support groups
- **60 Second Housecall** - twice daily health information segment on local TV stations featuring NMMC's CMO
- **Helplines** - available to community for any issue
- **School Health Nurses and Athletic Trainers**

To Obtain Services

- **All service locations** - such as hospitals, clinics, wellness centers
- **Health Link PPO** - a network which provides access to quality health care providers throughout Mississippi, southwest Tennessee & central Alabama
- **Appointment Desk** - a physician referral assistance program for patient-customers
- **Physician Consult Line** - a service to increase referring physician access to specialists
- **Work Link** - Occupational Health Program
- **Live Well** - School Health Nurses, Health Fair Screenings

To Make Complaints

- **Direct Contact** - physicians, hospital, clinic, administrative and other staff
- **Careline** - a 24/7 phone line for patients to offer complaints, compliments or comments
- **Nurse Managers** - visit inpatients & family members to gain feedback on services
- **Patient Satisfaction Surveys** - surveys of all patient groups
- **Physician Support Liaisons** - visit NMMC physicians to solicit feedback on services provided
- **Customer Advocate** - receives verbal & written feedback from discharged inpatients & outpatients
- **Internet Website** - physicians, patients & community members can offer complaints or comments 24/7

Finally, and most importantly, NMMC secures loyalty and positive referrals by providing health care services that people need and want, when and where they want them, through our multiple access points. We do it right and then we find ways to do it even better.

3.2a(2) Key Access Mechanisms: NMMC has developed a sophisticated system for managing contact with customers and partners (Fig. 3.2-1). Basic requirements were defined by the SLT and the BOD when they finalized NMMC's value statement to include "compassion, respect and smile," which are expectations for all customer contacts. We use three approaches to deploy these contact requirements: 1) introduce them during NEO; 2) expand on them during the CARES values training program; 3) and reinforce them during each employee's annual EXCEL review. Each employee is responsible for maintaining patient privacy, protecting confidentiality and modeling professional behaviors.

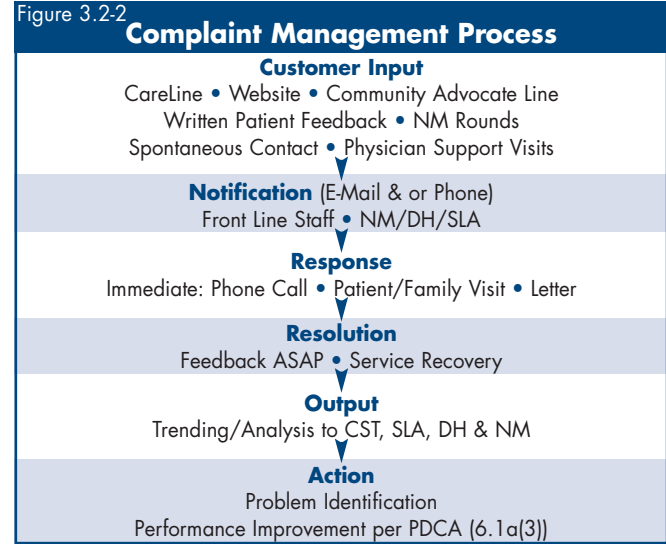
The CST provides systematic oversight of the analysis and trending of all customer feedback and drives development of individualized key contact requirements for each patient care area. The PGA-generated key drivers, described in 3.2b(1), assist in aligning key contact requirements within each service setting and throughout the organization while the CARES values training program

serves as the vehicle for deployment and integration. Learning is continuous with real-time feedback from PGA satisfaction surveys and the rounds.

Each contact mode also has a set of contact requirements which typically incorporate response time expectations. Patient contact requirements include introductions and explaining procedures. Rather than specific scripting we promote "key words at key times" in all patient contacts that include phrases such as: *What else can I do for you?* and *Is there something we can do better?* (6.1a(4)).

3.2a(3) Managing Complaints/Dissatisfaction: NMMC encourages patients to communicate their dissatisfaction and general comments regarding service, because patient comments are often the basis for PI initiatives. The complaint management process outlined in Fig. 3.2-2 utilizes E-CARELINE, a role-model Intranet-based systematic automated mechanism that collects information from all the customer entry points.

- **Input:** CARELINE is a phone line manned 24/7, which patients and their families may use to offer complaints as well as compliments. The CARELINE number is posted on telephones in every patient room, reception and outpatient waiting areas. The service is also available to LTC residents and home care patients. After discharge, all patients receive a thank-you-for-choosing-NMMC letter that invites their feedback. The Customer Advocate Line receives these patient phone calls and letters.
- **Notification:** Calls are received by NURSE LINK (17 hrs/d) and the Security Department (nightshift) and forwarded to the administrator on call or to the appropriate DHS/SLAS/NMS for prompt resolution. The Customer Advocate Line enters the complaints, suggestions and/or compliments into E-CARELINE and forwards them to the appropriate staff member for follow-up.
- **Response:** If possible, the respondent arranges an immediate resolution to the problem. If the complaint is a complicated issue, the respondent keeps the caller informed of progress.
- **Resolution:** Follow-up, corrective actions and resolutions are documented in E-CARELINE for trending and review by leadership. Each issue requires a service recovery explanation. When necessary, the rounding person utilizes the Service Recovery Program to provide the patient with a token gift, such as flowers.



- *Output:* All comments from E-CARELINE, positive or negative, are entered into the QUALITY MANAGEMENT SYSTEM (QMS) database for further analysis, trending and correlation with risk issues to eliminate duplication of efforts (Fig. 3.2-2). Each complaint is categorized into one of 33 categories. A Pareto chart is prepared monthly with the top issues for the month as well as YTD. Reports are sent to all appropriate DHS/SLAs monthly.
- *Action:* The CST and SLT review and utilize these aggregated and analyzed reports for improvements. PI teams may be formed to approach these OFIS (6.1a(3)).

Complaints from NMMC medical staff, customers or competitors are managed by Physician Support liaisons, elected Medical Staff leadership, CMO, the medical staff office or the SLAs. Investigation, resolution and reporting of complaints are completed within three business days and trended.

3.2a(4) Currency of Approach: Cycles of improvement to create services that build relationships with potential and competitor's customers use the same approach at improving our listening and learning (3.1a(3)). The CST updates the complaint process based on internal assessments and new technology. The NMHS Internet site features the ability for web visitors to e-mail comments to Marketing, which are forwarded to appropriate administrators for response and incorporated into e-CARELINE for analysis.

3.2b(1) Determining Customer Satisfaction and Dissatisfaction: NMMC contracts with PGA to systematically and randomly survey a sample of recently treated patients from each of the following settings: inpatient, outpatient, emergency department, home care and long term care. Approximately 50% of inpatients, 40% of ESD patients and 10% of outpatients are surveyed. Each set of questions is tailored to the type of NMMC service the patient received and is designed to capture actionable information about the patient's experience.

If the patient ranks his or her experience at NMMC as poor or very poor and if the patient provides his or her name and/or telephone number NMMC calls the patient to discuss his or her concerns. PGA performs a statistical analysis of the data and produces weekly, monthly and quarterly reports (Fig. 3.1-3). Each unit's Priority Index lists the top-10 items that need focus according to the last quarter's Priority Index. As noted in Fig. 3.1-3, the weekly and monthly reports are discussed at meetings and posted on the Knowledge Boards. The SLA/DH/NM identifies the top-3 issues from the Quarterly Priority Index and they become the unit's "key drivers" i.e., the issues if/when fixed will most likely improve patient satisfaction. The unit leader creates 90-DAY APs to address each key driver and explains and delegates these plans to the staff.

Each staff member has a personal goal regarding patient satisfaction and the 90-DAY AP provides staff members with current and pertinent direction as to how to improve patient satisfaction. Employees review the posted weekly and monthly PGA reports and can assess their units progress regarding their key drivers.

Other surveys NMMC uses for specific populations were described in 3.1a(2). Family members of all CCU patients are surveyed, Food and Nutrition provides a focused survey (7.2-16) and Behavioral Health patients are asked to complete a written satisfaction survey

at discharge. NMMC also surveys Wellness Centers members for their satisfaction with services (7.2-10).

3.2b(2) Follow-up and Feedback: Many of NMMC's satisfaction and dissatisfaction determination processes incorporate prompt and actionable feedback mechanisms. In addition to the previously mentioned follow-up activities (patient satisfaction assessment, CARELINE and Physician Support Department), we contact patients after their discharge from inpatient, ESD or outpatient services to check on their post-discharge status. Each service identifies the best person to make the call. The Women's and Children's SL has been using NURSE LINK for its discharge calls. Clinical protocols specific to women and children's discharge issues were adopted and provided to NURSE LINK. Patient questions and concerns are logged, tabulated and provided to the SLA to examine and modify patient care.

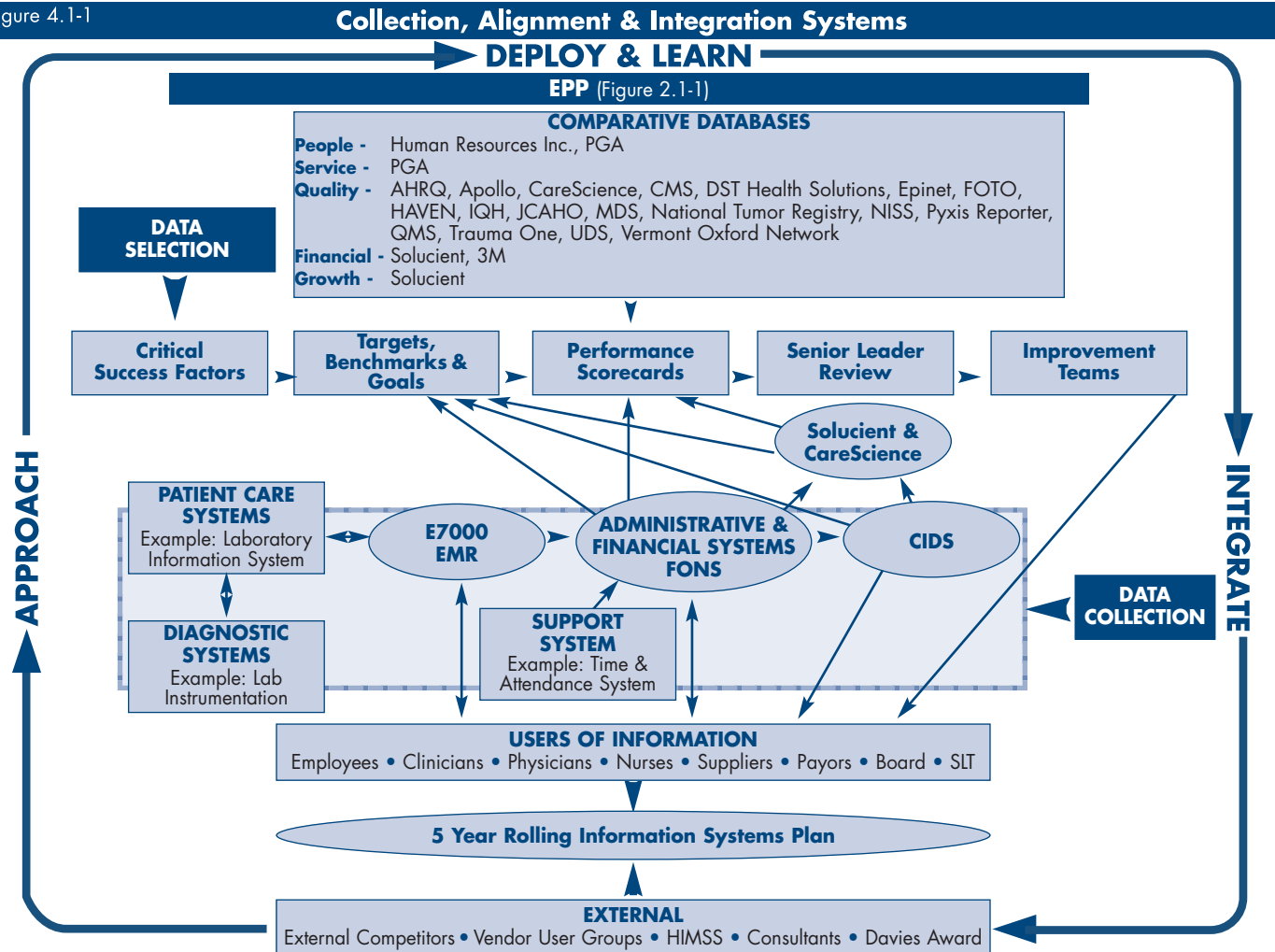
3.2b(3) Using Benchmarks of Patient Satisfaction: NMMC relies on PGA for its patient satisfaction comparisons. PGA's top box scores provide comparisons against other organizations providing similar services, and NMMC uses this information to set its patient satisfaction targets. Based on a prior Baldrige Feedback Report, the SLT reset the goal to be based on the highest level of patient satisfaction scores and implemented CARES training, a four-year training program. As a result of this, our patient satisfaction scores experienced a "Baldrige Boost" and we have been recognized by PRC (our previous vendor) for our high patient satisfaction. Other measurement tools include reviews of CBH customer and partner satisfaction surveys and systematic reviews of competitor data on finances, productivity and market share (P.2a(1)).

3.2b(4) Currency of Approach: As noted, each year NMMC modifies the patient satisfaction survey by adding or deleting questions in response to expectations and requirements identified through the listening mechanisms. NMMC participated in PRC's annual client conference and plans to do the same with PGA. We are participating in regularly scheduled group conference calls with PGA in which current issues and patient satisfaction trends are discussed.

4.1 Measurement, Analysis and Review of Organizational Performance

4.1a(1) Organizational Performance Measures: NMMC has long believed that the ability to collect, organize and communicate data and information is a key competitive advantage and essential to achieving our MVV and operational efficiency. Despite decades of IT promises and false starts in the health care industry, NMMC has held firm to its position as an early adopter of information management technology and is now a leading-edge data and information management health care organization. NMMC began laying the framework for its EMR in 1975 and is well on its way to achieving a community-based EMR and becoming a Regional Health Information Organization (RHIO) within its health care delivery environment by 2010. NMMC is a role model for the federal government's initiative to make Electronic Health Records available to most Americans by 2015. MIS has evolved into a single all-inclusive interoperable information management system that serves both the Tupelo campus and the OCL. It includes a system wide EMR, a corporate general accounting system (FONS) and COST INFORMATION DECISION SUPPORT (CIDS). These systems are

Figure 4.1-1



interfaced and provide comprehensive and integrated information to support daily operations and organizational decision-making in NMMC's effort to be lean and accurate in health care production.

As indicated in Fig. 4.1-1, our data selection process begins with the CSFs and is refined by the SLT, which use the EPP (Fig. 2.1-1) and strategic challenges (P.2b) to determine the essential elements for success. These elements are used to establish goals for each of the CSFs, key performance indicators for the PSC (Fig. 2.1-4) and DASHBOARD REPORT. Each DH and SLA develops his/her own aligned key performance indicators for the PSC and goals. As illustrated in Fig. 2.1-1, the CSFs align from senior leaders (EPP S3) to front-line staff while the selection and oversight of key performance indicators roll up through EXCEL for individuals (EPP S7) and the annual goal-setting process for departments and SLS (EPP S5).

Our key performance measures are the performance indicators from Fig. 2.1-4. Each key performance indicator on the PSC is monitored and reviewed by SYSILT, SLT, SLAS, DHS, staff, and the BOD. SLs have one standard indicator for each CSF on their PSC (PEOPLE- Employee Retention, SERVICE- Patient Satisfaction, QUALITY- Medication Errors, FINANCIAL- BAR score and GROWTH- Volumes). The quality measure is fluid because quality issues change and evolve annually. Each department and SLOG examines clinical, financial and operational data and information to determine the issues pertinent to the performance indicator. If the performance indicator is below the target, specific APS are

added to on-going 90-day APS (2.2a(3)). This learning supports organizational decision making as well as the adoption of new ideas, processes, procedures or technology which all follow the PDCA model (6.1a(3)).

Automated patient care and diagnostic systems such as laboratory, radiology and admissions collect and feed patient data to the EMR as a product of daily operations. The foundation of the EMR is a unique, life-long identifier assigned to each patient upon his or her first contact with NMMC at any access point. This permanent identifier ensures that each record of every episode of care delivered at any setting within NMMC is consolidated and retained within the EMR. This "lifetime clinical record" system is available at all sites of care and provides real-time data and information to clinicians who use it every day. NMMC continues to innovate and streamline patient processes based on OI, CO and PI project findings. For example, in 2003, NMMC created the Ache database to improve the patient admission and initial assessment process. The patient's assessment (i.e. allergies, family history, current medications) moves from the EMR to Ache. When the patient presents again, the nurse need only verify information instead of repeating questions to streamline the process. Our patients appreciate this benefit and it meets their efficient care requirement (Fig. P1-3).

Patient demographic and billing information flow from the EMR to FONS and CIDS. CIDS electronically sends data to CARESCIENCE monthly and to SOLUCIENT quarterly (Figs. P.2-1 & 4.1-1). As a

result of the availability of the electronic data, NMMC created the innovative CPA and CBCM. CPA compares peer, local and national benchmarks to individual physician practice data e.g., resource utilization (medications and testing) and complications. CBCM focuses on improving or reducing non-traditional cost drivers, such as processes of care, complications and social issues, to manage the cost of providing care (6.1a(3)).

4.1a(2) Comparative Data and Information: The selection of effective and appropriate comparative data steers NMMC toward its Vision of being the best provider of PCC and health services in America and allows NMMC to benchmark against world-class organizations. We developed the NMMC Goals and Scorecard Guidelines that are utilized to select performance indicators for the PSCs and to set RB and GB goals. The senior leaders work with the SLAS and DHS in the systematic selection and use of data to support operational and strategic decision making by examining evidence-based literature, selected external comparative databases, Baldrige winners and other industries for optimal comparisons. NMMC identifies four types of benchmarks: external and world class, external but not world class, internal and no benchmark. When a benchmark is not available, we select an ambitious target. Each SL has a dedicated outcomes manager. The outcomes managers, as knowledge experts, assist the SLS and departments in the selection of clinical benchmarks. The OI department assists departments and SLS in the selection of operational, staffing and financial benchmarks using SOLUCIENT data. The CQ department assists in the selection of benchmarks for internal patient and safety indicators. The SLT, SLAS and DHS, keeping in mind the ultimate goal is to be above the 90th percentile or top 10 percent, establish challenging yet realistic goals. The SLT, SLAS and DHS apply the following criteria to available database services: access to large national data sets, good logic, data support, and ease of use. The major comparative databases are noted in Fig. P2-1 & 4.1-1. The PATIENT SAFETY OPERATIONS GROUP (PSOG) maintains a list of all the available electronic comparative databases and provides consultative services, such as training, tools, data analysis and coaching to all departments (6.1a(7)).

The CO department, CQ department, OI department and PSOG ensure effective use of comparative data and information for operations through our performance measurement system (4.1a(3)), 90-DAY APS (Fig. 2.2-1) and Fact-based Results Oriented Approach (Fig. 2.1-3). By incorporating comparative data and information into the EPP, NMMC ensures effective use of it in strategic decision making.

4.1a(3) Performance Measurement System: The CO, OI and CQ departments as well as the outcomes managers, SLAS, DHS, medical staff and employees keep our performance measurement system current and help the system stay sensitive to unexpected changes.

We utilize the increasingly sophisticated needs of physicians and other stakeholders to drive the evaluation of options for improving the types of indicators, the breadth of comparative data and the underlying information system itself. Clinical outcomes relate to NMMC's core business and in 1992 NMMC developed its CO initiative, which created the innovative CPA and evolved into CBCM (P.2(c), 1.1a(3) & 6.1a(3)). The CO department is a key example of how NMMC examines and updates data management techniques to meet evolving needs for more detailed and refined data. Since 1997, NMMC has submitted patient care data to CARESCIENCE monthly,

which enables outcomes managers to query the database and determine quarterly risk-adjusted outcome rates, such as MORTALITY, MORBIDITY and complications, in comparison to "expected" rates. The outcomes managers use this powerful tool to survey the "Top-20" problematic diagnoses and to drill down by SL specific diagnoses and physician practices. Recent expectations from JCAHO's CORE MEASURES inspired the CO analysts to develop an innovative method for utilizing electronic data and restructured the analysis approach. This collaborative project involves MIS and CO analysts utilizing CARESCIENCE data to create interactive forms containing the required data elements for both mandatory reporting and performance improvement activities (7.1). The CQ department and pharmacists use the National Patient Safety Indicators from AHRQ (7.1-15) and internal patient safety indicators to proactively impact patient safety. PI teams may be created as the result of any findings (6.1a(7)).

The OI department distributes MRS reports bi-weekly to DHS, SLAS, SLT and SYSLT, which analyze volume, revenue and staffing for the current pay period (2 weeks), the four-period average and the YTD average. In addition, the OI department uses SOLUCIENT for customized operational, marketing, financial, and clinical benchmarking and results (6.2a(3)). Standard reports are distributed to the SLAS on a quarterly basis and custom reports can be requested any time. Inpatient market share is analyzed quarterly and outpatient market share is analyzed annually (7.3-15). Both are useful measures in analyzing performance.

NMMC's internal performance improvement activities continue to evolve through participation in external programs: IHI 100K LIVES CAMPAIGN, CMS/JCAHO measures, and AHA-SCIP program. NMMC's membership in Voluntary Hospitals of America enables NMMC to network with peers and other leading health care experts in an effort to stay current with health care needs and services.

4.1b(1) Organizational Performance Review: The SLT intentionally creates empowerment and alignment throughout NMMC via the disclosure of performance results and through their delegation of performance review, oversight and achievement to the SLS and departments. As discussed in 2.2b(1), the PSCs serve as the primary organizational performance and capability review tool while the DASHBOARD REPORT provides a snapshot of performance. NMMC creates its goals and PSC indicators (Fig. 2.1-4) then communicates them to DHS at the annual Operational Goals Retreat (EPP S5). Following the retreat, each department and SL creates goals, which are further classified as RB and GB, and a cascading PSC with the appropriate key performance indicators (2.1b(1)). The senior leaders review clinical, operational and financial performance findings through their leadership teams and meetings. SLAS and DHS prepare APS when a PSC indicator falls outside of its target, which sometimes evolves into a PI project (1.1b(2) & 6.1a(7)).

The key performance indicators on the PSC include those that are monitored monthly, such as patient satisfaction, as well as indicators that are included as a response to an identified need. The SL teams and departments meet monthly to examine indicators and determine whether APS are needed (1.1a(3)). The teams also examine national trends and local needs to plan for new services and to ensure that existing indicators are necessary and/or sufficient. Internal experts, CO and/or OI assist each SLOG and department to

determine the performance analysis appropriate for the nature and optimal use of the data. The analyzed data roll up to the senior leaders and are integrated into the EPP S3.

When requested, OI drills down on SLS, departments' or OCL operations and works with the SOLUCIENT database to compare and contrast NMMC to Mississippi, regional and national facilities. If opportunities are identified, or if questions regarding the validity of the data are raised, OI will perform a detailed study.

Specific analyses by CSF includes:

- **PEOPLE** – Employee satisfaction, physician satisfaction, productivity, worked FTES, retention and turnover data are statistically analyzed for leading satisfaction and dissatisfaction factors of each department and SL.
- **SERVICE** – PGA patient satisfaction scores are reported and reviewed weekly, monthly and quarterly (Fig. 3.1-3).
- **QUALITY** – Serious patient safety variances undergo RCA to drill down to cause and effect relationships (1.2b(1)). FMEA is used to evaluate current or new processes and identify possible process failures (6.1a(6)). The OI department uses regression analysis to develop staffing matrices or drill down for the patient care units by shift, patient age or whatever factor may be necessary to address the problem. The CO department uses CARESCIENCE and CIDS databases to identify potential improvements or to drill down by SL, procedure, diagnosis and provider. The PI coordinator reviews internal patient safety indicators to identify trends and OFIS.
- **FINANCIAL** – DHS, SLAS, managers and supervisors receive quarterly SOLUCIENT trend and compare reports, monthly actual-to-budget performance comparisons, monthly BAR roll-up (7.3-

10), bi-weekly MRS reports and weekly situation report (financial and volume).

- **GROWTH** – Cost benefit analyses, cause-and-effect analyses, SWOT analyses, feasibility studies, business plans, pro formas and trending are performed for new services, expansions and existing services (2.1a(2)). SOLUCIENT inpatient market share information is drilled down by SL, procedure or diagnosis. NMMC was one of the first hospitals to subscribe to the SOLUCIENT outpatient market share data, which became available in February 2006.

4.1b(2) Deployment of Performance Review Findings:

Organizational-level analysis is shared during the weekly SLT meetings, monthly SL team meetings, monthly DH meetings, the monthly/quarterly BOD meetings, the quarterly LEADERSHIP meetings and quarterly ECS.

- The DASHBOARD REPORT, PSC and STAT FACTS are the vehicles for communicating the organization's performance to the BOD as well as to work groups, front-line staff, physicians and partners (1.1b(1)).
- Each department has its own KNOWLEDGE BOARD, updated monthly with department-specific and NMMC results.
- Patient and customer focused-results are presented at medical staff meetings, SLOGs, departmental meetings and BOD meetings/retreats.
- Financial, clinical and organizational effectiveness results are presented to the quarterly LEADERSHIP meetings, SLT meetings, DH meetings, SL team meetings, and BOD meetings/retreats.
- The CEO and president send a weekly e-mail message every Friday discussing the issues and events of the week.
- The community stays informed through the bi-monthly Open Letter to the Community, which is published in the newspaper

Figure 4.1-2 Communications & Knowledge Transfer Mechanisms	
Knowledge Transfer Mechanism	Knowledge User/Provider, Description & Utilization (examples)
Meetings: Regularly scheduled; in-person/video	To: Community, Customers, Partners, Patients, Staff, Suppliers What: Best practices, performance results, changes in operations, changes in environment/marketing, clinical outcomes, PI reports, PSC, Dashboard Report, Stat Facts
Rounds	To: Customers, Partners, Patients, Staff What: Staff issues/ideas which are noted on leadership rounding logs and customer/partner complaints or compliments which are entered into e-careline
Phone & surveys	To: Community, Customers, Partners, Patients, Staff, Suppliers What: Patient and customer satisfaction surveys; call-in lines for information, referrals, complaints and compliments (Careline, Nurse Link, The Desk, Physician Consult Line)
Intranet	To: Partners, Staff What: Clinical, operational and financial data and information; policies and procedures; meeting schedules; evidence-based medical information; clinical databases (Micromedex, Medline Plus); cultural and ethical guidelines, EMPLINK (employee online pharmacy refills), phone directory, job postings, formulary and links to departmental websites
Internet	To: Community, Customers, Partners, Patients, Staff, Suppliers What: MVV, Services offered, NMMC financial statement, health information, online outpatient pre-registration form, news releases, Open Letters to the Community, 60 Second Housecall scripts, Checkup, community events, online nursery photographs, employment opportunities and EMPLINK for employee access
Best Practices	To: Partners, Staff What: CPA, Annual Outcomes & Safety Fair, medical conferences, NMMC Resource Center, Quarterly Quality Forum
Training	To: Partners, Staff What: Orientation, annual review, computer-based training (CBT), internal and supplier-based training programs, Outcomes College, Quarterly Quality forum, CME/CE courses, customer service tip sheets
Knowledge boards	To: Community, Customers, Partners, Patients, Staff, Suppliers What: PSC, Dashboard Report, clinical outcomes, announcements, best practices, patient and employee safety information
Publications & Programs	To: Community, Customers, Partners, Patients, Staff What: Employee Newsletters (Checkup, Enhancing Your Career, Practice Notes, Nurses Notes), CEO Weekly E-mail to employees, Open Letters to the Community, magazines (Vim & Vigor), publication inserts, 60 Second Housecall, forums, support groups, Spirit of Women, Live Well

and archived on the Internet, through the CRF and through BOD representation.

Communication and knowledge transfer mechanisms are listed in Fig. 4.1-2. As described in 2.1a(2) and 3.1a(2), the conversion from our natural SLS into a full SL structure demonstrates our ability to translate organizational review findings into a priority for improvement and innovation. Any result that falls short of the target by more than 3 percent is assigned to an improvement process as described in 1.1a(3). The BAR and 90-DAY APS ensure measures that fall below the target are monitored (2.2a(3)).

4.2 Information and Knowledge Management

4.2a(1) Data/Information Availability & Accessibility: A key deliverable from NMMC's years of IT investment is the unique ability to make information available to every clinician and staff member when needed, in the desired form and with the integrity needed to enable work to be done absent delays in waiting for information (Fig. 4.2-1). Timely availability of information is key to our ability to be lean and productive, and to provide patients, partners, staff, suppliers and customers with the information they want and deserve (7.5-7 & 8).

MIS uses technology and query-enabled databases to make comprehensive clinical, financial and operational data and information available to NMMC through extensive deployment of: more than 2,600 PCs, more than 500 printers, a gigabit collapsed fiber backbone, a WAN utilizing DS3 to T1 technology that links 58 buildings, remote dial-up access for users outside the immediate NMMC service area, wireless notebook computers, e-mail service, a broad array of printed reports, online report management, E-CARELINE, an NMMC-wide world-class Intranet, high-speed Internet access, automated materials management system, PACS and telemedicine capabilities.

Twenty-six percent of the MIS staff members have clinical backgrounds, (including RNS, MT(ASCP)s, RHIA, RRT and BSRT(R)MR) which bridges the chasm between the technical and clinical mindsets. NMMC provides 24 hours of dedicated basic computer training to each nurse and 16 hours to each physician. More than 250 physicians and school nurses have online, real time access to the EMR (1.2c). In addition, NMMC supplies a computer, printer, data line and support to physicians and school nurses' offices at no cost to them. Non-employed physicians using their own Internet service provider can access patient information via a secure and encrypted VIRTUAL PRIVATE NETWORK (VPN).

Financial data are contained and accessed by managers in FONS, which provides managers, DHS and SLAS with online, daily revenue reporting, biweekly payroll information, monthly financial reports and responsibility reports. More than 78% of routine orders and confirmations with suppliers are managed electronically through ELECTRONIC DATA INTERCHANGE (EDI) and through our automated materials management system, ADVANCED MEDICAL SYSTEM (AMS).

Data collected within Fig. 4.1-1 are used to create three types of alerts: real-time paging, e-mail and printed. Our industry-leading alert system notifies the appropriate clinical, support, financial and MIS personnel in an effort to filter critical data from routine data. Clinical research coordinators and principal investigators receive pager and e-mail alerts when a clinical trial patient enters the system at any access point, which avoids protocol violations.

Respiratory therapists and cardiac clinicians receive pager alerts for stat and now orders. This process received a Stellar Award in 2002 for innovations in outcomes achievement through the enhancements and uses of IS by the Eclipsys User Network. Infection control personnel receive an e-mail alert when there are positive test results for a state reportable communicable disease or infection. MIS personnel receive e-mail alerts for server, database, network and interface failures or malfunctions.

4.2a(2) Hardware and Software: MIS purchases, installs and supports all hardware and software at NMMC; in addition, MIS employs a group of custom programmers and a live testing environment. The Security and Privacy Team has developed processes to manage risk, information distribution, security incident reporting and testing and protocols that cover all elements of the system and all distribution points. The NMMC Auditing Department periodically reviews the automated audit trails built into the system (1.2b(2)).

The MIS Security Officer oversees computer security and manages security policies and information access through four primary methods:

- strict computerized systems development and change control procedures;
- physical security mechanisms, including proximity cards and keyed entry for access to sensitive areas;
- carefully defined system and network technical security requirements (Internet firewall, audit trail, entity authentication, auto logoff, etc.) and
- computer equipment disposal procedures in compliance with the HIPAA Privacy and Security Regulations.

The MIS Management Team has implemented mechanisms to ensure reliability and user friendliness, such as building these requirements into the REQUEST-FOR-PROPOSAL (RFP) process and testing them in our test environment prior to implementation in our live production environment. The team reviews every application for EMR access, which has more than 400 different user access levels, and if the applicant's needs are unique, a new access level is created. The MIS Project Team helps determine what systems' functionalities are needed and whether they are fulfilling their goals. MIS supplies clinical liaison support personnel to OCL and departments to elicit direct feedback and provide assistance to users; furthermore, the MIS Help Desk provides user support and logs calls in an effort to track trends. MIS supports its hardware with on-site hardware repair, the availability of spare units and parts, 24/7 availability of support technicians, a continuously staffed operations center, a business recovery "hot site," and a wide range of redundant systems. MIS learns about and maintains industry-leading standards in software and hardware practices in service and training through external competitions, HIMSS, conference attendance, consultants, vendor demonstrations and through the DAVIES AWARD process.

4.2a(3) Continued Availability: Annual risk assessments of each system identify which systems have the greatest impact on users and form the framework for our contingency plan. Each department has its own downtime procedures plan so that the essential departmental functions are maintained in a seamless manner. In 2005, the mainframe operated 99.9% of the time, which indicates unscheduled downtime was 0.1% (7.5-7). There are four levels of

downtime procedures based on the amount of time the system is down, and the Manager of Systems Applications maintains copies of each department's procedures. Backups are run each night for mission critical systems and stored offsite.

NMMC has a business recovery "hot site" located 300 miles from Tupelo for our two mission critical information systems: the EMR and FONS. In the event of total devastation, the backup files will be transported and these systems will be restored and controlled from these remote facilities.

4.2a(4) Keeping Current with Health Care Needs: NMMC won the DAVIES AWARD for development and implementation of an EMR in a rural integrated health system, and was recognized as MOST WIRED for five consecutive years beginning in 2001 and ranked as one of the 25 MOST WIRELESS in 2004 and 2005. NMMC also received international recognition when it was ranked 31st among all companies in all industries in *P.C. Week's Fast Track 500* for its innovative use of wireless technologies in the workplace. NMMC uses these awards both to benchmark its effectiveness and to identify OFIS based on what other organizations, in and out of health care, are doing (7.5-16).

Strategic direction is provided to the MIS Management Team by the Clinical Systems Steering Committee and by the Financial System Steering Committee that establish broad priorities linked to the SRP to assure alignment (Fig. 2.1-1, EPP S5). The MIS Management Team uses this guidance to develop a rolling five-year Information Services Project Plan (EPP S3), which drives the rolling five-year IS Capital Plan (EPP S3). These SRPs are reviewed, updated and approved by the SYSLT and SLT during the Workshop Week (EPP S3). The MIS Management Team implements short and long-range project plans.

The CIO leads the MIS Management Team, serves as a member of the DAVIES AWARD Organizing Committee, which is derived from the Baldrige Award, and is responsible for keeping data and information mechanisms and software and hardware systems current. Through systematic planning and budgeting, MIS annually budgets to replace one-fifth of its workstations, so that users have constant access to current technology. The MIS Project Team and customer account managers maintain systems that meet users' ever-changing needs. The MIS managers regularly attend national meetings on software and hardware and routinely test the quality of NMMC's information systems by competing for national awards.

4.2b Organizational Knowledge Management: NMMC recognizes that the achievement of role model performance requires the ability to manage and communicate not just data and information, but knowledge. Specifically, the collection and transfer of staff knowledge is managed through the iterative methods and multiple mechanisms in Fig. 4.1-2. For example, the Annual Outcomes and Safety Fair allows each employee to see how he/she contributes to patient outcomes and to both patient and staff safety (Fig. 5.2-2). The role model Outcomes College engages nurses as bedside champions of care improvement through a 2-day seminar on evidence-based care practices.

The OI, CO, and CQ departments and PI teams identify and share best practices throughout the organization. They work with staff

for training, creating protocols and implementing best practices. In addition, the CPA process examines internal physician practice patterns to determine the local best practice. Local physician practices are compared collectively to current evidence-based practice standards and the local best practice at the regular Medical Staff Section meetings and SLOGs. The best practice changes are incorporated into processes, protocols and ORDER SETS (Figs. 2.2-2 & 6.1-3), which are shared with staff at meetings, on KNOWLEDGE BOARDS, on the Intranet and at outcomes fairs (Fig. 4.1-2). Partner and staff knowledge is transferred through each SL team or department and across SL teams or departments (5.2a(3) & 5.2a(5)). Customer listening and knowledge transfer techniques are described in 3.1a(2).

4.2c Data, Information, and Knowledge Quality: NMMC's philosophy of acquiring, implementing and installing only systems that can be interfaced systemwide begins with the RFP process and ensures that several key aspects are addressed (Fig. 4.2-1).

Figure 4.2-1 **Data Information & Knowledge Quality**

Properties of Data/ Info/Knowledge	Quality Assurance Mechanisms
Accuracy	<ul style="list-style-type: none"> • Online data capture & entry screens • Templates with screen edits • Validity reports • Common patient identifier
Integrity	<ul style="list-style-type: none"> • System integration • Centralized/standardized systems • Automation & error detection/avoidance • Data entered once and then electronically sent to other systems • Reconciliation clerk
Reliability	<ul style="list-style-type: none"> • In 2005, the mainframe operated 99.9% • 4.2a(3)
Timeliness	<ul style="list-style-type: none"> • Response time (7.5-7) • 4.2a(1)
Security	<ul style="list-style-type: none"> • 4.2a(2)
Confidentiality	<ul style="list-style-type: none"> • MOD-10 check digit technology • Employees annually sign confidentiality statements • Employee training on confidentiality of personal health information (PHI) and electronic PHI

5.1 Work Systems

5.1a(1) Organization and Management of Work: To promote cooperation, initiative, empowerment, innovation and its culture, NMMC's service delivery model has three integrated systems. Work is organized by SLS, jobs are organized and managed by departments and the team model is used for both the daily accomplishment of work and to design or improve processes (6.1a(7) & 6.2a(6)). Our culture of PATIENT-CENTEREDNESS is stressed by the mantra: "all employees work to either deliver patient care or support those who do."

- **SLS:** Organization of work is based on the patient's perspective and experience. The SL team concept focuses on the patient and includes caregivers and process owners in the decision-making process. Physicians are organized by specialty and each group is assigned to a SL. Active medical staff are integral members of the SL teams – collaborating on health care delivery, outcome goals and budgets (P.1b(4)).

- **Departments:** Services that cross SLS assign personnel by patient care areas in order to create a stable team. Support departments have representation on SL teams.
- **Teams:** Patient care areas are physician section specific and are assigned to a SL. Teamwork is used to accomplish the work of patient care. Daily assignments are based on the time or number of people required to care for the patient. Support departments working outside of patient care areas use the team concept to organize their work.

The placement of PEOPLE as our first CSF and putting employees and teams in the center of the organization chart (Fig. P.1-2) are external symbols of an internal reality of recognizing that a motivated work force is essential to our mission. The following mechanisms are used to achieve a motivated workforce.

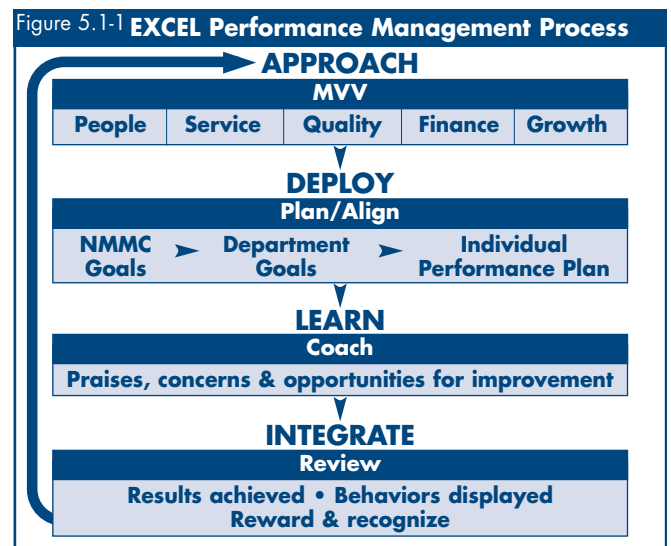
- **Empowerment:** Employees are empowered to act within their skill range and to meet customer needs (1.1b(1)).
- **Information:** Monitoring PSC indicators provides leaders and all staff with the information they need to be agile in responding to changing health care service needs.
- **Communication:** The focus on excellence and results is emphasized with communication of the area's PSC and is key to achieving our APS.
- **Linkage:** The PSC review demonstrates that each employee's work is linked to patient and operational outcomes. This is reinforced at the annual Outcomes and Safety Fair.
- **Reward:** Employees are rewarded for initiative, cooperation and innovative ideas through recognition of IE, STARS ON-LINE (Fig 5.1-2) and the incentive plan (5.1b).

Our performance management system (EXCEL) is a comprehensive process that allows us to appraise each employee's contribution to our CSF targets. Coaching and performance review reinforce that alignment as well as a culture of empowerment, inspiration and agility (1.1b(1)). Job documentation includes the essential functions for each job, the KNOWLEDGE, SKILLS AND ABILITIES (KSAS) required to do the job, the freedom to act (employee empowerment) and is reviewed as jobs change and/or every three years. Leaders receive on-going training to ensure they have the skills to systematically review and revise the essential functions to meet the ever-changing needs of NMMC.

5.1a(2) Diverse Ideas, Culture and Thinking: We embrace all people, all backgrounds, and all ages and have done this successfully since 1965. Although Mississippi was historically known for race-related issues, NMMC has always been a leader in doing what is best for our community. When federal funding for expansion was provided through the Hill-Burton Act, the federal inspection spurred a commitment to voluntary full integration in April of 1965 – the first institution to do so in Mississippi. Furthermore, we have intentionally designed processes to ensure that we communicate with and listen to everyone (1.1a(1) & Fig. 4.1-2). We have formal methods of soliciting and collecting diverse ideas, such as IE (1.1b(1) & 7.4-14), diversity training (5.2a(2)), ECS, peer interviewing, the EOS and inclusion of front-line staff on PI teams. Ideas may be solicited directly in the patient care area through input on flow charts, review and comments on suggested APS and piloting of proposed changes. This input promotes initiative, empowerment and innovation. Community listening methods are described in Figs. 1.2-1 & 3.1-2.

5.1a(3) Effective Communication & Skill Sharing: We use many communication strategies to share information across disciplines and sites including OCL (Fig. 4.1-2). The Trainer's Network is a group of more than 50 trainers who share best practice training, mentoring and preceptor strategies. Participation on PI teams, presentations at Leadership and clinical conferences all serve as skill sharing venues. Physicians share skills through evidence-based, best-practice care education provided during a CBCM project (6.1a(3)). Nurses are cross-trained to work on any patient care unit within their SL by working with a preceptor to obtain unit-specific competencies. Nursing educators meet regularly to identify common practice issues and develop best-practice guidelines.

5.1b Staff Management Performance System: Because we believe the key to success is to give each employee the opportunity to "EXCEL," the EXCEL process was designed to create a partnership between the employee and supervisor, which enables each employee to become an empowered expert. EXCEL is behaviorally driven and describes not only what must be done, but also how the job is done. EXCEL is a cyclical process of planning, coaching, reviewing and rewarding/recognizing performance (Fig. 5.1-1).



EXCEL begins each year with the individual employee submitting their Performance Plan (aligned with the CSFs and strategic goals) to their supervisor for review and approval. The Performance Plan has specific actions under each CSF and measurable results and/or observable behaviors. Employees record their Performance Plan on KEYS TO SUCCESS CARDS (1.1a3). Each employee (all areas, not just direct patient care) includes a patient satisfaction goal as a personal goal to strengthen our emphasis on PCC (Fig. 6.1-4). As part of an ongoing EXCEL process, performance is formally reviewed after the first 90 days of employment and then biannually. Leaders model desired behaviors daily through their interactions with employees and customers (1.1b(1)). During the mid-cycle and annual review process, feedback is solicited from at least six of each employee's customers and/or co-workers to produce a 360° evaluation profile on each of the CSFs. Employees are rewarded with merit increases based on performance (Fig. 5.1-2).

In addition to EXCEL, leaders (including physician leaders) and managers participate in a leadership development process - SERVANT LEADERSHIP - that includes a 360-degree profiles on eight servant leader attributes followed by aggregation of results and develop-

Figure 5.1-2

Strategies	Results Behaviors	Supports CSF
Attendance at work: Perfect & excellent Receive certificate, gift & recognition party		P•S•Q•F
Job performance: Merit increase Personal notes from SLT		P•S•Q•F
Tenure: 5, 10, 15 years, etc. Receive service pin & certificate from CEO		P•S•Q•F
Safety: No lost work time due to work-related injury		P•S•F
Incentive Plan: Customer service & financial goals 0-5% of pay based on results		P•S•Q•F•G
Live Well: Healthy Lifestyle requirements (5.3(a)1) \$100 if 8 of 8 met • \$50 if 7 of 8 met • \$25 if 6 of 8 met		P•S•F
Stars On-line: Receive letter from CEO, star & T-shirt (Multiple nominations - public recognition)		P•S•Q•F•G
IE: Employees submit ideas to improve CSF: Letter from administrator & \$5 gift card if idea accepted		P•S•Q•F•G
Wellness Pay: Unused sick time purchased annually		P•S•Q
Employee of the Month/Year		P•S•Q

P•S•Q•F•G = CSF

ment of an action plan (1.1a(3)). SERVANT LEADERSHIP is one component of the LDI (5.2a(2)).

In 1994 NMMC initiated an INCENTIVE PLAN open to all employees (not just management). We are the only NFP hospital in Mississippi with this type of plan. The plan has been sustained which is also unusual for the industry. The plan received national media coverage by the Hay Group. Employees are rewarded based on patient/customer satisfaction and on cost per unit of service, which balances the people and financial sides of operations. The plan financially rewards employees on the basis of three performance levels. All staff members receive monthly feedback regarding the current level of reward for their INCENTIVE PLAN category, identified as: inpatient (7.2-1), outpatient (7.2-6), ESD (7.2-7), home care (7.2-10), behavioral health (7.2-2), wellness centers (7.2-10) and LTC (7.2-8).

Meeting the satisfaction target (e.g. 90th percentile) is celebrated by a visit from the SLA awarding gift cards to all employees, including staff from support departments attached to that area. In the STARS ON-LINE strategy, both individual and department awards highlight specific behaviors to ensure these behaviors are repeated. Employee satisfaction with recognitions and rewards is depicted in 7.4-8.

5.1c(1) Identification of Needed Characteristics/Skills:

Characteristics and skills needed by potential staff are identified as a part of the HRSRP. This process begins with a needs analysis that considers: developing trends in technology, additional training needs to maintain skill levels, the anticipation of job upgrades and the addition of services and technologies (Fig. 5.1-3 Characteristics Analysis). After the necessary skills are identified by SLAS/DHS, a gap analysis is conducted focusing on projected turnover and any foreseen increases/decreases for targeted positions. Character attributes essential to CARES (Fig. 6.1-4) and SERVANT LEADERSHIP (Fig. 5.1-5) and that fit our culture of PCC and NO EXCUSES/RESULTS ORIENTATION are verified via behavioral interviewing by HR, DH, and peers. The EXCEL process reinforces the emphasis on behaviors and results.

5.1c(2) Recruiting, Hiring and Retaining Staff: Through a focus on customer service and PCC (Fig. 6.1-4), our employees

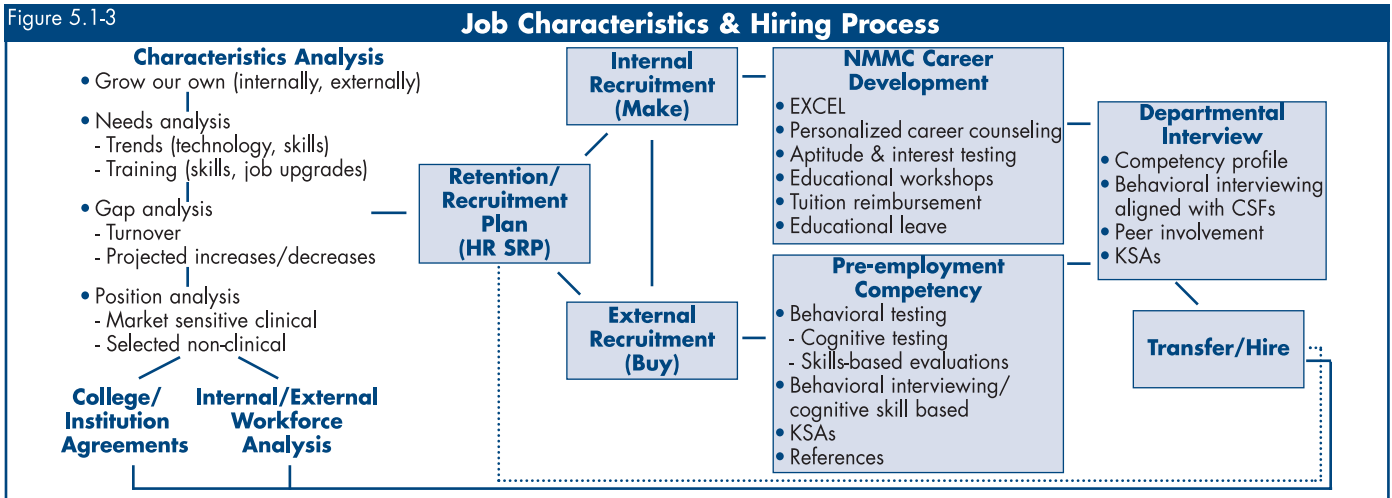
make a difference in someone's life each time they walk through the door. We know it and are proud of it. Consequently, we have a work environment that draws and nurtures the best people (P.1a(2)). As the largest employer in the region, we are a leader in developing our region's future workforce. Our employment strategy of "grow our own internally and externally" is accomplished by conducting internal and external workforce analyses on all market-sensitive clinical and selected non-clinical positions. We develop appropriate internal strategies or college/institution agreements that meet the position-specific targeted recruitment strategy (Fig. 5.1-3). To meet the challenge of a shortage of health care providers (P.2b) the FMRC (P.1a(1)) serves as recruitment and training strategies for physicians. Sixty-one percent of graduates have remained in our service area and 85% have remained in Mississippi. The center continues to grow with 20 currently enrolled.

Our recruiting process is a unique stepping stone system that begins with Let's Pretend Hospital, a tool to educate first graders in health care careers. The Summer Health Academy and the Advanced Health Academy are for middle school students. Medical Explorers, Job Shadowing and facility tours are for high school/vocational students. High school seniors pursuing a medical career as defined in the HRSRP are candidates for annual medical scholarships. NMMC hosts a Nurse Job Exposition averaging more than 600 participants annually. A new initiative, the Nurse Mentorship Academy, provides 16 hours of lecture, guest speakers, job shadowing and volunteering for exploring a career in nursing. We offer financial/other assistance to traditional and non-traditional students to assist with meeting our enrollment needs. A deliberate strategy for recruitment is our collaboration through 219 educational contracts with academic institutions across America. We provide experiential training sites, clinical rotations, and student mentoring. Our excellent vacancy rate is even more significant considering our non-metropolitan location (7.4-3).

As part of HR's strategic goals, employee demographics and EEOC classifications are reviewed annually to ensure that our workforce attracts, retains and promotes a work force that is reflective of the community. The employee population is segmented/analyzed by gender and race (7.4-1) and targeted APS are developed to improve recruitment and retention.

The hiring process is depicted in Fig. 5.1-3. During the external hiring pre-screening process, candidates undergo behavioral testing aligned with CSFs, cognitive testing, skills-based evaluations, evaluations of KSAS relative to the position and an in-depth referencing process. If referred for consideration candidates receive additional evaluation on their competency and attitudes/behaviors in the interviews conducted by SLAS/DHS and peers. Training for behavioral interviewing is required for leaders and is available to all. The hiring decision is made by the SLAS/DHS with consideration of peer input.

Empowered to set goals and provide direction for the CSF-PEOPLE, the Retention and Recruitment Committee meets monthly to analyze turnover and vacancy rates for each SL. Examining data from the EMPLOYEE OPINION SURVEY (EOS) (5.3b(1)), exit interviews and employee focus groups, the committee selects retention initiatives. Indicators of success are employee satisfaction, staffed positions rates and retention rates.



5.1c(3) Succession Planning: The LD/SP is a comprehensive and deliberate process of the SYSLT with an intentional emphasis on both top-down pull and bottom-up push as a part of our “grow our own” philosophy. The plan undergoes systematic review, realignment to CSFs and revision. This process resulted in seven new courses added to LDI in 2006 (Fig. 5.1-4).

staff that can function in the role in an emergency and one name of a person that is either ready or in development. A major initiative for 2005-2007 is SERVANT LEADERSHIP (1.1a(3)). Fig. 5.1-5 depicts the LD/SP flow chart.

Figure 5.1-4 Leadership Development Institute

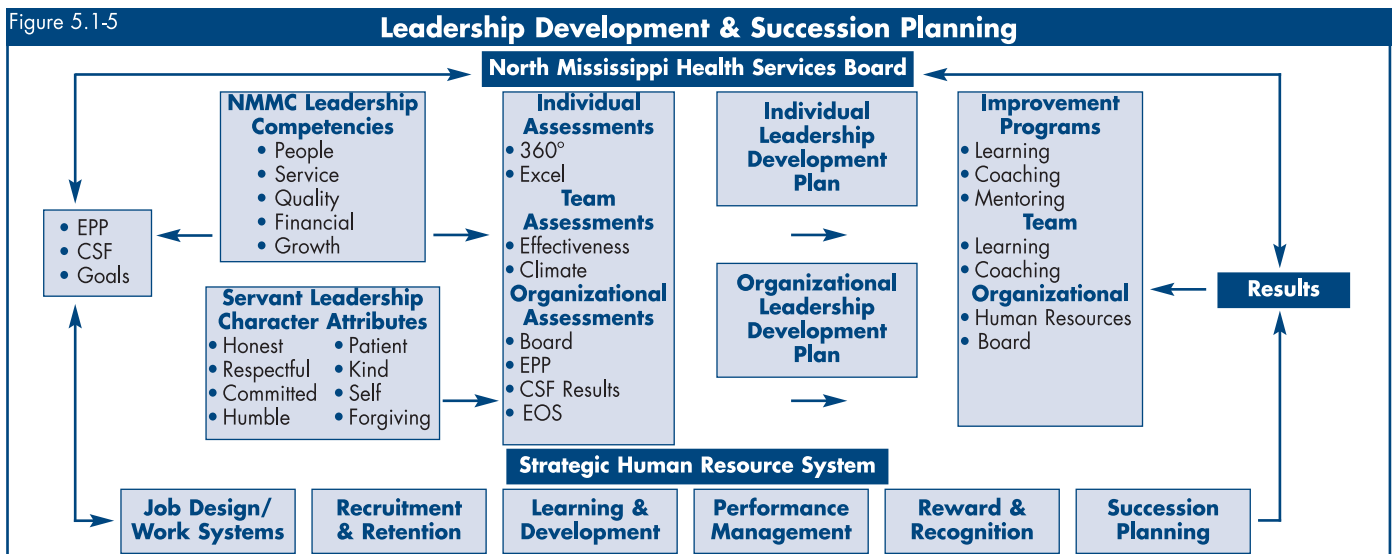
People: NEO, Servant Leadership, Employee Engagement/ Satisfaction/ Rounding, Employee Relations, Employee Selection/ Behavioral Interviewing, Excel, 7 Habits for Leaders, 7 Habits of Highly Effective People, Coaching Beyond the Basics, 4 Roles of Leadership
Service: Customer Service for Leaders, Analysis of PGA Data, Presentation Advantage, Writing Advantage
Quality: Mgt Orientation, Execution of a Plan, Patient Safety, Focus (Time Mgt), Meeting Advantage
Financial: Budget/Financial Mgt, Financial Mgt for Non-Financial Managers
Growth: EPP, Analysis of Market Share Data

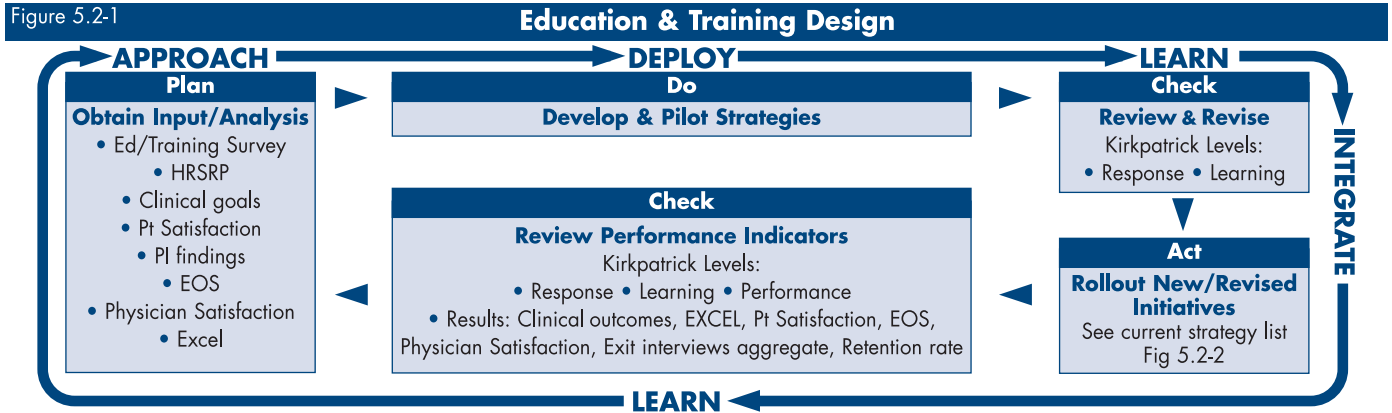
The management of career progression for non-leadership staff is included in EXCEL with a yearly discussion of career goals and/or ways to improve their KSAs. Career development is encouraged and supported as discussed in 5.2b and Fig. 5.2-3.

The LDI is CSF-based and provides 166 hours of education/training over a four-year period. Leadership succession planning begins with the completion of an LD/SP profile that is updated annually. Upon entry into a leadership position, goals are set with their immediate supervisor to complete leadership-training offerings as well as other activities required for career progression. This accountability structure creates the “pull.” Each senior leader and DH develops succession plans. The plan includes two names of

5.2 Staff Learning and Motivation

5.2a(1) Training to Achieve Action Plans: Beginning with NEO and throughout their tenure, staff learns that the highest priorities are customer service and PCC. Customer service training is designed around and targets our values (CARES 3.2a(1) & 6.1a(4)). The EPP and the Education and Training Design processes (Fig. 5.2-1) ensure that staff education and training content is matched to goals and APS. This sequential and annual process addresses key needs related to performance indicators and improvements, technological changes, staff development, skills enhancement and career progression. Course offerings with the highest potential impact on clinical outcomes, workforce quality, and employee and patient satisfaction are selected or developed by the Education Planning Committee. Needs assessments are conducted via surveys with staff, leaders and trainers (5.2a(6)). Training processes are reviewed by the Trainer’s Network (5.1a(3), a





diverse group of practitioners who meet quarterly to transfer information and share skills regarding training activities throughout the hospital. Our more than 800 health profession students (P.1a(3)) receive a specifically designed CBT orientation that includes our MVV as well as all accrediting and regulatory agency required trainings.

Our Education and Training approach balances short and long-term objectives with staff needs (including licensure and re-credentialing) for development, ongoing learning and career progression (Fig. 5.2-2). ANREV includes additional education/training based on survey and PI findings. CME is targeted to address clinical improvement opportunities (Fig. 5.2-2 & 3.1a(2)). When areas of need are identified, we decide whether to train internally or help fund the needed education in the community. When we identified the impending nursing shortage in 2001, we partnered with five schools of nursing in our region and funded professor positions in 2002, 2003 and 2004 with the goal of hiring 100 nurses in 2004 (7.4-4). The result was the hiring of 110 new nurses in the spring/summer of 2004. This brought the RN vacancy rate to 0 at that point in time as well as obtaining a reserve for anticipated turnover. Funding continues in 2005 and 2006 (7.4-5).

5.2a(2) Addressing Key Organizational Needs: Using the Education and Training Design process (Fig. 5.2-1), the Educational Planning Committee has developed a comprehensive approach to learning that far exceeds industry standards. For example, NMMC’s NEO is not simply a one or two-day orientation. Instead, NEO is part of an extensive three-month process that includes: 1) MVV, CSFs and leadership approach (1.1a(1)); 2) all mandated training required for accreditation; 3) materials (Corporate Compliance Plan, Policy Guidelines, Employee Guidelines Booklet); 4) resources (Safety Pocket Guide, Code of Conduct, Corporate Compliance Hotline); 5) Orientation of direct patient care staff on the POC process; 6) partnering with a preceptor and SL educator; and 7) the requirement to demonstrate clinical competencies.

Diversity and ethical education is provided to promote a culture of acceptance of each unique individual. A cultural, ethnic and religious reference manual is available on the Intranet. Ethical education is a part of ANREV, “7 Habits of Highly Effective People,” CARES training, clinical conferences, leadership training and the Ethics Committee meeting (open to all staff and community members) (1.2b(2), Fig. 5.2-2).

The LDI is designed to develop knowledge and skills for new and tenured leaders. Leadership development is systematically

deployed and includes: 1) leader assessment (360-degree profiles on eight servant leader attributes); 2) leader development planning with leader/mentor; 3) LD courses (Fig. 5.1-4); 4) performance evaluation (EXCEL); and 5) succession planning. New physicians receive initial orientation, continuing medical education and leadership training. During orientation, physicians learn about the MVV, the RESOURCE CENTER, committee structures, services and

Figure 5.2-2 Current Education/Training Initiatives

Initiative Examples	Link to Goals (See Fig. 2.1-4)	"Step Beyond" Minimum Requirements
Clinical conferences (OL)	Clinical processes & outcomes	Targeted to clinical outcomes goals, multidisciplinary planning team - yearly calendar
ANREV: Various methodologies for diverse needs (ST/OL)	Competent workforce JCAHO, OSHA HIPPA requirements	Diversity education & offerings based on targeted needs - PI data, education needs survey
LD Training: mandatory (LT/OL)	Competent workforce Employee Satisfaction	LD/SP profile for all, 4-yr LD education plan, on work time, no charge
Physician Leadership Training (ST/OL)	Competent workforce	Entire program is beyond minimum requirement
CPA (ST)	Competent workforce	Improved quality = decreased cost
"7 Habits of Highly Effective People" (ST)	Employee & patient satisfaction	Reinforce character-based behaviors, available to all staff, 2,000 trained
Customer Service: CARES (OL)	Patient satisfaction & loyalty	1st yr: "Key Employee - you make a difference," teamwork 2nd yr: "Compassion" & "Accountability," teamwork
BLS - All direct caregivers (ST/OL)	Clinical processes & outcomes	All employees - Heartsaver or Health Care Provider training (recognition by AHA-Fig. 7.5-16)
ACLS - mandatory for trauma staff (ST/OL)	Clinical processes & outcomes	Offered to clinical specialty staff - avg 418 trained/year (award from AHA-Fig. 7.5-16)
CME-physician requirement (ST/OL)	Clinical processes & outcomes	Targeted to clinical outcomes (Exemplary status on 7 of 10 criteria at AMA (MS) review)
"Teams & Tools" (PDCA, PI tools) (ST)	Competent workforce	Perform skillfully as a team member
Medical Ethics (ST/OL)	Competent workforce	Monthly CME/CE & included in clinical conferences
Outcomes Fair/College (OL)	Outcomes, Workforce, Safety	Employees SEE their contribution to Outcomes/Safety

Short-term (ST), Long-term (LT) and Ongoing Learning (OL)

resources. The CME offerings are aligned with annually targeted clinical outcomes goals (3.1a(2), Fig. 5.2-2).

Organizational needs associated with staff, workplace, and environmental safety are planned using the Education and Training Design process (Fig. 5.2-1) and appropriate performance indicators such as OSHA recordables (Fig. 7.4-9) and our safety culture (Fig. 7.4-10).

5.2a(3) Staff Input into Training Design: The Education Planning Committee manages Education and Training Design and seeks input on training needs by annually surveying employees and leaders (Fig. 5.2-1, Plan). GROUPSYSTEMS software is used to prioritize training needs and/or opportunities to help meet organizational goals. In addition to needs assessment surveys, employees enter suggestions for training into the IE process. Identified internal experts are recruited to assist with the design and delivery of education. Teams report new practice guidelines and successful methods for incorporation into training. For example, findings from CBCM led to the development of Outcomes College – education designed to connect daily care processes with outcomes. The communication of organizational learning is described in 4.2b.

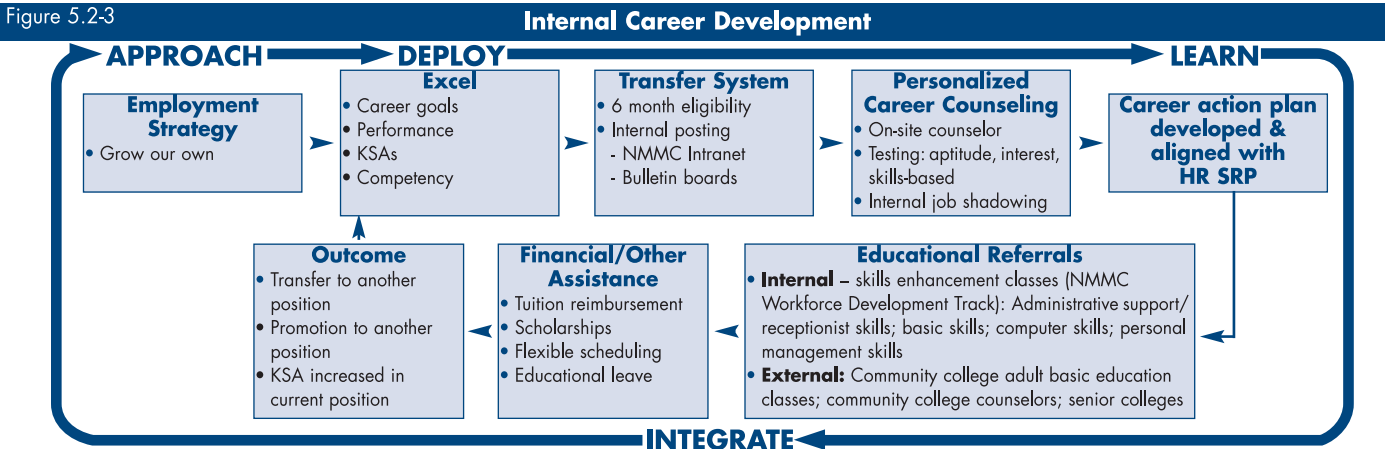
5.2a(4) Delivery of Education/Training: Certified Education Department staff teach required leadership and clinical courses utilizing diverse didactical methodologies including: simulation, classroom, distance learning, independent study, in-house video, “Educational Toolkits,” CBT and clinical conferences. Input concerning delivery methods is requested on the course evaluations. Skill labs combine instruction and return demonstrations. Informal approaches include mentoring and cross training.

5.2a(5) Reinforcing/Transferring Knowledge/Skills: Fig. 4.1-2 describes knowledge transfer mechanisms. Skills transfer is accomplished by orientation, mandatory education, ANREV, scheduled training sessions, and one-on-one coaching. The clinical preceptor structure helps to retain knowledge for organizational use by using experienced and certified clinicians to work closely with novice clinicians on specific skills. Other methods of retention of knowledge are written procedures and the encouragement of publishing innovative methods or improved outcomes. The SYSLT directed LD/SP captures the knowledge/skills of departing or retiring leaders through systematic leadership development and mentoring. A structured process of LD/SP is in place that designates two back-up staff members for each leadership position.

For staff positions these methods are used: job document review (e.g. “where are you on this project”), cross-training and departing staff trains new or covering employee.

5.2a(6) Evaluating Effectiveness: Evaluating operational impact is the first step in the process of assessing training needs (Fig. 5.2-1). EOS satisfaction with training is measured at two-year intervals and training surveys are conducted annually. The Kirkpatrick Model for evaluating education is incorporated into our education and training design process (Fig. 5.2-1). The levels are: Response (e.g. survey re: “liked the course, met objectives”); Learning (e.g. post assessment); Performance (e.g. observation); and Results (CSFs). After each educational session, we ask participants to complete an evaluation. Evaluations are aggregated and a composite score is calculated. Courses are revised and improved using the feedback. Instructors and participants are provided with remedial resources to improve training. Grade requirements from accredited institutions are in place for external offerings. The performance indicators (linked to CSFs PEOPLE, SERVICE AND QUALITY) in Fig. 5.2-1 are used to evaluate training effectiveness (7.1, 7.2, 7.4-6, 7 & 11).

5.2b Motivation and Career Development: We retain our employees through opportunities to realize life’s full potential both personally and professionally. Our hiring process (Fig. 5.1-2) and internal career development process (Fig. 5.2-3) offer a multitude of career paths to set our employees on the road to success. Their journey is facilitated by internal job postings of available jobs that can be accessed by the Intranet, Internet, bulletin boards and a 24-hour JobLine. We manage effective career progression for all staff by exploring individual career goals that are identified during the EXCEL process (Fig. 5.1-1). A full-time career counselor helps employees identify career paths, aligned with the HRSRP, through aptitude, interest and/or skills-based testing and internal job shadowing. Once a career AP is developed, educational referrals are made. Internally, we offer the following skills enhancement classes through our workforce development track: administrative support/receptionist skills, computer skills and personal management skills. Externally we develop alliances with providers of adult basic education, community colleges, universities and others to provide the necessary education for our employees. Financial and other assistance is available under our “make” portion of our “make or buy” philosophy (Fig. 5.1-3) in the forms of tuition reimbursement, scholarships, flexible scheduling and educational leave. Our internal career development plan encour-



ages and allows employees to increase KSAs in their current position, transfer or be promoted to another position. An internal job fair allows departments to share information concerning non-clinical jobs and applicant requirements. An internal assessment of successful transfers found that more than 40% resulted in promotions for these employees.

Leaders help staff attain job- and career-related development and learning objectives through the comprehensive and systematic EXCEL process (Fig. 5.1-1). Leaders complete mandatory training in the use of the EXCEL process when entering a supervisory role.

5.3 Staff Well-Being and Satisfaction

5.3a(1) Workplace Health: Our highest priority to our workforce is their health and safety. Our innovative LIVE WELL INCENTIVE PLAN proactively teaches, encourages and rewards employees for safe and healthy behaviors for life, not just on the job. Employees enroll each year with more than 2,200 enrolled for 2006 and committed to the behaviors in Fig. 5.3-1.

Figure 5.3-1 Live Well Incentive Plan

Behavior Modifications	Requirements
Tobacco/Drug Free	Signed declaration
Seat Belt Use	Signed declaration
Attend 3 Health Seminars	Sign-in sheet
Exercise Program	9 consecutive mos w/log
Health Outcomes	
Health Assessment	BP, cholesterol & weight
Results	
Unscheduled Absence	3 of 4 calendar qtrs. with no lost work time
Safety	No lost work time due to work-related injuries
Healthcare Use	Usage less than \$250 excluding preventive care & Rx

In 2005, more than 1,300 employees completed the plan. Employees were rewarded for achieving the requirements as follows: more than 300 employees achieved all eight requirements, more than 600 employees achieved seven of eight requirements, and more than 300 employees achieved six of eight requirements. The successful program has a major impact on maintaining a high performing work force, employee safety, work attendance and health care use. Program results are shown in 7.4-13. Mental health and wellness are addressed through free access to an employee assistance program.

A multidisciplinary team, the SAFETY AND EMERGENCY PREPAREDNESS COMMITTEE (SEPC), manages the “Seven Elements of the Environment of Care.” SEPC examines workplace factor performance indicators monthly (Fig. 5.3-2). Employees provide input on safety and health through four structured mechanisms: IE; EOS; participation in the SEPC and related PI teams; and completing an anonymous Hazard Report for any observed safety or hazard issue. The SEPC analyzes the nature, frequency and site of occurrences and develops the necessary interventions. For example, if a work-unit exceeds the maximum target for OSHA recordables, the unit’s SLA is notified and a 90-DAY AP to clarify the problem, identify a solution and change the process is developed. The unit’s OSHA recordables are monitored by the SLA and the SEPC for change.

The Security Department maintains a safe and secure environment for patients, staff and visitors through system wide electronic security hub and includes design standards for all new facilities

that incorporate state-of-the-art security measures. More than 200 cameras and 900 alarms are monitored 24 hours each day. This system works harmoniously with a well-trained security force comprised of Certified Intervention Specialists and Certified Security Officers who are also Emergency Medical Responders.

Figure 5.3-2 Workplace Proactive Improvement

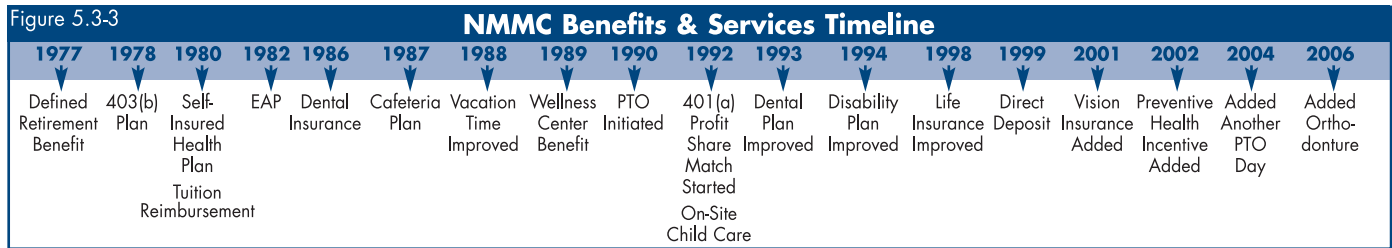
Key Factors	Performance Indicators	Adjustment for Different Work Environment
Workplace Health	Live Well Incentive Plan; Employee Health Fair (1,375 participants)	Via Intranet and classroom (for diverse groups) Special populations (more susceptible to/not as informed re: BP, diabetes, heart disease, etc.)
Safety	OSHA Recordables Radiation Safety Compliance, Sharps Exposures, Hazardous Spills	Job Hazard Assessments (back injuries, blood/body fluid exposures, chemical spills, etc.)
Security	Monthly Incident Report	Clinical vs. non-clinical
Ergonomics	Work and Job Site Analysis	Engineering controls, redesigned work space, job specific retraining

5.3a(2) Emergency Preparedness: The Healthcare Emergency Incident Command System (HEICS) (federal plan designed to optimize response to disasters) is in place and works in conjunction with NMMC’s “Code Green” emergency plan to respond to all types of emergencies and disasters. An internal pharmaceutical “push pack” (\$25K worth of drugs) is segregated from our regular pharmacy inventory to provide immediate response to chemical or biological weapons. NMMC, along with other local agencies, has jointly developed a Critical Incident Stress Management (CISM) team to assist emergency services personnel and others with the emotional toll of a critical incident. It is the first CISM team in the state and is the Mississippi Hospital Association’s role model for development of other teams.

5.3b(1) Determining Key Factors Affecting Staff: We use the biannual EOS process as the primary tool for identifying key factors affecting employee satisfaction, well-being and motivation. NMMC contracted with Human Resources Inc. (HRI), a nationally recognized service, to conduct and analyze the surveys. In 2006 we will utilize a different company, HR Solutions, Inc, because it offers a larger comparative pool, greater segmentation and a unit-based, top key-factor analysis. Both companies use similar questions in 19 dimensions and we’ll be able to compare our current EOS (results AOS) to past EOSS.

The EOS provides useable information (scores within each dimension and comparisons to the national average) for leaders at all levels by segmentation: SL, department, location (off campus and facility), job class, full-time/part-time, and supervisor/non-supervisor. The results are presented to each unit/department in focus group sessions conducted by an SLT member and a trained facilitator from outside of the unit/department. The unit identifies their key factors and employees are asked to discuss their praises, concerns and OFIS.

Each unit/department with a score below 80% develops an AP which is reviewed by the Recruitment and Retention Committee to ensure alignment and integration with overall workplace improvement. Those with a score below 67% are resurveyed in one year



(7.4-12). In addition to the comprehensive, biannual EOS, we identify current issues by asking employees six key questions at the quarterly ECS. The SLT analyzes the biannual and the quarterly EOS information, using it to proactively implement changes to maintain and improve staff well-being, satisfaction and motivation.

5.3b(2) Staff Support: All initiatives are fully deployed, evaluated at least annually, and are aligned with the CSFs. Our unique approach integrates the total compensation program, including basic compensation, recognition and reward and incentives to focus the employee on the CSFs, and also meet the needs of the employees. We have implemented numerous benefits in response to feedback from EOS, Intranet, and IE (Fig. 5.3-3). We are innovative in looking for “win-win” solutions to employee needs. For example: a number of full-time employees wanted a part-time option, but did not want to give up benefits. Consequently, policies were implemented to encourage part-time positions that were tailored to the diverse needs of employees and included benefits. One benefit was improvement in NMMC’s agility in responding to fluctuations in patient census.

5.3b(3) Determining Staff Satisfaction: The biannual and quarterly EOSs, described in 5.3b(1), are our primary formal assessment methods for determining employee well-being, satisfaction and motivation. Informal assessment methods, such as ECS, open door policy, staff meetings, exit interviews and IE also help us to learn what to improve relative to employee satisfaction/retention. Unlike other companies, all leaders can be reached by e-mail and have an OPEN-DOOR communication. The Recruitment and Retention Committee aggregates information from informal and formal methods along with measures to determine trends, key issues and develop APS. The SEPC reviews safety information monthly by area and number of employees and uses PDCA to develop APS. Assessment findings are part of the EA (Fig. 2.1-2) and are related to the key organizational performance results during the EPP.

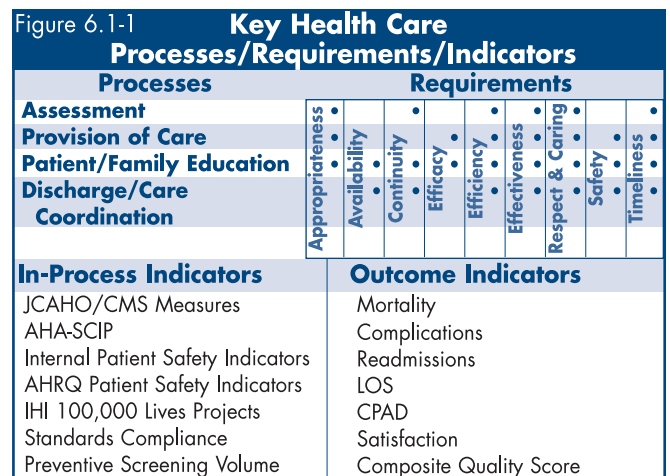
5.3b(4) Environment Improvement Priorities: PEOPLE, the first CSF, is addressed in every meeting and report. Employee retention is the primary PEOPLE indicator and it is a timely and sensitive marker for the other PEOPLE indicators described in 7.4. We compare employee retention to an external benchmark and its performance is analyzed with the other key CSF indicators (monthly Dashboard report). If we cannot retain our staff, we expect the other 7.4 indicators will describe poor staff satisfaction, well-being and motivation. The PEOPLE assessments described in 5.3.b(3) are analyzed and specifically incorporated into the HRSRP to identify PEOPLE-related priorities and improve the work environment.

The Recruitment and Retention Committee assesses our employee opinion assessment process monthly. To make the assessment

timelier, we added the already-mentioned six-key questions to the quarterly ECS meetings in 2004. In 2005, NMMC applied for Fortune’s “Best Companies to Work For in America” as another form of external assessment of our employee’s satisfaction. NMMC ranked 87 in the survey’s bottom line question. And although NMMC did not make the list in 2006, the mean score for the bottom line question of the companies on the list was 88. This indicates that NMMC is approaching the top 1% of companies in America for overall employee satisfaction.

6 Process Management

6.1a(1) Key Health Care Services and Processes: Our Mission “to continuously improve the health of the people of our region” is the foundation for determining our key health care services and their accompanying processes. During the EPP S1 external and internal input is considered to determine the need for new services/processes and the need to re-examine existing services/processes. We are never satisfied with the status quo in our processes or in the accomplishment of our Mission. Our processes - both health care and support - are designed to meet our Mission of improving health and still maintain cost efficiency. To do so, we organize our services by SLs (5.1a(1)) and provide services in multiple settings: outpatient, ESD, hospital, home, rehabilitation, LTC and community. The SL model, focused on the patient/customer, eliminates departmental silos, involves the specific SL medical staff and manages processes in order to provide value and improve outcomes (Fig. 6.1-1).



6.1a (2) Key Health Care Process Requirements: Process design requirements are determined during the EPP S1-4 (Fig. 2.1-1). In EPP S3-4 requirements are translated into in-process and outcomes goals and indicators based on available best-in-class benchmarks, or on input from patients, customers, suppliers, physicians, other partners and collaborators. A representative from a key supplier attends the Leadership Planning Retreat (2.1a(1)). Inputs from patients, physicians, partners and customers are obtained through structured and spontaneous feedback

(3.1a(2) and Fig. 3.1-1). Supplier input is integrated and hard wired into our EPP assessment process. This occurs through the NMMC supplier feedback survey, the RFI/RFP process and periodic as well as ad hoc business review meetings. The JCAHO’s Dimensions of Performance are our key health care process requirements (Fig. 6.1-1). When PI teams design new processes or improve current processes, the use of the JCAHO Dimensions of Performance, which include the Institute of Medicine’s six quality aims, ensures the requirements addressed are comprehensive. Fig. 6.1-2 displays the requirements and example indicators that are SL specific. Examples for other settings are: LTC – HOSPITAL ACQUIRED PRESSURE ULCER incidence (effectiveness, 7.1-16) and home health – improved cognitive function (efficacy, 7.1-18).

Securing process requirements including supplier input for the Plan (Input) phase of the PDCA cycle (PD1) is described in 6.1a(2). Team members who have expert knowledge in the process requirement areas gather internal and external process requirements and determine the appropriate standard of care and expected outcome(s) (PD2). For example, the Tracheostomy PI Team consists of all disciplines involved in the care of this population. They collaborated to develop APS: the clinical ORDER SET and staff education plan (PD3). The significantly improved outcomes can be seen in 7.1-5.

Once process requirements are determined and metrics for validation of the process are in place, the process is piloted to evaluate the AP’s overall efficiency and effectiveness in the Do phase (PD4). The PI team then uses the Check phase of the PDCA model to determine if process requirements are being met by reviewing in-process indicators (PD5). Examples of in-process indicators for the CBCM example are order-entry error, service delay errors and practice/procedure errors. Failure to meet process requirements triggers revision. If all requirements are met, then the Act phase is used to integrate the process into daily work (PD6). The recurring Check phase is used to evaluate both in-process (6.1a5) and outcomes indicators (PD7). Examples of outcome indicators in the CBCM example are MORTALITY, MORBIDITY, complications, LOS and cost. Performance results on these requirements are reported to the PI team and the appropriate SL.

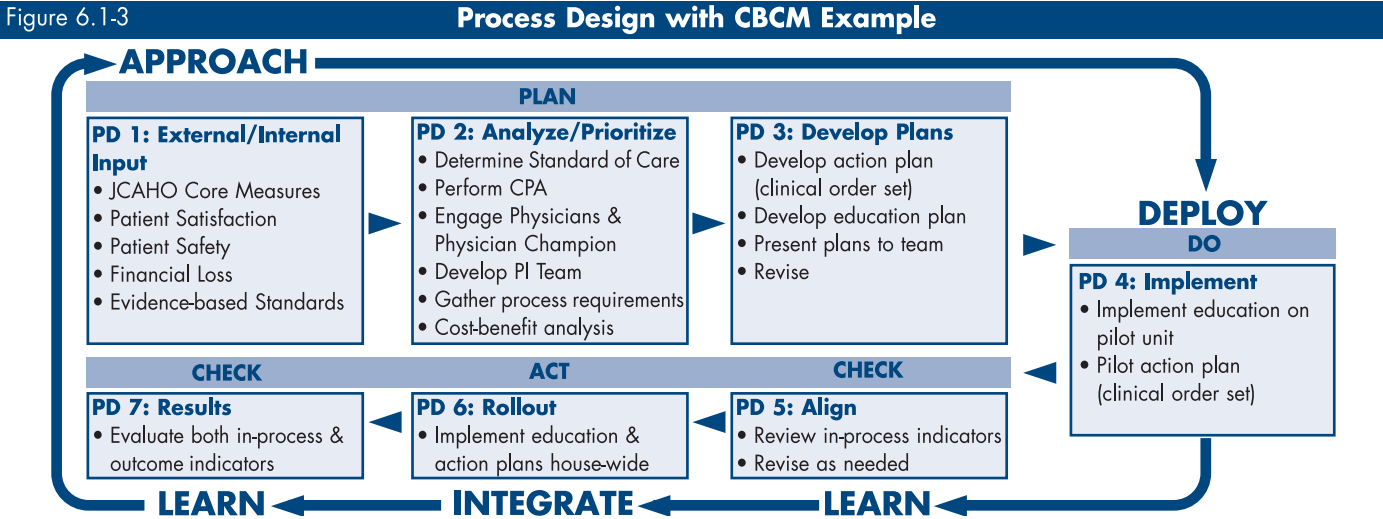
Requirements	Indicator Example
Appropriateness	ACEI usage (7.1-1 & 3)
Availability	Adult smoking advice/counseling (7.1-1 & 3)
Continuity	Discharge instructions (7.1-3)
Efficacy	CABG Outcomes (7.1-2)
Efficiency	Cost versus reimbursement (7.1-6)
Effectiveness	Complications (7.1-2)
Respect & caring	Patient/family satisfaction (7.2-2)
Safety	Medication error rate (7.1-14)
Timeliness	Aspirin/Beta Blocker at arrival (7.1-1)

6.1a(3) Designing Processes to Meet Key Requirements:

When a new service is generated through the EPP process, additional specific evaluations of customer and partner requirements are conducted in marketing, financial outcomes, access, supply chain management, technology and facility needs (6.2a(2)). Piloting of new and redesigned processes affords teams the opportunity to assure that generic requirements are customized for the process. The PDCA performance management and improvement model is used throughout the organization. Fig. 6.1-3 illustrates the Process Design model with CBCM as an example.

CBCM is NMMC’s approach to clinical improvement and is the result of evolving understanding of quality since the early 1980s. CBCM links health care quality and cost containment by looking beyond traditional cost drivers (people, equipment, supplies) to the care issues that have a greater impact on the actual cost of care – practice variation, complications and social issues. This approach aligns financial and clinical manager’s incentives to optimize clinical outcomes and minimize waste and cost. Since its inception in 1992, CBCM has grown from a focus on efficiency based on physician direction of care, to involving the entire care team. Implementing the CBCM approach required organizational culture and structure changes. Patient-centered strategies became the major focus of PI activities. Physicians made the transition from their traditional roles as independent practitioners to become members of care teams. They recognized the skills of professionals on the team and equipped with evidence-based protocols, team members are empowered to practice within the scope of their license. This

The first step in process design is affirmation that the process contributes to our Mission and the CSFs. Process design and improvement initiatives often begin with the medical staff to leverage their organizational knowledge, scientific investigation, knowledge of new services and techniques and patient/customer needs. Our listening and learning activities also serve as an impetus for PI (Fig. 3.1-2).



change has resulted in improved cycle times, outcomes and employee satisfaction (7.1-4). The Outcomes/Safety Fair shares results and involves all staff, while the Outcomes College improves nurses understanding of their role in patient outcomes (Fig. 5.2-2).

CBCM uses CPA to examine clinical processes and to engage physicians in performance improvement. CPA provides physicians with individualized real-time performance profiles of their own care management and outcomes for comparison with local and national benchmarks. Comparisons include deviation from best practice (variation), LOS and cost (complications) and non-acute days (social issues). Comparative data are shared with PI teams and staff through a myriad of mechanisms described in Fig. 4.1-2. A role-model component of CPA and CBCM is the improvement of CMI (7.3-7). Case Managers and two Physician Advisors provide physician education in appropriate documentation in the patient's medical record. Physician documentation improvement leads to correct coding, severity ratings and reimbursement. Physicians embrace the CBCM approach, see it as positive, request its use, and present their outcomes at local and national meetings.

CPA is essential to the CBCM approach and is our primary tool to incorporate improved health outcomes, cycle time, productivity and cost control into patient care process design. The data gathering, analysis and review steps of this iterative process are described in P.2c, 4.1a(3) and 4.2b(1). PI teams design processes to meet external best practice benchmarks and/or exceed internal benchmarks. Teams are able to ensure process design requirements are met through pilot implementation of the newly designed or redesigned process. The CBCM approach targets improved effectiveness (MORTALITY and complications) and efficiency (cycle time (i.e. LOS) and cost of care). A relentless and systematic focus on review of outcomes and initiating improvements using PDCA keeps us on the road of continuous improvement. We have performed more than 65 CPAs and developed teams that address disease management on an ongoing basis. We have repeatedly shown that delivering high quality care through process management and improvement produces world-class clinical and financial outcomes (7.1-1 through 7.1-20 & 7.3-11).

We use the EPP and the TAC to develop our overall plan for technology advancements (2.1a(1)). Once a new technology opportunity is identified, the TAC reports the technology's impact on the CSFs in EPP S1. Upon technology acquisition, customization and implementation is handled at the SL/PI team level. We work closely with our suppliers in technology implementation. Because of our relationship and history of implementing significant improvements in their products, the Pyxis® company asked us to be a testing site for their new automated medication inventory storage and retrieval system. We are making modifications that will benefit others using the system in the future.

6.1a(4) Addressing Patient Expectations: Patient expectations from the concept of PCC are addressed and implemented through the deployment of our CARES values (3.2a(1) & Fig. 6.1-4).

Figure 6.1-4 Patient-Centered Care	
Compassion:	meeting physical comfort & emotional needs
Accountability:	coordinating & integrating care
Respect:	courteous regard for values, involvement of family & friends
Excellence:	providing access, information, communication & education
Smile:	being friendly & kind to ensure genuine hospitality

We will treat you with COMPASSION, we will be ACCOUNTABLE to do the right thing, we will RESPECT your values, and we will provide EXCELLENT care with a SMILE.

As a part of the EPP, the SLOGs develop profiles of patient requirements and expectations (3.1a(2)) for incorporation into process design. Each patient's needs, preferences and expectations are addressed and considered on an individual level through the Assessment process. Assessment occurs at pre-established points in care delivery (e.g., when a patient is transferred from ESD to a patient care unit) and on a continuous basis as caregivers interact with patients. Information gathered during Assessment is used to develop an individualized POC, manage patient expectations and provide each patient and family with opportunities to participate in decision-making regarding their care. The POCs are developed in conjunction with physician orders, established ORDER SETS, standard protocols and goals of involved disciplines. The POCs are monitored through the Assessment process and adjusted in the Provision of Care EMR processes to provide optimal patient outcomes. The patient and family participation in the POC best illustrates the PCC vision and philosophy. Health care service delivery processes and desired outcomes are explained through the nursing service's care delivery requirements, patient-specific care plans and educational brochures. For example, a non-English speaking or hearing-impaired patient requirement is communication assistance and the POC would include the use of an interpreter.

Caregivers provide the patient/family with information on care processes to set realistic expectations about the processes of care and likely outcomes. Specific protocols enable patients to participate in pain management and patient safety. Each patient room has a communication board used to list goals and stimulate patient involvement in care process decisions.

6.1a(5) Daily Operational Requirements: Our extensive industry-leading long-range investment in and development of IT enables us to track clinical progress with precision – it is the most important return on investment we derive from our EMR (4.1a (1) & Fig. 7.5-7). The EMR has built-in Provision of Care process protocols, which alert caregivers to real-time in-process potential food-drug and drug-drug interactions, and drug allergies, as well as past due medications and treatments. The EMR's assessment database reduces errors by providing an up-to-date medication history and demographic data. This information plus laboratory and radiology reports (PACS) and past episodes of care are available at any point of entry into care.

Key performance indicators, both in-process and outcome, are department/SL specific as well as common, such as patient satisfaction and cost per unit of service. Each patient care unit and department maintains a scorecard for tracking indicators monthly or quarterly. Data are aggregated to the SL/department and then to NMMC. SLs select at least one standard indicator for each CSF based on goals and strategic priorities (4.1-1a(1)). Leaders are empowered to develop 90-DAY APS when results are below target.

The POC is monitored and adjusted through the Assessment and Provision of Care processes. Patient and family education

processes are built into standard POCs and are selected to meet the patient's needs as the care plan is developed. Outcomes and tasks are built into the plan and then become the documentation reminder against which charting is done. Safety and regulatory requirements such as those pertaining to the use of restraints are incorporated through EMR programming. Patient care unit managers receive daily reports of in-process indicators: falls, medication errors, restraint use, HOSPITAL ACQUIRED PRESSURE ULCERS and practice variations. Monthly reports provide trending information. The automated nursing assessment process contains triggers that consult other disciplines as needed.

The Discharge/Coordination of Care Process has automated systems for assuring correct discharge medications, instructions and follow-up care such as lab work. Automated systems assure continuity of care through communication with hometown and referring physicians by making the Discharge Instructions/Summary available in the MIS system. All credentialed physicians can have access to the EMR in both their office and at home via the VPN (4.2a(1)).

The use of the Assessment process engages patients in communicating how well their needs are being met. Interactions with physician partners during care delivery provide staff with input on the need for any modification in health care process management on a real time basis. Suppliers such as Owens and Minor (medical/surgical supplies) and Amerisource (pharmaceuticals) provide input and education related to scientific and technical support by sending clinical consultants to train staff and physicians.

6.1a(6) Minimizing Overall Costs, Preventing

Errors: We use our highly interoperable MIS and the EMR to minimize overall costs associated with inspections, tests, and process or performance audits by using as many automated reporting, screening, auditing and analysis systems as possible (4.2a (1)). Data for these systems are collected as a byproduct of documentation of health care processes and through the completion of QCCRs, which staff initiates when errors or a significant process or outcome variance occurs. QCCRs are entered into a database (QMS), which is used to monitor key process requirements and patient outcomes, such as medication errors, falls, and HOSPITAL ACQUIRED PRESSURE ULCERS. Reports from this database are routinely distributed to managers, JCAHO Function Teams, SLAS/DHS, and SEPC. Periodic environmental rounds and mock surveys are conducted to identify process variations and opportunities to address safety and environment of care issues.

Our PI philosophy affirms that researching causes, improving processes and preventing problems is more effective than blaming. Staff is encouraged to report near misses, errors and quality issues by our non-punitive reporting system. RCA is used to study serious events and APS developed to change processes to prevent recurrence. FMEA is used to proactively improve a process by studying where it could fail and making improvements (1.2b(1)). For example, the FMEA team on Drug Delivery Devices (infusion pumps) cut the risk of an infusion medication error in half by purchasing "smart" pump technology with pre-programmed infusion rate and dosage limits. The risk factors identified were used in the purchase RFP. Safety data downloaded from the pumps for a nine-month period after implementation revealed 420 errors prevented, including 15 SENTINEL EVENTS.

We utilize a combination of technology, quality control and manual safety checks as our strategy to minimize rework and errors. Systems such as MIS drug-drug and drug-food interaction alerts and "smart" infusion pumps reduce the potential for error (4.1a(1)). The JCAHO's National Patient Safety Goals are used to incorporate safety checks into a variety of health care delivery processes, such as medication administration, patient identification, surgical and invasive procedures, and HOSPITAL ACQUIRED INFECTIONS. Teams are responsible for monitoring and improving compliance to JCAHO and CMS standards. Each patient care area or department incorporates applicable goals into their scorecard.

6.1a(7) Process Performance Improvements: With the deployment of the SL structure, processes have been realigned based on the patient's perspective and experience. This structure breaks down department silos and streamlines care. Physician and institution goals become aligned as the physicians participate in operational decisions. PI teams redesign processes and services to keep processes current with health care services' needs and direction using evidence-based, best-practice standards and the PDCA model (Fig 6.1-3). PI team membership includes appropriate process owner representation and front-line staff. Teams receive just-in-time training in PI, PI tools and the use of the PDCA model. They use customer feedback, partner and supplier input and regulatory changes in their improvement process. The CBCM approach is used to improve health care processes to achieve better performance, reduce variation, minimize complications, and improve health care services and outcomes. Improvements are shared through multiple mechanisms (Fig. 4.1-2).

PI teams can be commissioned at many levels: patient-care areas, support department, SL, facility, system-wide or process management. Teams request commissioning and report results on an Intranet site. The Intranet site allows for review and communication of team activity. The PSOG monitors and coordinates team activity and provides an executive summary to the SLAS and the Quality Standards Committee of the Board. They provide the consultative services of training, tools, data analysis and coaching (4.1a(2)). A senior leader or SLA approves every team and assures the initiative is tied to strategic goals. This senior leader is accountable for the teams he/she has approved and serves as the Sponsor. The EPP and goal-setting process along with PSCs provide the structure for coordination of improvement efforts (Fig. 2.1-1).

Because we seek to also continuously enhance our performance improvement processes, we incorporated Six Sigma into our PI processes including training six leaders to the Black Belt level.

6.2 Support Processes and Operational Planning

6.2a(1) Key Support and Business Processes: While our support processes are those typically found in a health care organization, the exact structure and relationship of support services is refined during the EPP based on the needs of patients, SLs, staff, customers, partners, and the health care processes. Business and support processes align with the design and delivery of health care to ensure operational effectiveness and efficiency. We use CSFs as our organizing theory for key business and support processes, requirements and key indicators, which are shown in Fig. 6.2-1.

Figure 6.2-1 **Business & Support Processes**

CSF/Process/Key Requirements	Key Indicators
People	
Competitive compensation/benefits	○ - Hay reports (comp/benefits)
Recruitment efficacy	I - RN staffed rates (7.4-5) I - Vacant positions (7.4-3)
Retention efficacy	○ - Retention rate (7.4-2) ○ - Employee satisfaction (7.4-11)
Safe environment efficacy	○ - Workplace safety (7.4-9)
Staff development availability	I - Training hours/FTE (7.4-6)
Efficiency	○ - Productivity (7.5-2)
Service/Quality	
Dietary Services quality	○ - Satisfaction (7.2-16)
Environmental Services quality	○ - Productivity/cleanliness (7.5-4)
Facility Management	
- Maintenance timeliness	I - Work order completion (7.5-9)
- Waste recycling efficiency	○ - Pounds recycled (1.2b(1))
Supplies & services efficiency	I - Inventory turns (7.5-13)
- Right product, place & time	I - Fill rate (7.5-14)
- Right (lowest possible) price	○ - Cost/savings (7.5-15)
- Utilization	○ - Laundry rewash (7.5-10)
Mgt Information Systems	I - Report turnaround (7.5-8)
- Timeliness	I - Response time, down time(7.5-7)
Ambassador Service/Admissions	I - Response time (7.5-11)
- Efficiency	I - Timeliness (7.5-12)
Financial	
Billing/Collections - Timeliness	I - Days in AR (7.3-4) ○ - Days cash on hand (7.3-5)
Budgeting - Agility, effectiveness, efficiency	○ - Profit margin (7.3-2), Bad debts (7.3-1), CPAD (7.3-9) I - BAR (7.3-10)
Operations efficiency	○ - Productivity (7.5-2, 3, 4 & 5) I - LOS (7.3-12)
Growth	
Comprehensive provider panel w/comprehensive services	I - Loyalty assessments (7.2-11) ○ - Active medical staff (7.6-1) ○ - Market share (7.3-15 & 7.6-1)

Key: I - In-process ○ - Outcome

6.2a(2) Key Support Process Requirements: Support process requirements are determined through the EPP S1 and then specifically with the use of the Design Process/PDCA seen in Fig. 6.1-3. Safety, regulatory and accreditation requirements are determined during this process. Input from customers, partners and suppliers is obtained through structured and spontaneous feedback and the RFI/RFP process as described in 6.1a(2) and is used to develop process requirements (Fig. 6.2-1).

6.2a(3) Designing Processes to Meet Key Requirements:

Business and support processes are designed using the same process as health care processes (Fig. 6.1-3). The objective of business and support processes is the same as for health care processes: appropriate and efficient care. Design of business and support services must include the requirements of specialized health care processes (e.g. patient safety) as well as those of external customers and business operations. Each requirement is translated into a specific indicator with a targeted level of performance. Our cultural focus on measurement and results is a driver for incorporating cycle time, productivity, cost control and other efficiency and effectiveness factors into the process design. The piloting and repeating check phase of the process design cycle (Fig 6.1-3 PD4-7) is used to ensure processes meet design requirements when implemented.

The addition of an OT Department years before they started to show up in other hospitals, staffed by an engineer who has expertise in

streamlining support services to reduce waste and increase productivity, has led to a work-systems approach to managing and improving support processes. An RN is also part of this department in order to include the clinical component. They are involved in improving health care processes as well as business and support processes.

6.2a(4) Daily Operations Requirements: Key performance indicators for business and support processes are noted in Fig. 6.2-1. Information is gathered from multiple sources as depicted in Fig. 4.1-1 and is organized into useful indicators. Key performance requirements are incorporated into the design of the process as seen in the Process Design model PD1 (Fig. 6.1-3). In-process indicators are reviewed daily, weekly, monthly or quarterly and reported via the PSC. Customer complaints are captured and managed through the complaint management process (Fig. 3.2-2).

Periodic and ad hoc business review sessions with key suppliers are used to review past performance, discuss future goals and solicit input for the design and management of new and existing processes. Results of these indicators are reported during the EPP S1. An innovative partnership with our medical waste vendor reduced medical waste by 3% through on-site surveys and staff education. Examples of in-process indicators and their contributions to meeting strategic initiatives are described in other sections (e.g., patient satisfaction KEY DRIVERS (3.2b(1)), OSHA occurrences (7.4-9) and cost per adjusted discharge (7.3-9).

6.2a(5) Minimizing Overall Costs, Preventing Errors: The costs associated with inspections, tests, and process or performance audits are minimized by the use of PDCA and the pilot process prior to full deployment of new or redesigned processes. Department PSC RB indicators are used to track processes that are stable. If an indicator has achieved excellence, it may be tracked but may not have a written goal. PSCs are reviewed by VPS/SLAS/DHS monthly (4.1b(1)). Automation is integrated into business and support processes for accuracy and efficiency. Automation decreases the cost associated with performance measurement. Use of automation examples are: Biomedical Services for the preventive maintenance of all clinical equipment; Facility Operations for tracking work orders (7.5-9); and supply chain management monitoring (7.5-13 & 14).

6.2a(6) Process Performance Improvement: The goal setting and PSC development and review processes are the mechanisms for deploying our culture of focusing on results and creating value. The monthly review of the PSC at the department and SL levels, 90-DAY APS utilizing PDCA when an indicator is more than 3% below target for a quarter, stressing the importance of customer satisfaction and decreasing costs by performing effectively all create a culture of continuous improvement. Sharing of lessons learned is encouraged both by the desire to improve and the recognition received for doing so. Teams and their results (outcomes) are featured through in-house publications and at LEADERSHIP. Process improvements are shared with staff using the knowledge sharing mechanisms described in Fig. 4.2-2.

6.2b(1) Ensuring Adequate Resources: The time proven and often-refined EPP is the methodology used to ensure adequate financial resources, to meet current financial obligations and to support major new business investments. The SRP survey and the EA (EPP

S1) are used to determine needs for clinical equipment, facility, and information system capital. These processes also determine sources of revenue from predicted growth in market share and volumes, including issues of physician turnover and acquisition. The volume predictions, which are based on historical trends and predicted changes in market share, are converted to revenue and utilized to make decisions (e.g. price increases). This results in the five-year rolling Capital Plan (EPP S2-5). The five-year plan is then used to create the budget (EPP S6). Budgeting begins at the department level and rolls up. S&P AA median ratios serve as our benchmark and demonstrate our fiscal strength as seen in Fig. 6.2-2.

Figure 6.2-2 Current & Goal Ratios vs S&P

	S&P AA* Median	NMMC 2006 Proj.	NMMC^ 2010
Excess Margin (7.3-2)	7.60%	5.0%	4.02%
LT Debt to Capitalization (7.3-6)	27.30%	22.16%	16.23%
Days Cash on Hand (7.3-5)	271	251	291

*per 2005 NFP Healthcare Medians booklet based on 2004 data
^per 2006-2010 Capital Formation Plan

The TAC monitors emerging technology and begins planning in advance of the purchase. For example, several years prior to implementation, we began researching and planning for the a-remedical service due to our rural area, poor roads and high incidence of motor vehicle accidents-even though it was known that it would lose money (\$800,000 per year).

We face significant financial challenges (as does the entire health care industry) due to minimal patient volume growth, overall decline in reimbursement, increase in uncompensated care (7.3-1) and increasing expenses. During 2005 we began noticing negative changes in several of the key indicators monitored on a monthly basis. As part of our data-driven approach, we began implementing changes (SL structure (5.1a(1), reduced LOS (7.3-12) and process efficiencies (7.3-11; 7.5-1, 2 & 3) to address these challenges. Fig. 7.3-2 YTD 2006 shows the improved profit margin.

6.2b(2) Ensuring Continuity of Operations-Emergency:

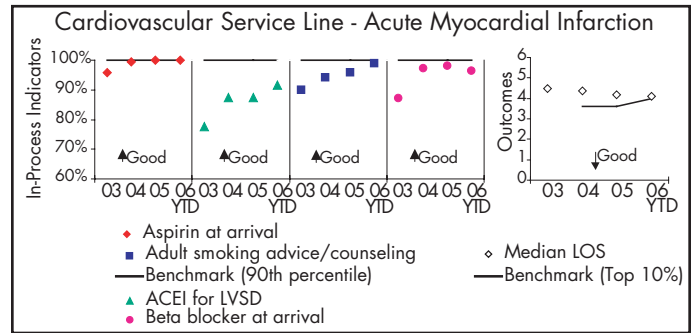
The SEPC has developed an extensive emergency plan that is integrated with the region’s emergency plan. Each year the SEPC participates in an exercise to prioritize our hazard vulnerabilities. The Bioterrorism Contingency Grid (1.2b(1)) is a guideline for responding to the most likely biological weapons. Preparations and drills for possible incidents as well as terrorist acts and other types of emergencies are systematic and ongoing. Continuity of operations is ensured by plans for inclement weather, fire, earthquake, riot, flood, communications, telephone contingency, emergency power, duplication of computer data (4.2a(3), additional morgue capacity, critical medical supplies, provision of water and food, alternative sites for care and transportation.

An “Incident Command System” model has long been the backbone of the NMMC “Code Green” Emergency Plan. Since 9/11 and the implementation of the Homeland Security Department, our model has been promoted nationwide as the structure for all emergency responses. The model standardizes terminology and roles, and provides for continuity in an emergency situation that is extended over days or weeks. This model not only promotes a standard response technique in Tupelo, and at NMMC, but also provides for a previously non-existent national standard for emergency response (1.2b(1) & 5.3a(2)).

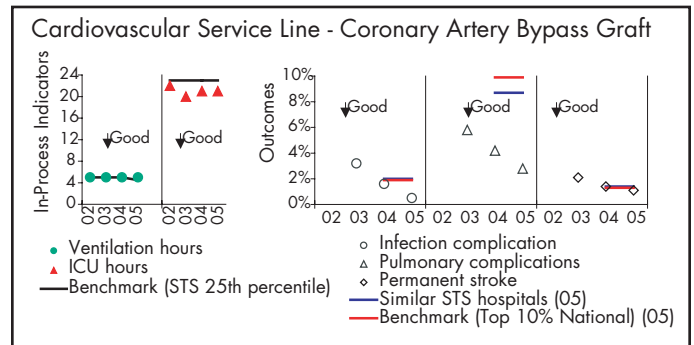
7.1 Health Care Results

We have selected results from each SL that tell the full story of NMMC’s performance. The results describe in detail NMMC’s performance in areas that are truly key to strategy and mission such as cardiovascular disease because of its prevalence in the region. For similar reasons we provide in-depth results on chronic illness, patient safety and publicly reported quality measures. We present high level results for other areas to provide a more complete perspective of our performance. In alignment with our M,V - the target for each health outcome is to be at or greater than the 90th percentile or in the TOP 10%, depending on appropriate comparison data. CareScience “select practice” methodology utilizes risk adjustment to the top 15% in the category. In some cases, benchmarks and comparisons will only be available by these data.

We have designed our results charts to be information intensive. Instead of presenting one variable and result in a graph, where appropriate, we have created an enhanced format to present multiple in-process and outcome variables in a single graph to make best use of limited space. Multiple variable inclusion chart key: In-process indicators: filled symbols; Outcome indicators: unfilled symbols.

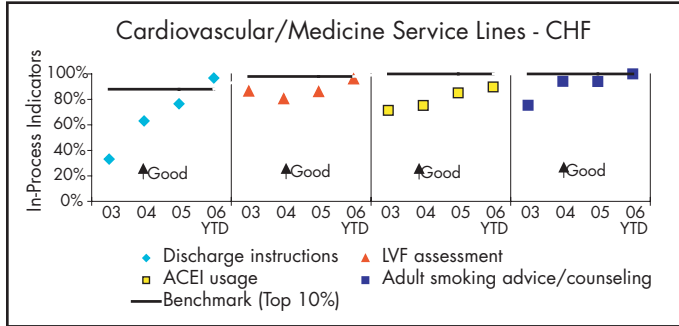


7.1-1 Clinical studies have demonstrated that AMI patients who receive aspirin and beta blockers (a medication) within 24 hours of hospital arrival have better outcomes. Patients in Mississippi have increased risk factors (e.g., diabetes, obesity) which make AMI management more difficult and early interventions more important. NMMC cardiologists, practicing AHA evidence-based medicine, have decreased LOS for their patients and are addressing IHI’s 100K LIVES CAMPAIGN with improvements in delivery of evidence-based care for patients with AMI. With volumes of more than 900 patients annually, this represents significant reduction in hospitalized days.

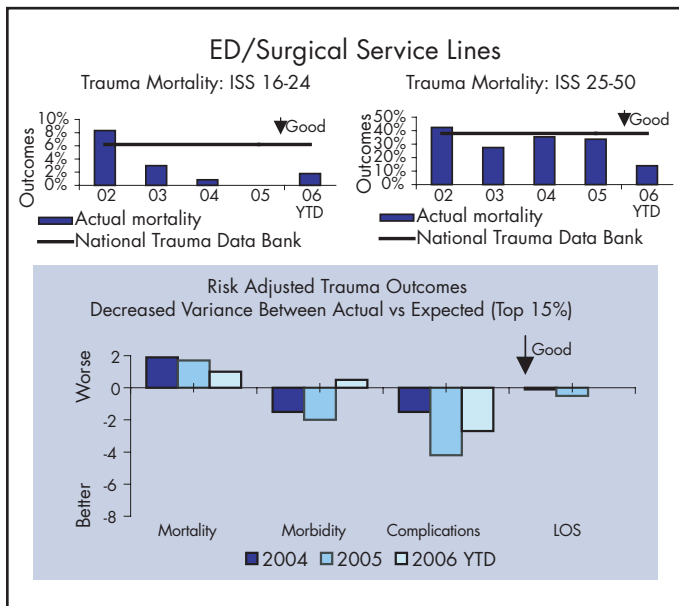


7.1-2 Mississippi has the highest cardiovascular disease death rate in the nation. In addition to AMI (acute) and HEART FAILURE (HF) (chronic) management we have focused on optimal surgical inter-

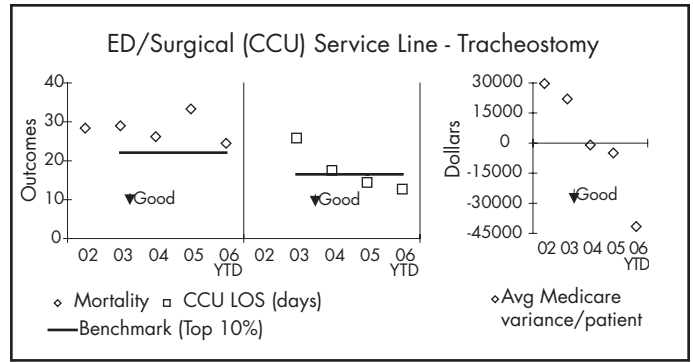
vention, namely the CORONARY ARTERY BYPASS GRAFT (CABG) procedure. According to the Leapfrog Group, the more experience a facility has in performing procedures, the safer the procedure. NMMC's CABG volumes (we do more than 1,000 cardiothoracic surgeries, including coronary bypass) exceeds national volume standards for patient safety (more than 500 annually); and post-operative complications are lower than most hospitals compared in the nationally recognized Society of Thoracic Surgery (STS) database. STS uses a quartile system of measurement. NMMC strives to be at or below the 25th percentile benchmark.



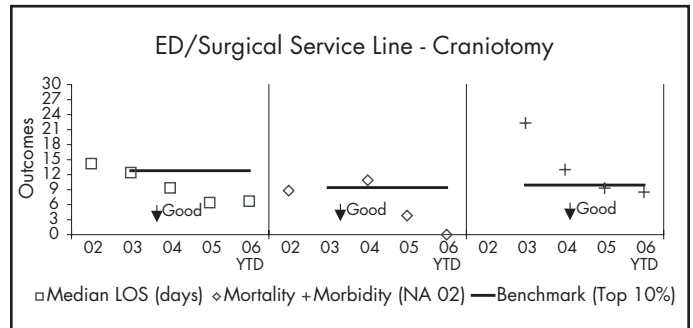
7.1-3 CONGESTIVE HEART FAILURE (CHF) is a high volume chronic disease in NMMC's service area, so we've focused on optimal management. We implemented the AHA's recommended processes and are approaching the top 10% of JCAHO CORE MEASURES database. Our comprehensive team approach has extended optimal management to include home care, ambulatory care and LTC settings with the goals of improving the quality of life for this population.



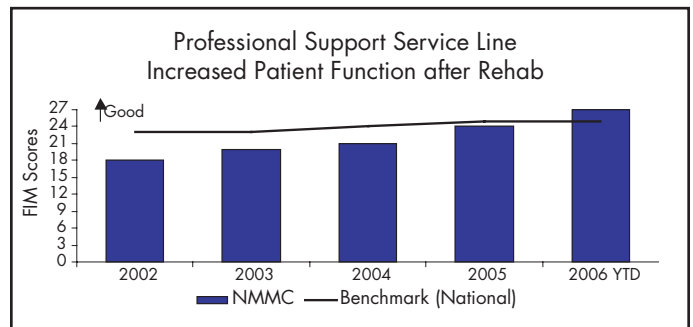
7.1-4 Injury Severity Scores (ISS) are internationally recognized categorization of the survivability of trauma patients. Patients presenting to the ESD with ISS scores between 25-50 have a 38-50% mortality rate, nationally. Through the best practice interdisciplinary Trauma-Neuro Team, NMMC utilizes evidence-based treatment recommendations and integrates physician leadership with clinician empowerment to produce optimal patient outcomes both at the "front door" (ESD) and in continuing inpatient care. The CARESCIENCE risk adjustment tool shows improvement in better-than-expected mortality, morbidity, complications and LOS in this population.



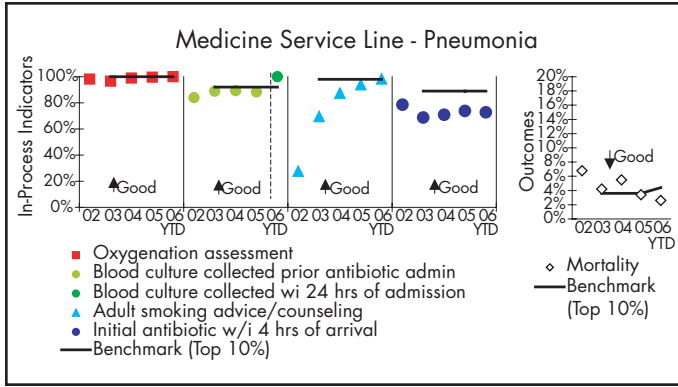
7.1-5 Focused tracheostomy care improvements and in-process control protocols implemented by an interdisciplinary team of nurses, therapists, physicians, dietitian and pharmacists resulted in lower CCU LOS. Tracheostomy patients typically require intensive, multiple-system care because of trauma and/or lung disease. They have a high potential for long LOS and medical complications. In addition to challenging medical management, this patient population is also difficult to discharge to step-down care facilities. These remarkable results demonstrate the efficacy of NMMC's integrated, proactive team approach. This is a dramatic example of CBCM as the variance between cost of care and reimbursement shifted from more than \$1 million loss annually to cost effective care (see 7.3-11).



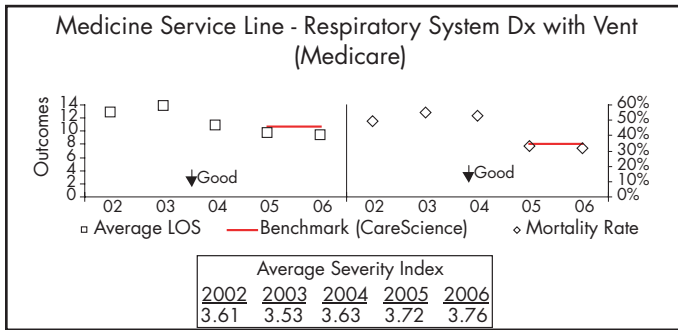
7.1-6 NMMC's outcomes team worked with neurosurgeons to improve processes in the operating room, CCU and post-op care areas. Patients having craniotomy surgery at NMMC have improved outcomes over time with LOS, mortality and complications below top 10% benchmarks nationally.



7.1-7 Post stroke and trauma patients who undergo rehabilitation services demonstrate an increasing gain in ability to function independently from admission to through discharge from the rehab facility as shown by increasing FIM (Functional Independence Measures) scores. In 2006, the percent gain at NMMC exceeded the benchmark of like-facilities nationwide.



7.1-8 As with AMI, pneumonia is another acute illness that plagues a poor and aging population. Infectious disease evidence shows two actions that result in lower mortality: administering antibiotics within four hours and acting on the information obtained from blood cultures. As NMMC’s processes improve, the mortality rate decreases. The decreased mortality rate from 2001 to 2005 represents approximately 100 fewer pneumonia-related deaths.

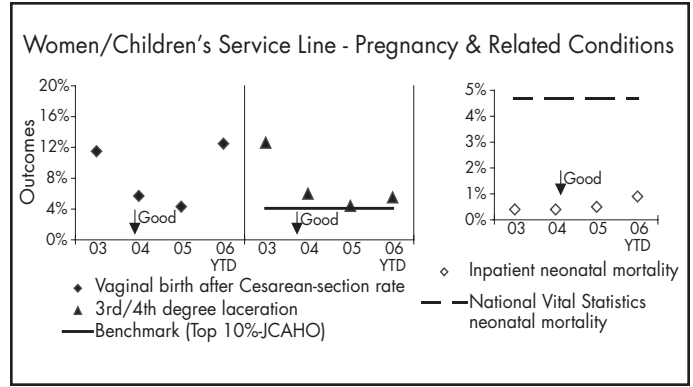


7.1-9 Patients who require mechanical breathing assistance while hospitalized frequently experience complications that increase their LOS, adding to the cost of hospitalization and the risk of death. The severity index (a 3M risk score on scale from 1-4) shows this population to be increasingly sicker. With a comprehensive best practice team approach and as a participant in IHI’s 100K LIVES CAMPAIGN, NMMC utilizes a ventilator bundle checklist, daily rounds and caregiver education to make significant improvements in LOS and mortality for these patients.

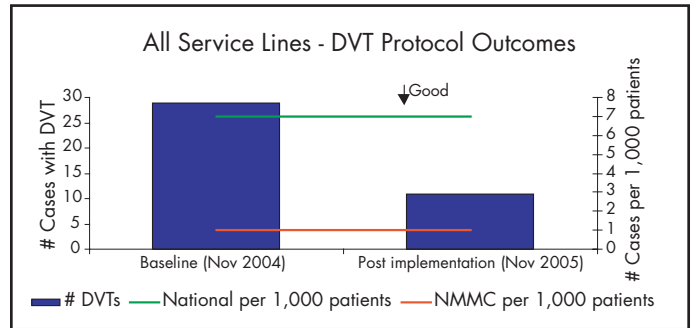
Oncology/Behavioral Health Service Line Falls and Restraints

	Falls Resulting in Injury (Rate)	Restraint (Rate)	Cleveland Clinic (Restraint)
2003	0.01	0.009	.24 - 1.85
2004	0.03	0.015	.24 - 1.85
2005	0.02	0.013	.24 - 1.85
2006 YTD	0.01	0.000	.24 - 1.85

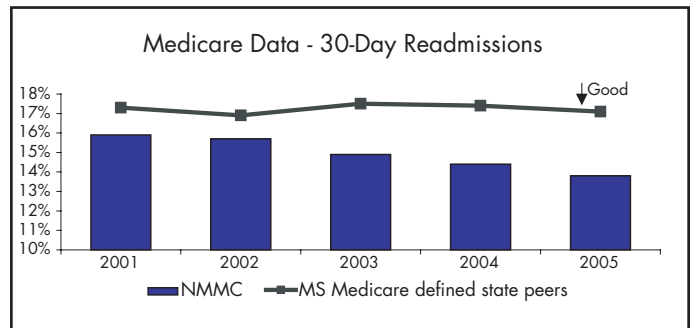
7.1-10 Behavioral Health: A national initiative to minimize restraint use is designed to protect patient’s rights to dignity and freedom of movement. Our challenge is to balance respect for patient’s rights with patient safety. A fall prevention PI effort resulted in a decrease in falls with injury while decreasing restraint use even though there is a geriatric unit at this location. NMMC’s Behavioral Health’s planned PI efforts resulted in zero restraint use with zero falls resulting in injury, which is significantly lower than a well regarded national health care leader.



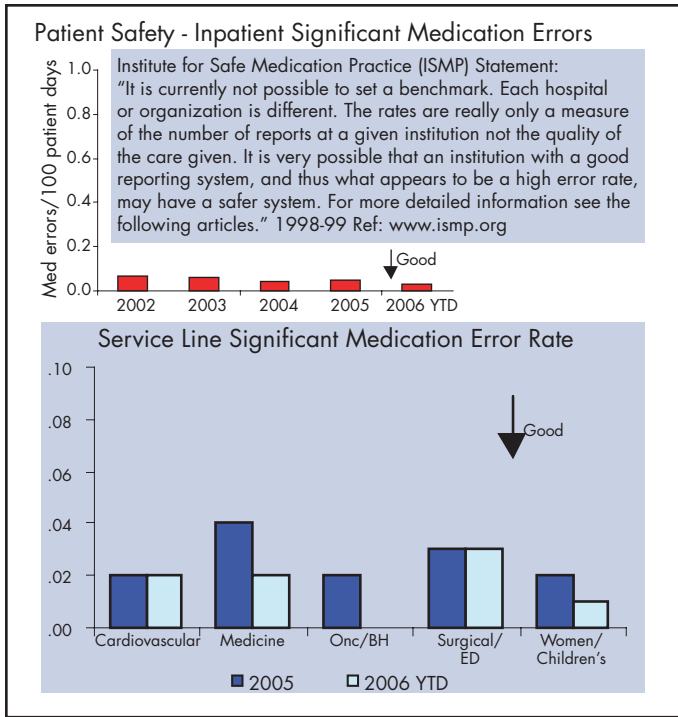
7.1-11 Publicly reported quality measures for women’s services related to pregnancy are at or exceed top 10% rates. NMMC’s obstetricians led a focused PI team to analyze the causes and effects of 3rd/4th degree lacerations in vaginal delivery patients. Neonatal mortality remains below 1%.



7.1-12 As a result of the implementation of a system-wide automated protocol to screen for deep vein thrombosis (DVT) risk factors, NMMC was able to decrease the number of patients with hospitalization-related DVT, a condition which prolongs hospital stay and puts patients at risk for sudden death. AHRQ national rate is approx 7 per 1,000 patients. NMMC’s rate decreased to 1 per 1,000. (7.1-15) - includes DVT & pulmonary embolism) This trend continues with widespread protocol implementation to all SLS and facilities.



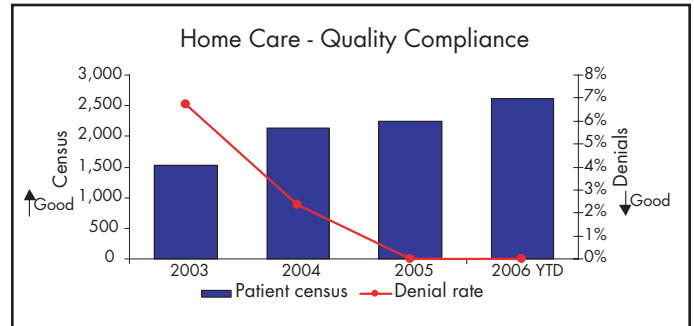
7.1-13 Medicare data demonstrate that NMMC’s readmission rates are lower than its peers. The 30-day readmission rate is a dual indicator of the effectiveness of initial treatment and that a lower LOS did not harm the patient (7.1-1, 7.5-6). Full 2005 data and benchmark will be available from CMS later in 2006.



7.1-14 Medication administration is a complicated process with the potential for error at many points. Significant errors are those with the potential to cause harm. While there is no national benchmark, we have set an aggressive target (Fig. 2.1-4). NMMC has reduced the incidence of significant errors through the use of technology and a culture of striving for excellent, accurate, safe patient care (P1.b).

Quality Indicator	Pressure Ulcer		Delirium		Restraints	
	2004	2006	2004	2006	2004	2006
NMMC	0%	3%	3%	N/A	0%	0%
Competitor A	0%	0%	2%	1%	3%	4%
Competitor B	2%	2%	3%	0%	31%	22%
MS - State	2%	1%	3%	2%	11%	11%
National	2%	2%	3%	3%	7%	6%

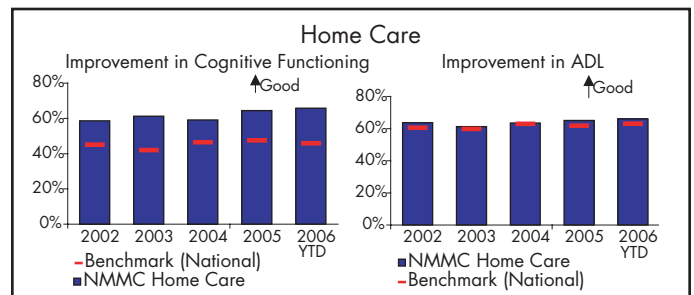
7.1-16 Publicly reported key LTC indicators show NMMC's LTC facility's quality is higher than the state's LTC aggregate and two LTC competitors' quality. 2004 results for NMMC's LTC facility included no pressure ulcers and no restraint use. The publicly available most recent website updates contain 2004 data. NMMC maintains zero percent frequency on these quality indicators.



7.1-17 Medicare denies payment on records that have poor documentation and reflect inappropriate care. CMS requests random record reviews to monitor for medical necessity and quality compliance. Although, home care's census increased, the number of denied Medicare claims decreased.

Patient Safety Indicator	AHRQ Population Rate	Facility(s) Rate (per 1000 cases)
PSI-01: Complications of Anesthesia	0.56	0.09
PSI-02: Death in Low Mortality DRGs	0.66	0.88
PSI-03: Decubitus Ulcers	22.71	13.66
PSI-05: Foreign Body Left During Procedure	0.08	0.04
PSI-06: Iatrogenic Pneumothorax	0.83	0.81
PSI-07: Selected Infections Due to Medical Care	1.99	1.28
PSI-08: Postoperative Hip Fracture	0.3	0.15
PSI-09: Postoperative Hemorrhage or Hematoma	2.03	1.44
PSI-10: Postoperative Physiologic and Metabolic Derangement	0.54	1.08
PSI-11: Postoperative Respiratory Failure	3.44	3.30
PSI-12: Postoperative Pulmonary Embolism or Deep Vein Thrombosis	7.08	3.50
PSI-13: Postoperative Sepsis	9.75	6.80
PSI-14: Postoperative Wound Dehiscence	1.41	0.00
PSI-15: Accidental Puncture or Laceration	3.22	2.52
PSI-16: Transfusion Reaction	0.005	0.000
PSI-17: Birth Trauma-Injury to Neonate	6.34	0.41
PSI-18: Obstetric Trauma-Vaginal Delivery with Instrument	217.09	203.54
PSI-19: Obstetric Trauma-Vaginal Delivery without Instrument	81.98	141.41
PSI-20: Obstetric Trauma-Cesarean Delivery	5.93	0.00

7.1-15 NMMC has better results than AHRQ population hospitals in 16 of 20 Patient Safety Indicators. We are able to actively address OFIs because our comprehensive EMR and CARESCIENCE provide us with early access to these new AHRQ measures. NMMC won the 2005 AHA-McKesson Quest for Quality Prize for organizational commitment to highly reliable, exceptional quality, PCC. The criteria for this award are based on the 10M patient safety initiatives. NMMC extends its commitment to patient safety by participating in Stanford's Safety Culture study and IHI's 100K LIVES CAMPAIGN to reduce adverse drug events (6.1a2).



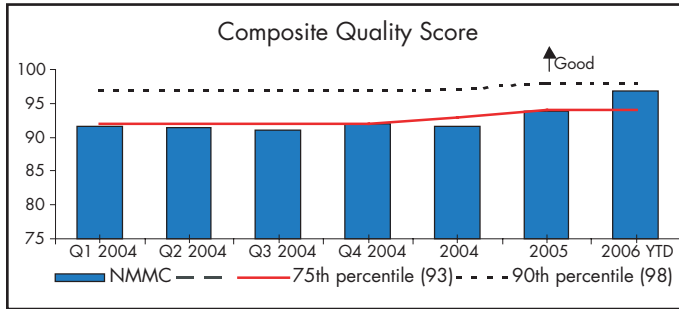
7.1-18 National reporting data shows NMMC's Home Care improvement in patients' ability to perform activities of daily living (ADL) (bathe, eat, dress) as well as their cognitive (ability to think) function. This performance exceeds the national benchmark in 2005. 2006 data will be available late summer.

	Baptist Memorial Hospital-DeSoto, Southaven, MS	Baptist Memorial Hospital-Memphis, TN	Baptist Memorial Hospital-Golden Triangle, Columbus, MS	Baptist Memorial Hospital-North Mississippi, Oxford, MS	North Mississippi Medical Center Inc. Tupelo, MS
Heart Attack Care	⊖	⊕	⊖	⊕	⊕
Heart Failure Care	⊕	⊕	⊕	⊕	⊕
Pneumonia Care	⊕	⊕	⊕	⊕	⊕

⊕ This organization achieved the best possible results
 ⊕ This organization's performance is above the performance of most
 ⊕ This organization's performance is similar to the performance of most JCAHO accredited organizations.
 ⊖ This organization's performance is below the performance of most JCAHO accredited organizations.

7.1-19 Publicly reported competitor comparisons - Heart attack care includes nine AMI measures; HF care includes five measures,

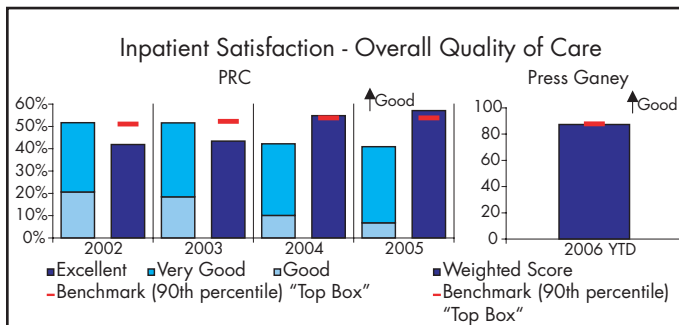
and pneumonia care includes seven measures. Pregnancy care measures were not reported by JCAHO for this time frame from any organization. NMMC performance is above most JCAHO accredited organizations in the 21 quality measures (7.1-1, 7.1-3 & 7.1-8). These publicly reported measures in Heart Attack Care (AMI) are part of IHI'S 100K LIVES CAMPAIGN to "deliver reliable, evidence-based care" for patients with heart disease.



7.1-20 NMMC utilized the CMS Hospital Quality Incentive Demonstration Project on Composite Quality Score methods to assess itself. The HQI Composite Quality Score is comprised of two separate components, a composite process score and a composite outcome score, which are generated by a weighting formula and rolled up to one composite score. NMMC is currently near the 90th percentile in this self-selected demonstration group and has focused APS to remain in the top 10%. As noted in P.2b, our population is more poor, less healthy and medically underserved which increases the challenge of providing medical care.

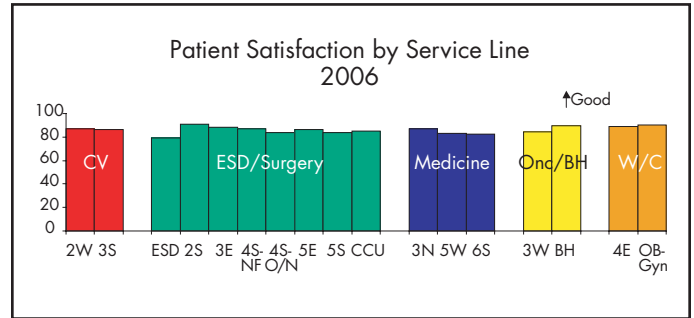
7.2 Customer-Focused Results

We are providing two sets of patient-customer satisfaction graphs which represent our transition from PRC (2002-2005) for our patient satisfaction assessment to Press Ganey Associates (PGA) (2006) (3.1a(2)). Both PRC and PGA use a five-point Likert Scale with one point representing "very poor" satisfaction and five points representing "excellent" for PRC but "very good" for PGA. In 2003 we changed our focus to concentrate on providing "excellent" care and measuring "top box" results. To achieve this we implemented the CARES values training program (3.2a(1)) and we experienced a dramatic change in the "top box" scores. The PRC telephone surveys asked 35 questions, but the patients' overall satisfaction data is determined by only one "Overall Quality of Care" question. In contrast, the PGA overall satisfaction is based on a composite score of several dimensions. In 2006, we deliberately changed from PRC, a database of approximately 200 hospitals, to PGA because PGA is a more "robust" survey, with more than 1,300 hospitals in its inpatient database. Three previous Baldrige award winners utilized PGA and we want to compare ourselves to the best.

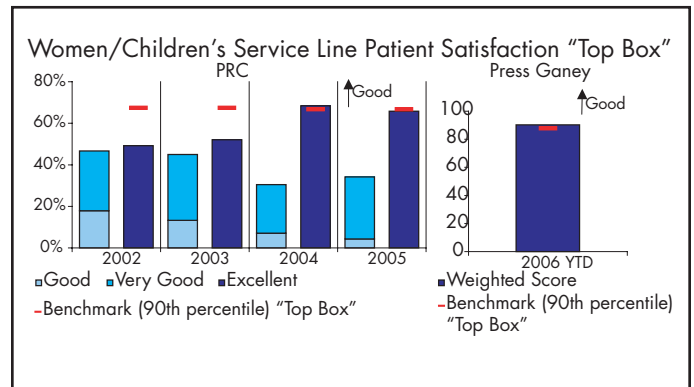


7.2-1 NMMC utilizes the patient satisfaction data to identify unit-specific key drivers of satisfaction (3.2b(1)). The CARES values train-

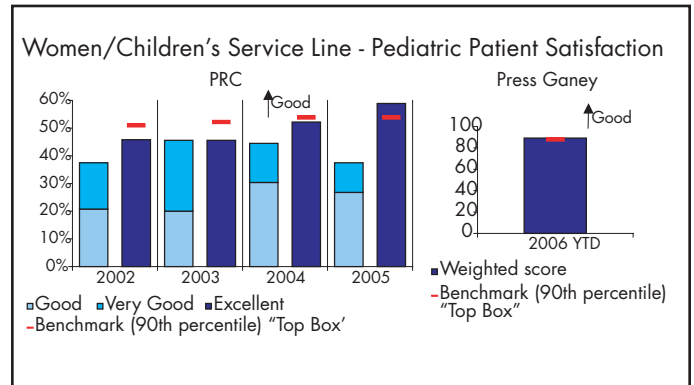
ing program establishes patient satisfaction as our primary focus and provides staff with the tools and techniques to address key drivers and achieve excellence. The positive trend in "top box" PRC scores has been maintained with our transition to the PGA survey process.



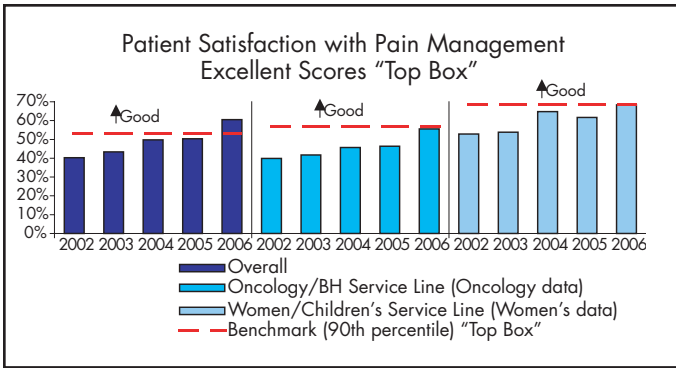
7.2-2 Overall inpatient satisfaction (7.2-1) is segmented by SL, each of which provides a drill-down analysis to individual inpatient units.



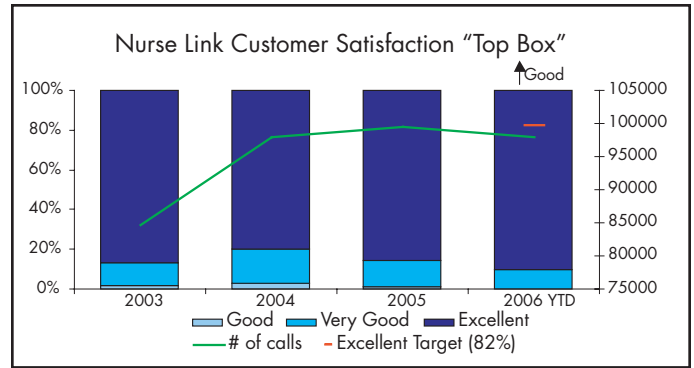
7.2-3 Women's service satisfaction: In addition to the CARES training, in 2004 the women's SL more than doubled the frequency of their discharge phone calls from 741 (2003) to 1,810 (2004). The information from these calls is used to improve care and contributes to continually improving patient care and exceeding the 90th percentile (3.2b(2)).



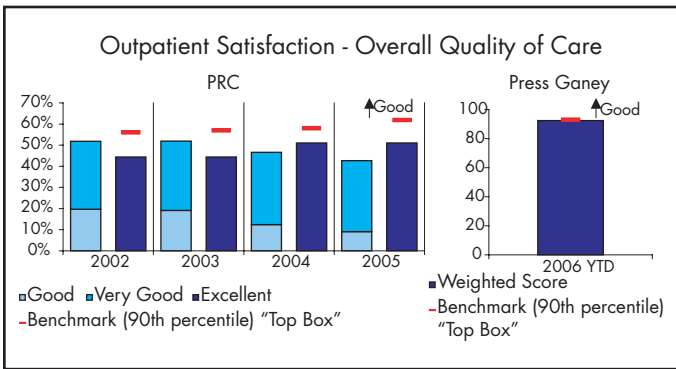
7.2-4 The pediatric services came under the management of the Women's SL in 2004 and the techniques (including structured discharge phone calls (3.2b(2)) that resulted in high patient satisfaction in women are now applied to the pediatric population with good results.



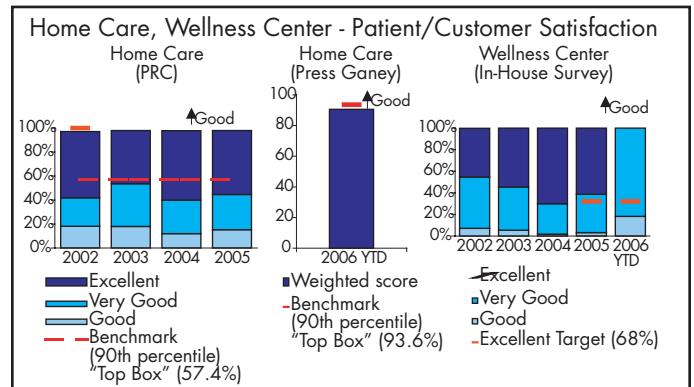
7.2-5 Segmentation of patient satisfaction with pain management



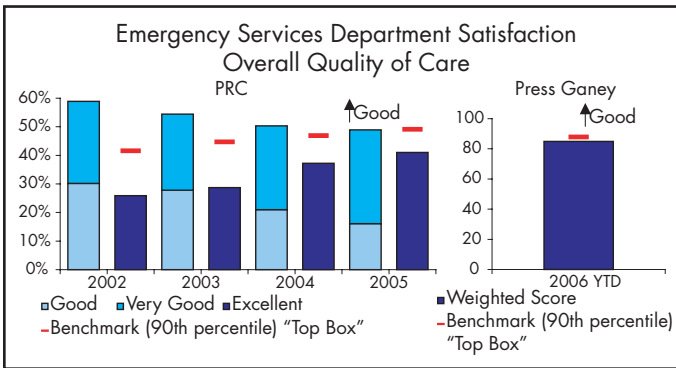
7.2-9 Nurse Link receives calls for medical information from the community 17 hrs/d, 7d/wk. The volume of these calls increased dramatically from 2003 to 2004 and the annualized number remains high in 2006. These customers include current patients as well as community members and their satisfaction with this free service remains exceptionally high (3.1a(2)).



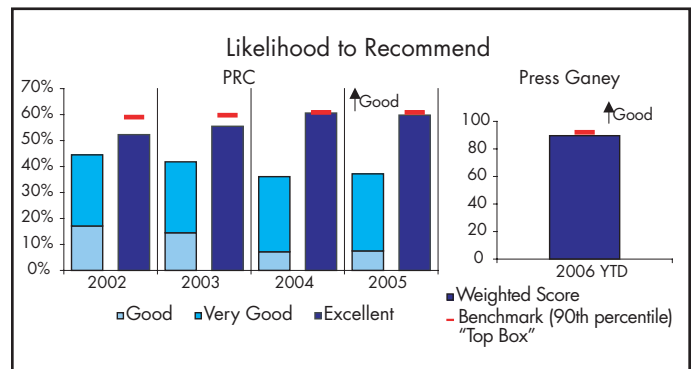
7.2-6 This satisfaction response is a roll-up of multiple outpatient units.



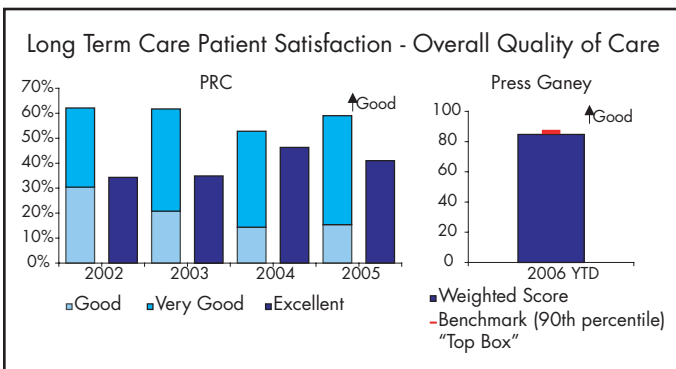
7.2-10 Home care scores are consistently "Top Box." The Wellness Center provides training and education to avoid illness and although PRC benchmark data for Wellness Centers are not available the "excellent" responses remain high.



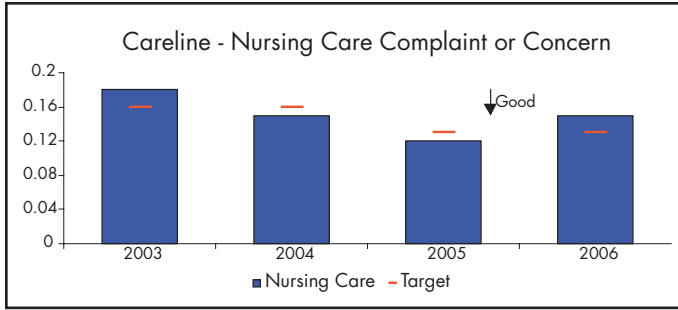
7.2-7 The ESD processes are undergoing a thorough review in which is coined the "Year of the ER." We anticipate continued improvement in patient satisfaction.



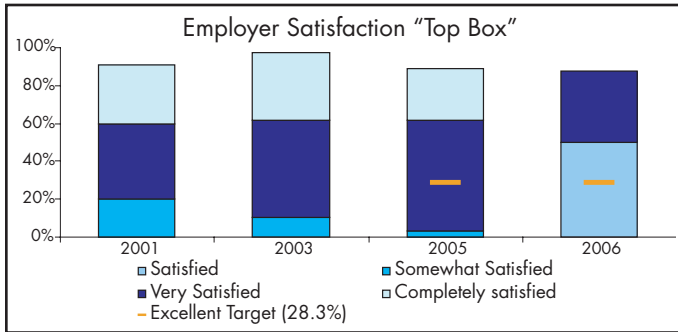
7.2-11 Each survey concludes with an assessment of the potential for future interaction and referral (3.1a(2)). PRC asked "Would you recommend NMMC to your family or friends?" and PGA requests a ranking of the "Likelihood of your recommending this hospital to others?" NMMC is performing near the 90th percentile in this measure of patient loyalty.



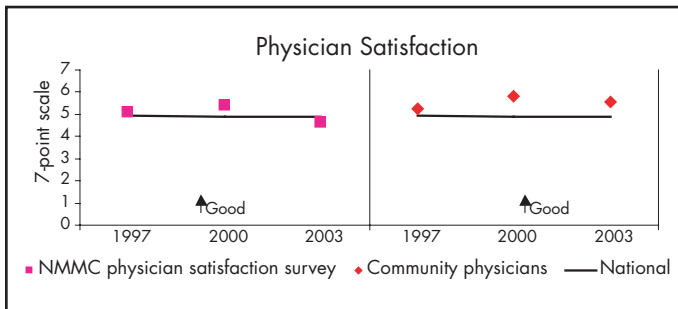
7.2-8 Long term care "excellent" scores increased in 2004 with implementation of CARES and focus on key drivers. This reflects patient and family satisfaction with quality of care that exceed national metrics. The 90th percentile was not calculated by PRC for LTC; however, we are exceeding PGA's 90th percentile.



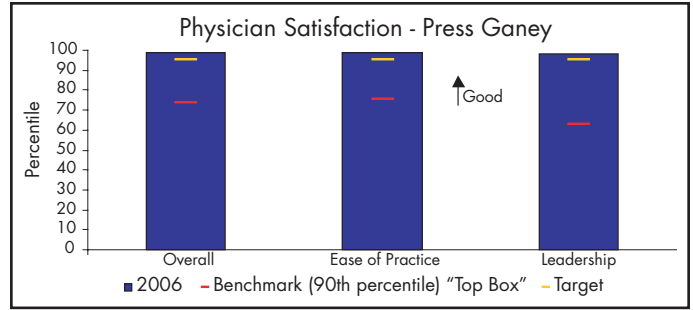
7.2-12 Every patient room and care area has the CARELINE phone number and patients are encouraged to call in their complaints, compliments and concerns (Fig. 3.2-2). We track and trend these calls and focus on nursing care because it is a key driver of patient satisfaction. The percentage of the calls involving nursing has been steadily decreasing. In 2006 we implemented E-CARELINE to better capture and track calls. We have an overall increase in CARELINE calls and an increase in the percentage of calls related to nursing care. We continue to utilize the information from these calls to improve patient care (3.2a(3)).



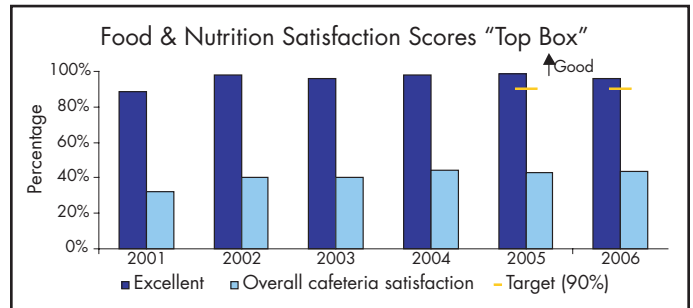
7.2-13 The CBH conducted employer satisfaction surveys every two years (now conducting annually). Their primary question is how satisfied the employer is with HEALTH LINK PPO. HEALTH LINK includes contracts at 25 hospitals, but based on dollar volume, NMMC is responsible for providing 74% of care to HEALTH LINK, enrollees. Although we do not have an external benchmark, we are pleased that a significant percentage of the "somewhat satisfied" has shifted to being "very good" and "completely satisfied."



7.2-14 Prior to 2006, NMMC utilized Baird/Melnick Associates to conduct physician satisfaction surveys every three years. As noted, a seven-point scale was used (with seven being the best) and the satisfaction of different physician groups is shown over a nine-year span.



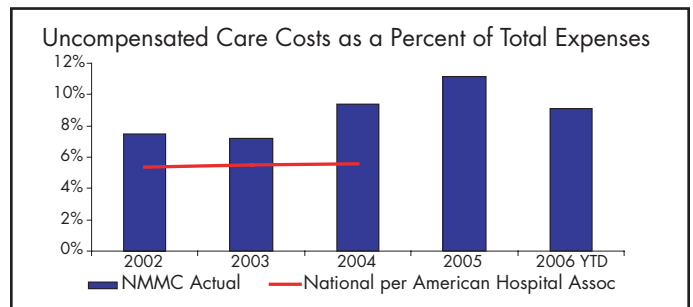
7.2-15 NMMC physician's overall satisfaction, satisfaction with ease of practice and satisfaction with leadership ranked at the very top of the PGA survey. These scores reflect the successful integration of physician partners into the organizational culture and decision making.



7.2-16 Employees, visitors and patients are surveyed for cafeteria selection, quality and cleanliness. NMMC's cafeteria includes a deli, two hot food bars, a salad bar and a variety of healthy snacks and desserts. NMMC also employs a full-time chef to enhance both food choice and presentation for appeal, which has helped maintain high satisfaction.

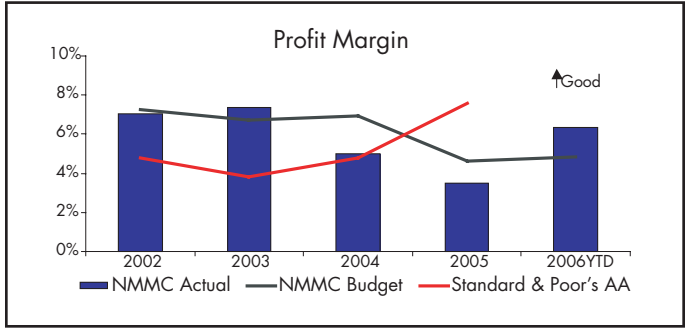
7.3 Financial and Market Results

As noted previously, NMMC, like other healthcare providers, faces significant financial challenges because of uncompensated care and overall declining reimbursement. The uninsured population in our service area is significant, but true to our mission and obligation as a tax-exempt organization we treat these patients like any other, without regard to their ability to pay. In addition, we have recently experienced some softening of our patient volumes. These issues have had an impact on our overall performance in some measures but we have responded to those challenges and continue to demonstrate strong financial performance. The SLT and BOD have a firm commitment to producing favorable financial results in order to meet and sustain NMMC's Mission. Our comprehensive capital planning process (EPP) integrates multiple five-year SRPs. We merge traditional financial management tools with CBCM to manage our costs (7.3-11) and we track market share to assess and plan (7.6-1).

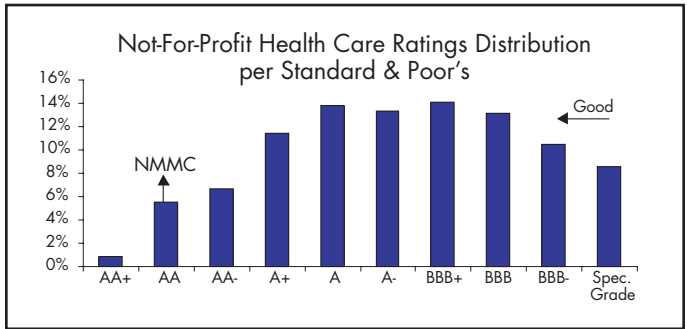


7.3-1 Uncompensated care is defined as the sum of charity allowances and bad debt expense. NMMC's uncompensated care as a

percent of total expenses is above the AHA's national average. The significant increase in uncompensated care in 2004 and 2005 is due to the increased focus this issue has received within our industry. In late 2003, the Department of Health and Human Services made clear that it was not in violation of their policy to provide discounts to the uninsured. This clarification as well as other scrutiny by Congress and others resulted in increased emphasis by all providers to assist the uninsured with more defined and available charity care policies. In response to this change within the industry, we worked hard to implement a clear and consistent charity policy. This process resulted in a significant increase in our uncompensated care, primarily charity.

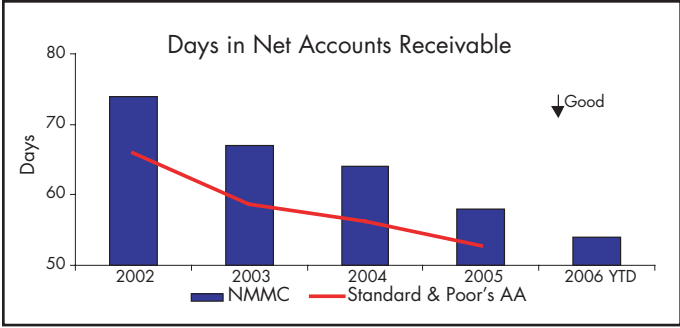


7.3-2 The profit margin measures total profitability as a percentage of revenue. The impact of the increased levels of uncompensated care can be seen in our profit margin in 2004 and in 2005. Even with that impact, however, NMMC's profit margin has approached the Standard & Poor's AA median. The entire health care industry is now dealing with minimal patient volume growth, decline in reimbursement from payors and increasing expenses. NMMC has incorporated these challenges into EPP and the results of that planning can be seen in the increased margin projected for 2006. NMMC has made significant operational changes to address these challenges in order to continue our historically strong financial results. NMMC has implemented SLs which have reduced the layers of management. It has also eliminated the use of contract nurses, which carry a significant cost premium, reduced LOS and has reduced our salary cost through attrition and control of overtime. All of these efforts were in response to the reduced profits resulting from the challenges noted here.

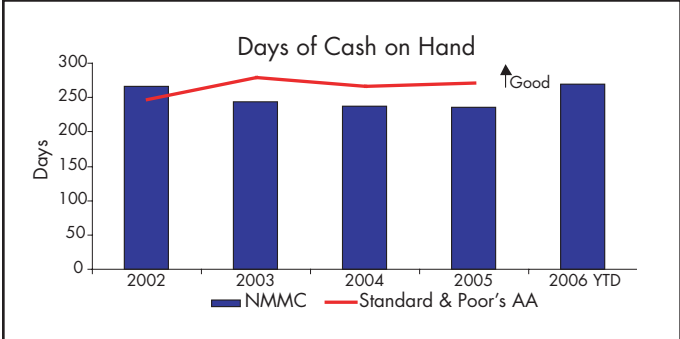


7.3-3 In 1993, NMMC's bond credit rating was upgraded from A+ to AA. In 1996, we hired Ernst and Young to assist in developing a five-year plan and setting targets that would maintain our AA balance sheet ratios. In 2005, Standard and Poor's reaffirmed our AA credit rating and stable outlook even with declining margins. Significant cash reserves resulting from past good results, a strong balance sheet, historic strong financial performance, and our dominant business position in our market were the primary factors for the reaffirmation. The AA credit rating is a clear, objective meas-

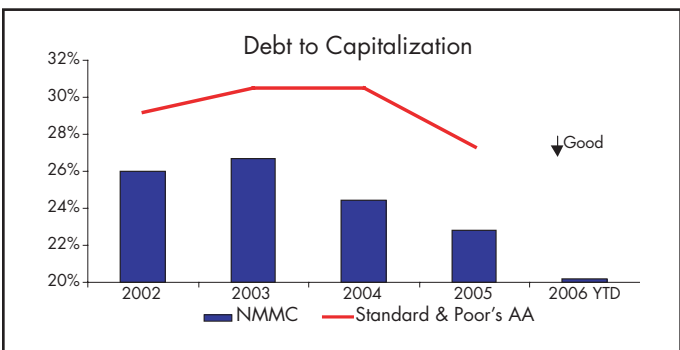
ure of our financial strength compared to other health care organizations.



7.3-4 The days in net accounts receivable (AR) measure the number of days of net patient revenue due from patients and third-party payors. Although NMMC's days in net AR are above the Standard & Poor's AA median, they continue to show improvement. We attribute this improvement to a plan implemented in 2001, which included focusing on financial counseling, monitoring AR more closely and improving the efficiency of coding. As a result, the NMMC days in net AR have decreased by 29 days over the five-year period shown.



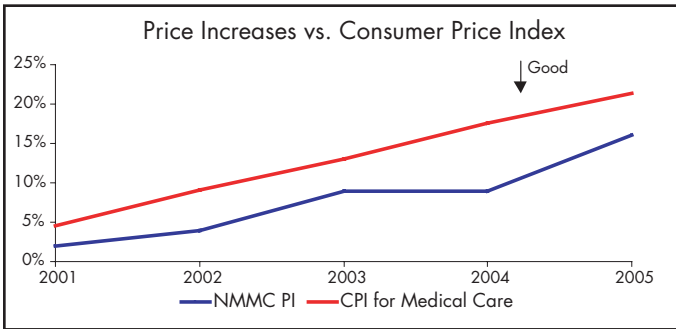
7.3-5 The days of cash on hand measure the number of days that operating expenditures can be financed with no cash collections. NMMC continues to track very close to the Standard & Poor's AA median. We attribute this success to our AR management as well as our investment policy which utilizes professional managers who are evaluated by agreed-upon performance benchmarks.



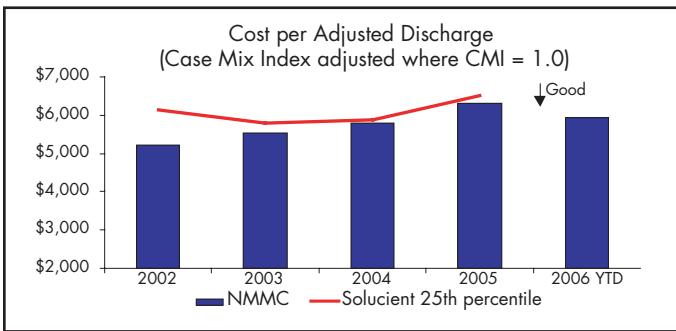
7.3-6 The debt to capitalization measures the proportion of total capitalization provided by debt. NMMC remains stable. Although the Standard & Poor's AA median permits increased levels, NMMC has improved well beyond this mark by reducing debt.

Hospital	Gross Average Charge per Admission	Case Mix Index	CMI Adjusted Charge
University of Alabama - Birmingham, AL	\$44,119.00	1.9622	22,484.46
Methodist Healthcare - Memphis, TN	\$28,358.00	1.5512	18,281.33
Baptist Memorial Hospital - Memphis, TN	\$29,423.00	1.8493	15,910.34
University Medical Center - Jackson, MS	\$25,922.00	1.8283	14,178.20
St. Dominic - Jackson, MS	\$19,635.00	1.5200	12,917.76
Forrest General - Hattiesburg, MS	\$19,714.00	1.5457	12,754.09
North Mississippi Medical Center	\$21,810.00	1.7488	12,471.41

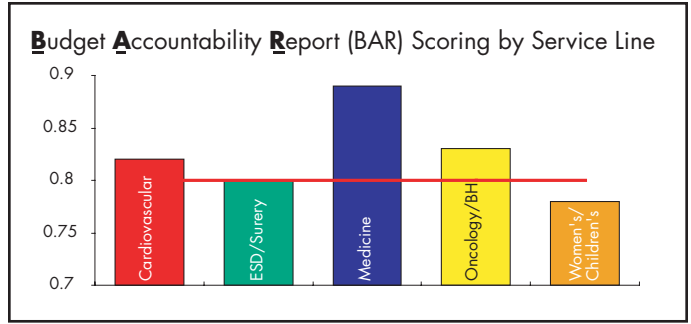
7.3-7 The CASE MIX INDEX (CMI) is Medicare’s resource allocation methodology and represents the relative cost of caring for the average patient. A higher CMI represents more intensive care and resource utilization. According to the American Hospital Directory (www.ahd.com), NMMC’s CMI adjusted charge per admission is lower than those of its competitors, which supports NMMC’s commitment to providing quality services at affordable pricing. Medicare reported CMI is 2004 data.



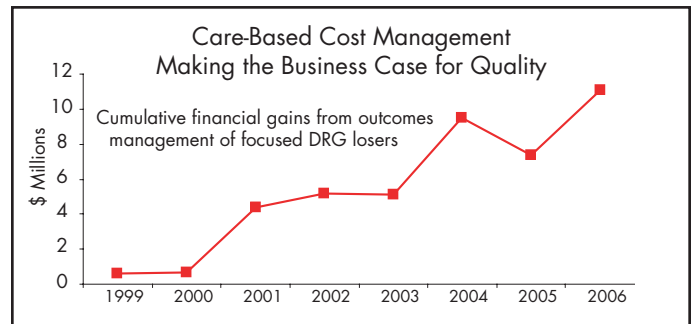
7.3-8 A five-year comparison of NMMC’s annual price increase to the consumer price index (CPI) for medical care demonstrates our commitment to maintaining comparatively lower health care costs to our regional industries, thereby enabling them to remain competitive.



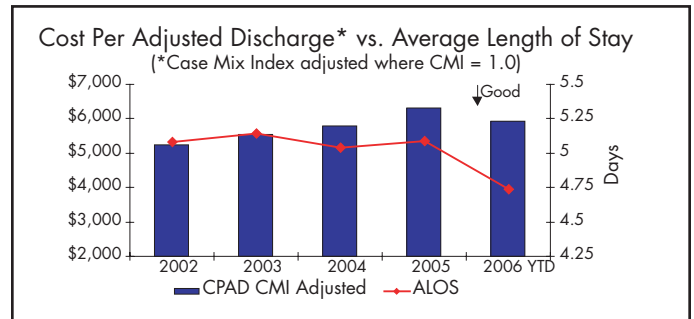
7.3-9 The cost per adjusted discharge measures operating expenses per discharge adjusted for outpatient volumes and CMI. NMMC’s cost per adjusted discharge is below the Solucient 25th percentile but has increased over the past five years. These increases are attributed to the rise in bad debt expense and increases in patient care staffing costs. Those cost increases caused us to look for other cost reductions and operational improvements to bring our profitability back in line. Changes in management layers, elimination of contract nurses as well as increased focus on LOS and on overall staffing in the first half of 2006 have resulted in an improvement in cost per adjusted discharge.



7.3-10 The BAR measures each department within the SLS against a flexed budget based on their budgeted volumes. If the volumes are up, the BAR allows for more budget for staffing and supplies. If the actual volumes are down, the BAR flexes the budget dollars for these expenses in line with the volume decrease. A score of 80% results if the department is on target based on budgeted volumes and the associated revenue, cost and productivity measures. A score of below 80% says the measures are out of line with budget and an AP is required to be submitted to the SLA. This measurement tool provides each SL with a clear focus on keeping cost in line with our volume changes. Although this tool was only implemented at the beginning of FY 2006, it has already helped NMMC reduce its staffing cost and other expenses in response to the increased cost trend and soft volumes.



7.3-11 It is not uncommon for Medicare’s reimbursement for certain diagnoses (DRGs) to be less than our cost of providing patient care. We have identified these as “DRG losers.” The CBCM approach (illustrated in Fig. 6.1-2) contains costs by focusing on practice variation, complications and social issues. CBCM makes the business case for clinical quality management with steady growth in the annual financial gains of focused DRG losers (7.1-5). The decrease in 2005 is attributed to the unexpected rising device/implant costs in cardiotherapy and orthopedics. Contracts have been adjusted and resource intensity has been addressed since that time. A continued focus in this area in 2006 helped achieve savings to offset the impact of decreased reimbursement as well as projected additional savings.



7.3-12 In response to the challenges of uncompensated care, we have focused efforts in a variety of areas in order to continue to pro-

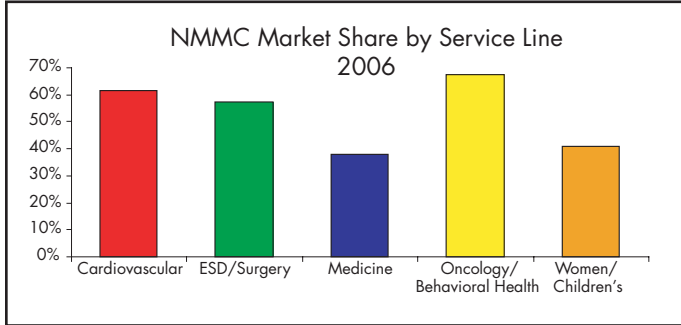
duce adequate financial resources, to continue to serve our community and to achieve our mission. A primary area of focus has been toward reducing LOS. The longer a patient stays in our care the more resources are required to be expended for the patient. LOS needs to be appropriate for the condition of the patient but a variety of factors can result in stays longer than necessary. Those stays have a significant impact on cost. We have worked hard in this area and have achieved a significant reduction in LOS which has in turn helped us drive down cost.

	2001	2002	2003	2004	2005	Budget 2006	5-Year Change
Adult Acute Patient Days	148,945	145,253	150,278	150,735	142,092	145,173	-2.53%
Nursing Home Patient Days	36,186	37,990	38,194	38,028	37,394	38,118	5.34%
Newborn Patient Days	11,774	11,596	11,221	11,871	12,019	12,283	4.32%

7.3-13 The patient days' trends fluctuate over the past five years. Ten nursing home beds were added in 2000 and in 2001 to meet demand and to allow for continued growth.

	2001	2002	2003	2004	2005	Budget 2006	5-Year Change
Outpatient Visits	222,056	227,868	252,387	258,860	239,933	249,015	12.14%
Emergency Room Visits	54,877	55,246	54,371	55,413	56,332	56,100	2.33%
Surgery Procedures	15,817	15,986	16,319	17,242	16,364	16,507	4.36%

7.3-14 NMMC continues to see a shift from inpatient stays to outpatient visits. In 1998, an outpatient tower was constructed housing outpatient services including emergency services to accommodate the projected growth.

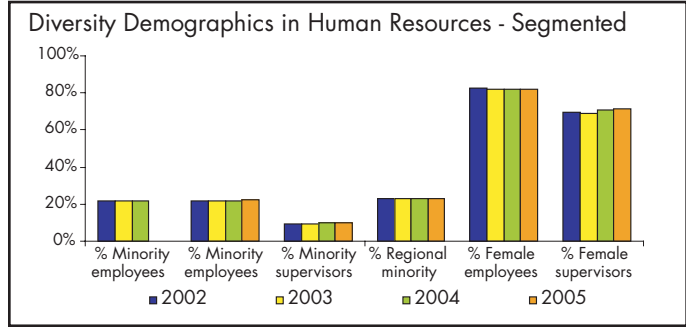


7.3-15 Our SLS were selected based on our areas of significant patient need and well developed services to meet those needs (3.1a(1)). The focus on these areas through our SL structure has strengthened our commitment to these services. The market share data above show our dominance in Cardiology, ESD/Surgery and Oncology and Behavioral Health SLS. We hold a smaller share of the market in Medicine and Women and Children's services. Our market share in these services while not as dominant, is still strong. As is typical nationally, these services, are less specialized and more providers in our area offer them, therefore the market is diluted. While these services are reimbursed at lower rates, due to high volumes of Medicaid patients and uninsured patients, we still consider them a vital part of our mission and have placed their importance at the same level as the other SLS.

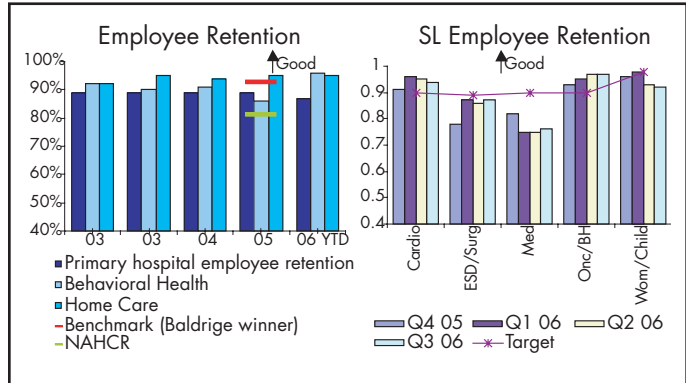
7.4 Staff and Work System Results

PEOPLE is the first among equally important CSFs and key to creating a culture where only "top box" excellence is acceptable. All results demonstrate the commitment of leaders to continuously

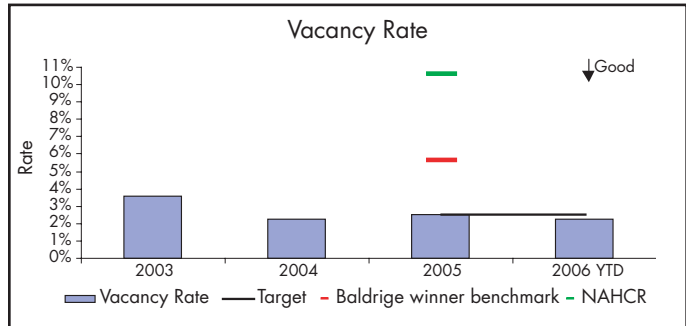
improve the quality and safety of the work environment. The benchmark is the target unless a benchmark is unavailable or otherwise indicated. Segmentation of the workforce is documented in several indicators. As noted in 5.3b(1), the EOS is conducted every two years. In-depth 2006 results AOS.



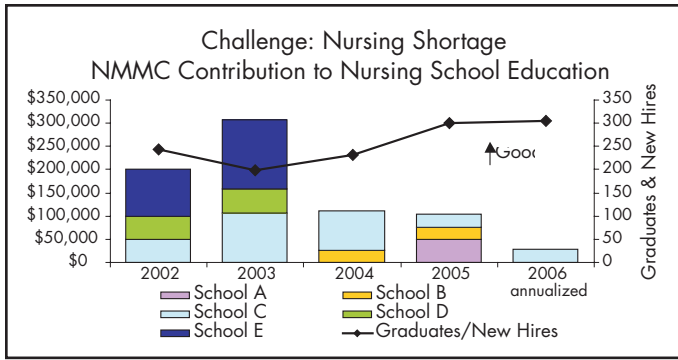
7.4-1 NMMC has always been a leader in doing what is best for our community (5.1c(2)). The percentage of minority employees closely matches the region's minority population. The percentage of minority and female supervisors demonstrates our commitment to career development for all (Fig. 5.2-3). NMMC receives an average of 11.9 job applications for every available position.



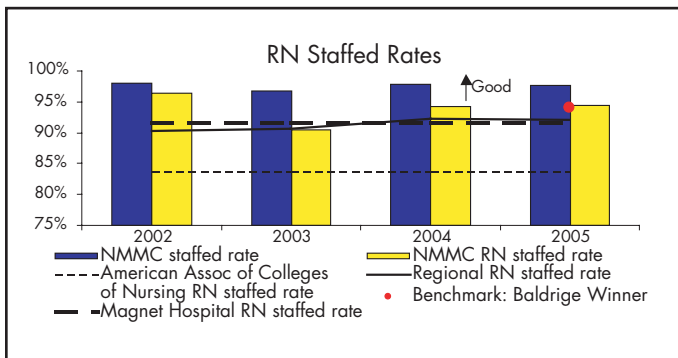
7.4-2 Employee retention is an important indicator of employee satisfaction. Retention rates exceed the health care industry benchmark. Segmented and SL results demonstrate effective deployment of retention initiatives (Fig.5.1-3). *National Association of Healthcare Recruiters



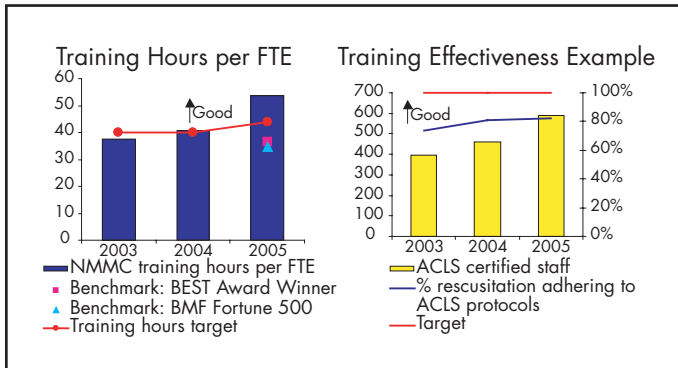
7.4-3 NMMC's excellent vacancy rate is an indicator of role model recruitment, hiring, retention and education/training. Vacancy rates continue to decrease and are well below the Baldrige winner benchmark.



7.4-4 As a strategy to address the nursing shortage, NMMC has partnered with five nursing schools to increase the number of graduates by funding additional instructors. The goal of this partnership was to increase enrollment at the nursing schools with substantial initial NMMC contributions but for schools to sustain the growth through other sources of funding. As a result of this intentional strategy, we have been able to maintain new hires at or above turnover (inverse of retention 7.4-5) and have been able to reduce expenditures in this area.



7.4-5 A significant investment of time, money and energy has been dedicated to maintaining/improving our RN staffing rate (7.4-3). The use of contract nurses was 0% in 2002-2003, 3% in 2004, 2% in 2005 and 0% in 2006. We are above national benchmarks in 2005.



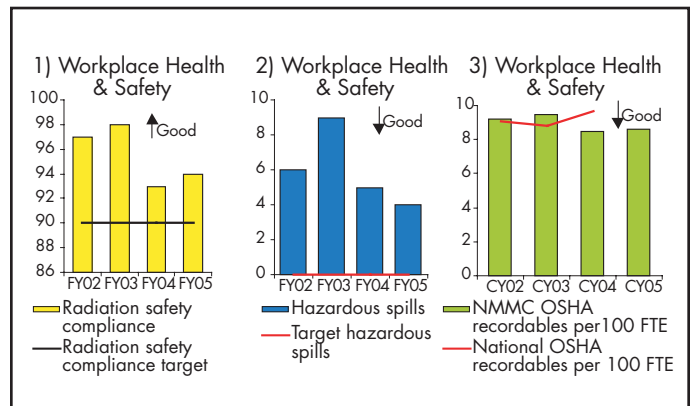
7.4-6 We go a “step beyond” minimum requirements for education and training (Fig. 5.2-2). The American Society for Training and Development recognizes organizations that demonstrate enterprise-wide success as a result of employee learning and development through BEST Awards. With 53.83 hours per FTE in 2005, NMMC exceeded their BEST Award Winners. NMMC’s training hours per FTE are also above Benchmarking Forum Organizations (BMF), a group of large Fortune 500 companies and public sector organizations that share best practices. NMMC’s result is an improvement in the quality of care as seen in the increased percentage of resuscitations in adherence with best practice guidelines.



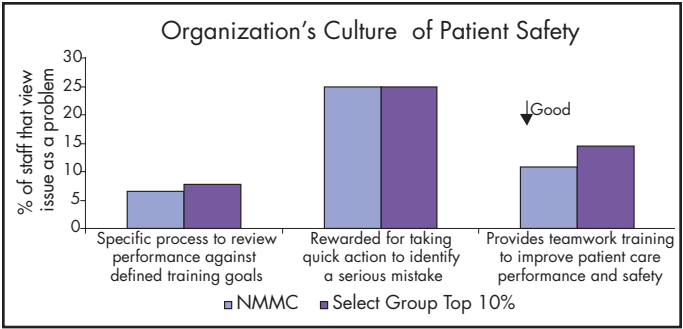
7.4-7 Satisfaction with feeling valued is a group of measures that includes adequacy of training, support received, job security and leadership availability and responsiveness.



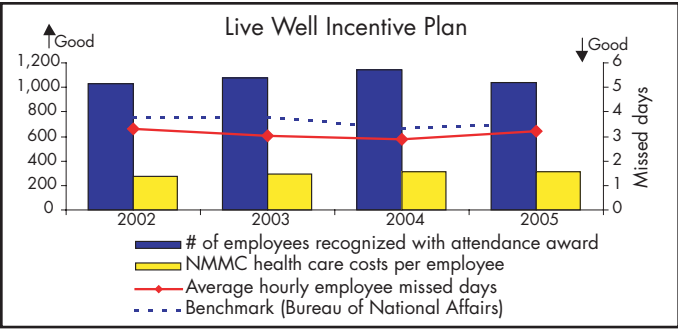
7.4-8 Recognition and Reward strategies (Fig. 5.1-2) let employees know they are valued. Positive trends demonstrate measurable improvement in satisfaction with recognition and rewards. With a goal to continuously increase employee recognition and satisfaction, employee retention rate exceeds the benchmark (7.4-2), and employee tenure remains high.



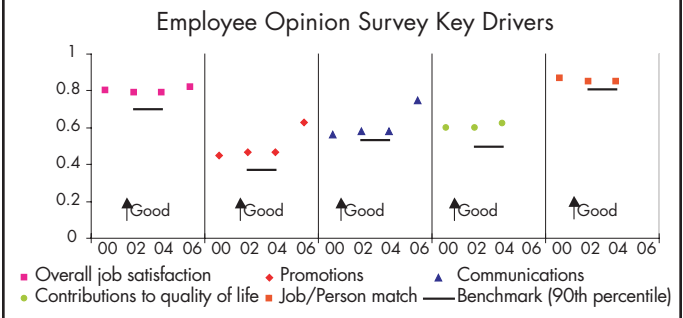
7.4-9 We value our employees and have a proactive approach to their safety and wellbeing (Fig. 5.3-2). The SEPC’s comprehensive effort to decrease avoidable accidents has resulted in positive safety trends. We also measure Sharps incidents (puncture by needle or other instrument) and had 112 incidents in 2005 in all NMMC units (acute, ESD, LTC, FMRC, home health). The CDC does not recommend that hospitals compare themselves to each other because of a difference in reporting methods. The CDC average for needlesticks alone, however, is 30 per year per 100 hospital beds (which projects to 195 needlesticks per year for just our acute care beds.) We continue to pursue our target of fewer than 95 Sharps incidents per year.



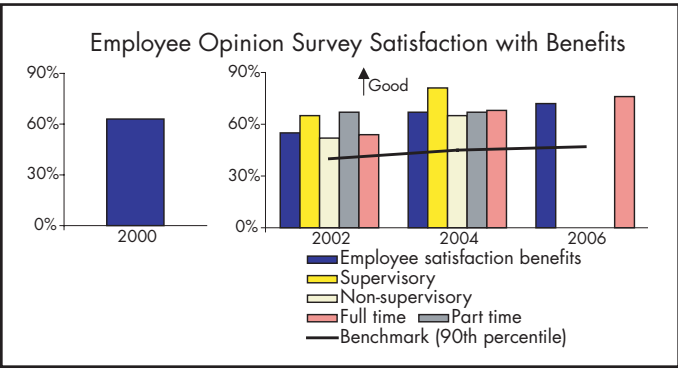
7.4-10 A “culture of safety” means that patient safety is a priority of management and that the employees know this. In order to assess our current culture and improve it, NMMC joined the Stanford Patient Safety Consortium sponsored by AHRQ. An initial survey of the 105 participating hospitals was performed in 2004-2005. Repeat survey results will be available early 2007.



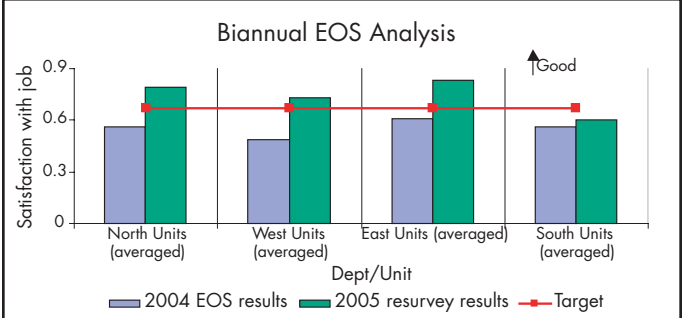
7.4-13 NMMC’s Live Well Incentive Plan (Fig. 5.3-1) is a win-win-win. Encouraging and rewarding healthier lifestyles has resulted in employees missing fewer days of work and a stable overall cost of health care for employees.



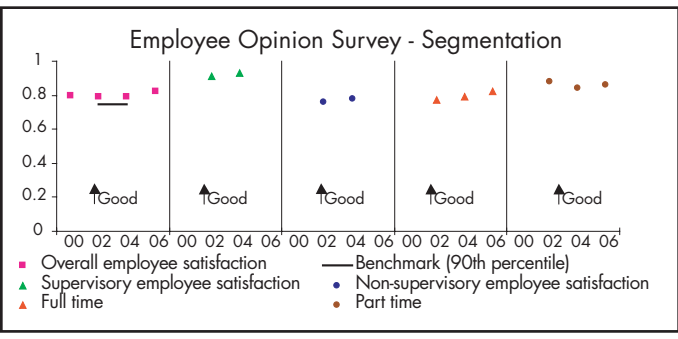
7.4-11 NMMC’s deployment of placing PEOPLE first in setting our CSFS is demonstrated in the EOS. All items are above the benchmark. Although EOS are performed every two years, ECS surveys are assessed quarterly for continuous monitoring of NMMC’s employee key factors (7.4-15).



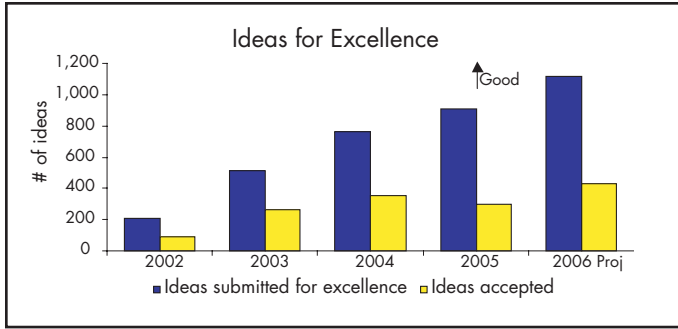
7.4-14 Satisfaction with benefits serves as a recruitment “pull.” Leadership’s positive response to employee requests is reflected in the 2004 EOS results, which are above the national benchmark. Segmented data are not available for 2000.



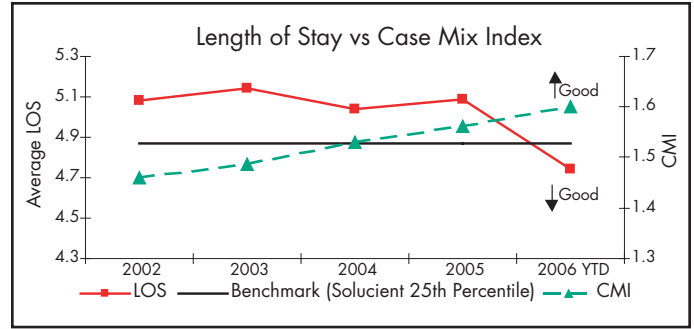
7.4-12 Each department/unit with an EOS score below 67% must identify the cause(s) of their low satisfaction and develop an AP. The department’s/unit’s employees are resurveyed one year from the original EOS (instead of the two-year cycle) to assess the outcome of the AP. In 2004, 79 departments/units (18% of total) were below 67%. The improvements in the 2005 EOS demonstrate the commitment of leadership to employees and effectiveness of APs (5.3b(1)).



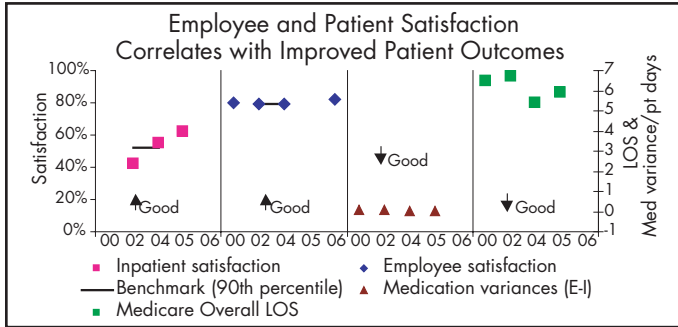
7.4-15 Employee satisfaction has continued to be an exemplary indicator. Segmented data are not available for 2000. In between the biannual EOS, quarterly ECSS are used to proactively implement changes for maintaining and improving staff well-being, satisfaction and motivation (5.3b(1)). Minimal EEOC submissions are also indicators of NMMC employee satisfaction (7.6-4).



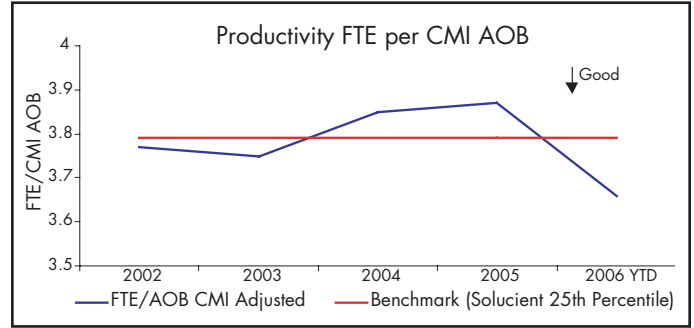
7.4-16 An indicator of staff involvement in quality and safety is the willingness to submit suggestions for improvement. A revitalization of the initiative by leadership in 2002 has resulted in a dramatic increase in submissions by NMMC staff. Leadership’s rapid response to accept and grant requests coupled with overlapping ideas from intuitive employees explains the trend of increased submissions, but a flattening of acceptances. With a goal of increased submissions each year, the projected increase in acceptance for 2006 reflects leadership commitment.



7.5-1 LOS impacts profitability because the longer patients stay, the more resources are used. Prospective systems (e.g. Medicare) reimburse based on the diagnosis and not actual care. Sicker patients require more complex treatments and these diagnoses are assigned a higher CMI value. NMMC has improved its clinical processes to care for more complex patients (higher CMI) more efficiently (lower LOS).



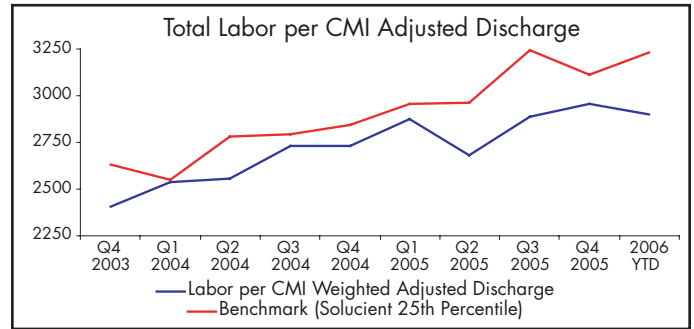
7.4-17 A staff that feels valued will strive to provide excellent care, which results in satisfied patients. A cause and effect relationship exists between decreased medication variances (increased patient safety) and LOS. All correlate with improved outcomes.



7.5-2 FTE per CMI adjusted occupied bed (AOB) is a measure of efficiency and staff productivity adjusted for the acuity of the patient’s diagnosis. Productivity varies from quarter to quarter due to the fluctuation of patient census.

Measurement	2005	2006 Proj.
Time Contribution (Total hours of volunteer service - Adult & Students)	12,594	14,628
Financial Contribution (Volunteer hours x \$10)	\$125,940	\$146,280
Volunteer Retention Rate (Adults only)	71%	AOS

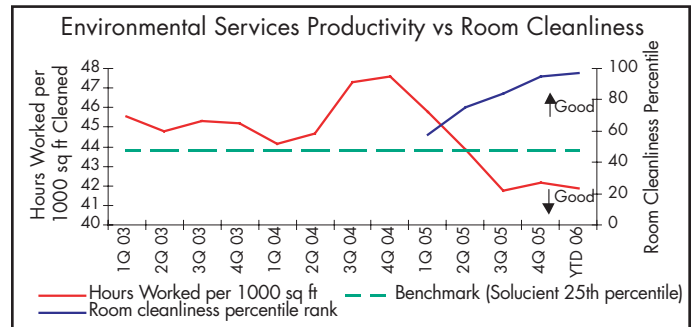
7.4-18 Volunteer services are an important part of the NMMC vision. Volunteer time contribution in hours is equivalent to four FTEs or eight part-time employees for 2005. Using NMMC average hourly wage, the financial contribution makes evident the impact volunteers have on our hospital. Volunteers now serve 20 departments, and the retention rates indicate volunteers’ satisfaction with and dedication to NMMC. Data does not include board members’ volunteer contributions (7.6-6) or the contributions of nine volunteer chaplains or 231 visiting chaplains.



7.5-3 Total labor cost per CMI adjusted discharge measures how effectively an organization uses its labor resources as volume fluctuates. NMMC continues to keep labor costs below the Solucient 25th percentile.

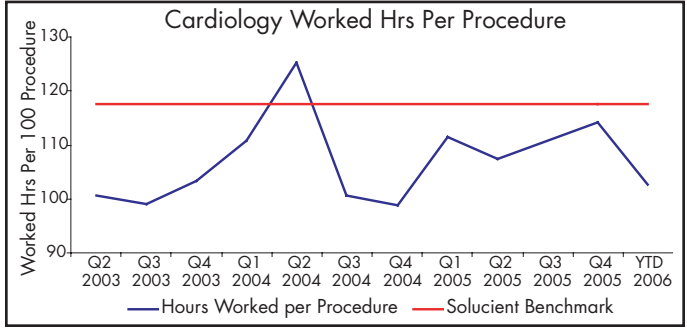
7.5 Organizational Effectiveness Results

If it can be measured, it can be improved. This philosophy drives the improvement process throughout NMMC. The following graphs and tables are examples of the analyses performed on the support processes that are repeated every day in the delivery of health care to our patients.

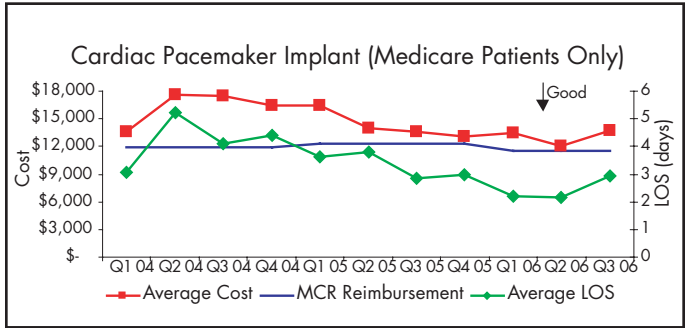


7.5-4 Environmental Services hours worked per 1,000 sq ft has decreased below the benchmark (Solucient 25th percentile). At the

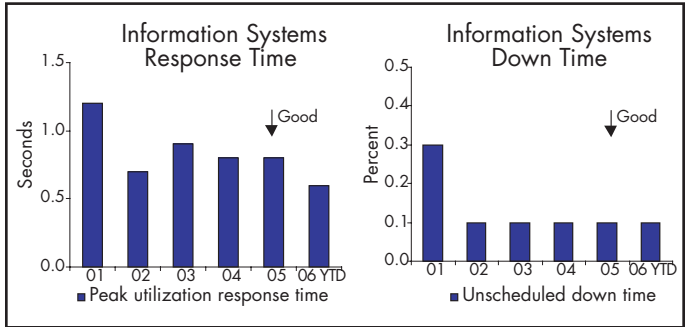
same time patient satisfaction with room cleanliness has increased. In early 2005 Environmental Services changed their work assignment process to adjust for patient census. Staff members are no longer attached to specific units but clean rooms where and when they are needed. This indicates increased productivity, resulting in improved efficiency and effectiveness.



7.5-5 NMMC monitors productivity by department using an internal productivity system (MRS) on a biweekly basis. Also, NMMC uses SOLUCIENT Action O-I to monitor productivity comparisons to other organizations. This graphic shows that the cardiology hours worked per procedure remains below the Solucient 25th percentile, indicating NMMC’s cardiology department is more efficient than 75 percent of the reporting hospitals.

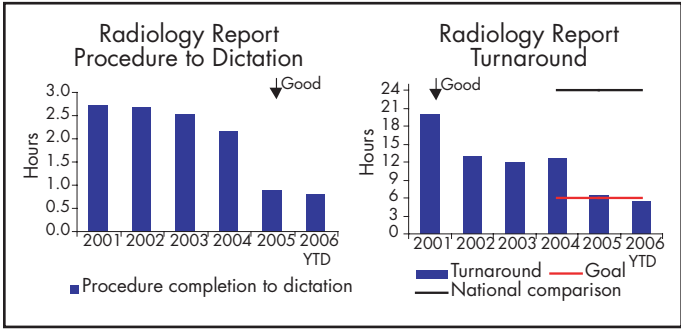


7.5-6 NMMC has three cardiologists who specialize in electrophysiology. They implant the most advanced pacemakers and it is not uncommon for reimbursement to lag behind the high cost of this expensive technology. NMMC has worked with its internal partners (cardiologists) to improve its care processes and with its external partners (pacemaker suppliers) to decrease its acquisition costs. These collaborations resulted in a lower LOS and a cost-per-case that is now less than the fixed Medicare reimbursement. Improving the pacemaker implantation process is a win-win-win: our patients continue to benefit from having access to the most current technology; our early adoption of this technology helped us to capture the electrophysiology market; and this market is now a profitable venture.

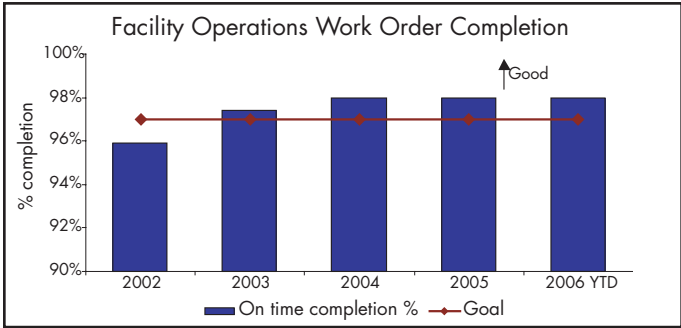


7.5-7 EMR response time refers to the amount of time from when the user clicks until the screen appears during peak utilization time

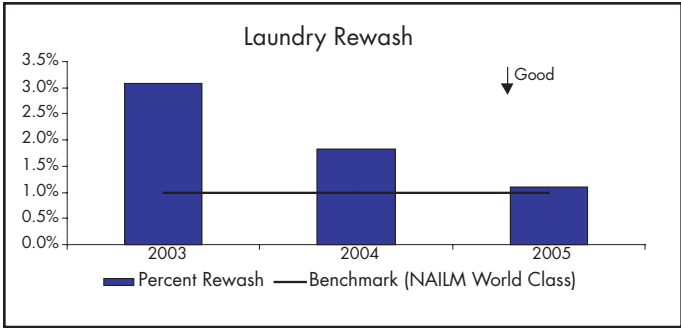
(8 a.m.-5 p.m.). NMMC uses a gigabit fiber backbone and a WAN with T1-DS3 technology to decrease response times. NMMC performs routine maintenance on its information systems which is known as scheduled downtime. As a result, users are told that the system will be down at a specific date and time. When the system goes offline, at any other time, it’s known as unscheduled downtime. Our target is zero.



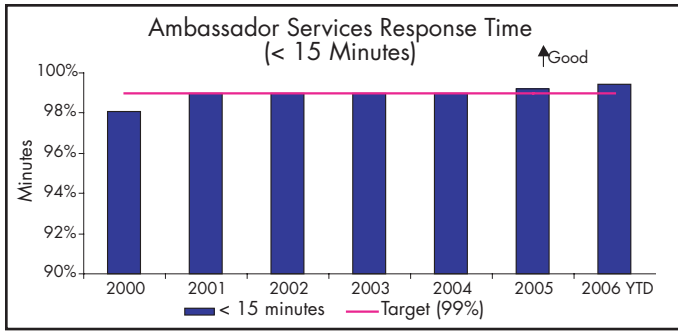
7.5-8 Quality of care is improved and cost is decreased by readily available diagnostic testing information. Procedure completion to dictation of the interpretation time has shown incremental improvement from 2001-2006. We dramatically improved this time with the implementation of PACS in 2005. Report turnaround measures the entire process from the physician order entry to the completion of transcription and availability of results.



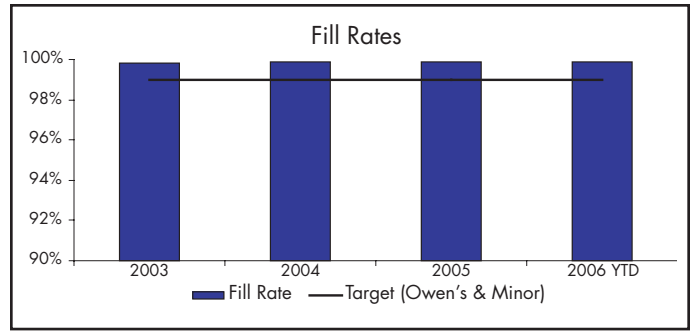
7.5-9 As a result of online work order entry, the percentage of work orders completed in the desired time frame continues to increase. This is another example of using our industry-leading MIS to improve efficiency in operations as well as health care.



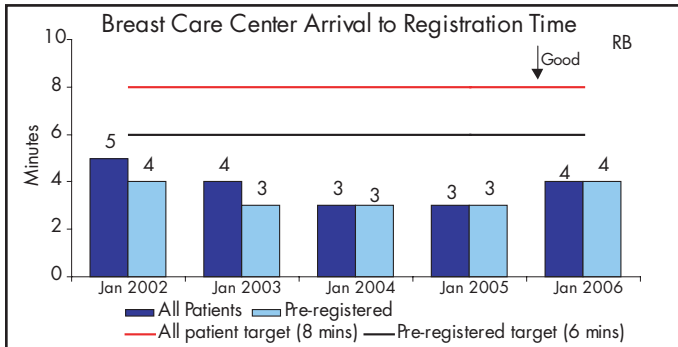
7.5-10 In 2003, NMMC was rewashing 221,439 lbs of linen. As a result, a team was organized to investigate the causes of the increased staining of linen. The team determined that the cause was the chlorine bleach used by Laundry was combining with a antimicrobial agent used throughout the hospital. Laundry switched to hydrogen peroxide bleach and later to ozone washing, which has decreased the total rewash of linen. This process change saved NMMC over \$90,000 in operational costs (1.2b(1)).



7.5-11 Ambassador Services is responsible for the transportation of both inpatients and outpatients throughout NMMC. The exceptional performance of this function increases patient satisfaction and organizational efficiency.



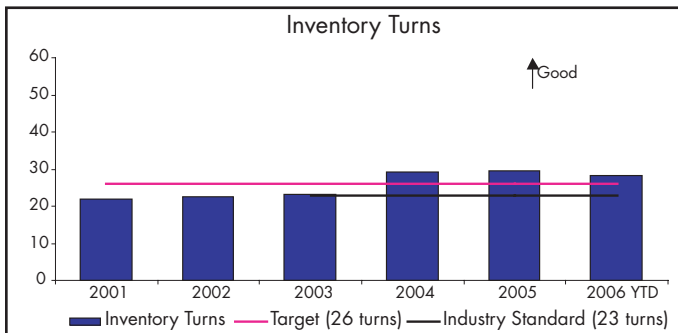
7.5-14 NMMC works with our major supplier, Owens and Minor, to maximize the supply fill rate. Supply fill rate measures the total units shipped as a percentage of total units ordered.



7.5-12 A key driver of outpatient satisfaction is the total time spent as an outpatient. Wait time from arrival to registration is one indicator for this key driver. Time studies and queuing analyses are used to set targets. Targets for both pre-registered and scheduled-only patients continue to be met or exceeded.



7.5-15 The use of a Group Purchasing Organization (Med Assets) allows leveraging of its buying power for better prices. Through negotiation NMMC saved \$6.2 million in FY2005, a continued increase over prior years. Savings from supply contracts improves NMMC's days cash on hand (7.3-5).



7.5-13 Inventory turns measure NMMC's process efficiency related to management of supply inventories. The industry standard is 23 turns. A company turning inventory much slower than the industry average might be an indication that excessive old inventory is on hand which is tying up cash. The faster the inventory turns, the more efficiently the company manages its assets. As a result of increased inventory turn, we have increased our days cash on hand (7.3-5).

2002 - 2005 Awards/Recognition	Sponsor/Years
Top 100 Integrated Health Networks (26th 04; 41st 05)	Modern Healthcare 04, 05
Top 100 Most Wired	Hospitals & Health Networks 02, 03, 04, 05
Top 25 Most Wireless	Hospitals & Health Networks 04, 05
Hospital of the Year (100+ beds)	Mississippi Nursing Association Nightingale Awards 06
People	
Top Ten Training Center by number trained	Mississippi Region AHA 02, 03, 04
Training Center of the Year - Emergency Cardiac Care	Mississippi Region AHA 04
Training/Recruitment	Aegis 03
Worksite Wellness	Governor of Mississippi 02, 03
Service	
Four-Star Customer Service - North Mississippi ASC	PRC 03, 06
5-Star Customer Service-NMMC Inpatient, NMMC Women's Hospital, North Mississippi ASC	PRC 05, 06
Overall Top Performer-Medicine SL, Neurology SL, North Mississippi ASC Outpatient Surgery	PRC 05
Quality	
Top 100 Hospitals in PI: Clinical & Operational	Solucient, Inc. 03, 04, 05
Quest for Quality Prize	AHA/McKesson 05
Acute Care Quality Improvement Project(s)	IQH 02, 03, 04
CME Activities: MD Practice/Outcomes	ACCME 04
Finance	
AA Bond Rating	S&P, Fitch 03, 04, 05
Growth	
Community Leadership	United Way 02, 03, 04, 05

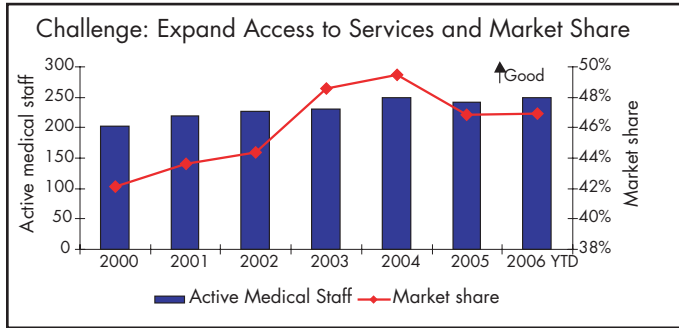
7.5-16 Most notable of these awards are the American Hospital Association-McKesson's Quest for Quality Prize and Solucient's Top 100 Hospital Award. NMMC is one of four hospitals in the nation who have achieved this performance consistently three years running.

7.6 Leadership and Social Responsibility Results

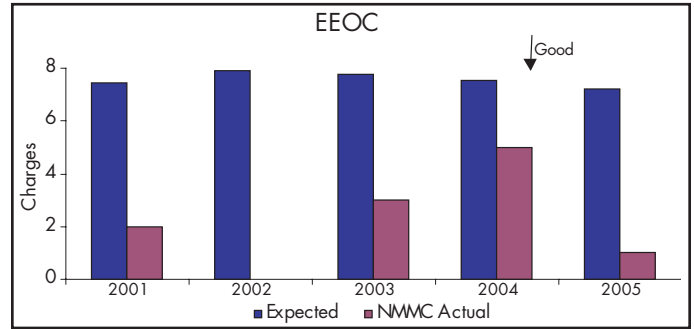
NMMC’s leadership is fully committed to the MVV and has a relentless focus on the CSFS (PEOPLE, SERVICE, QUALITY, FINANCIAL and GROWTH). We are committed to delivering high quality, compassionate patient care in an economically disadvantaged state whose population’s health status typically ranks 49th or 50th in the nation (Fig. P.2-2). This is a tremendous challenge, but we have met it - as demonstrated by excellent clinical outcomes (7.1) and “top box” patient satisfaction (7.2). We have managed our finances well (7.3) and are in a strong position to continue our Mission. We credit our accomplishments to our incredible staff (7.4) and our efficient processes (7.5). NMMC has been blessed with visionary leaders and a devoted BOD who have always placed the community’s health interests first. Category 7.6 closes this application and provides a summary of NMMC’s compliance with accreditation, governance and ethical standards. More importantly, however, it documents our comprehensive efforts to give back to our community, specifically to provide our population with opportunities to lead healthier lives.

Internal Assessment	Result
Employees trained: Corporate Compliance	100% 2005
Employees trained: Ethical Behavior	100% 2005
Contract Reviews	100% 2005
Compliance hotline calls/investigations	112 calls 1998 - 2005
Ethical and Legal violations	0
Internal audits	Avg 100/yr
Internal Assessment of External Criteria	
Independent Board Members	93% 2005

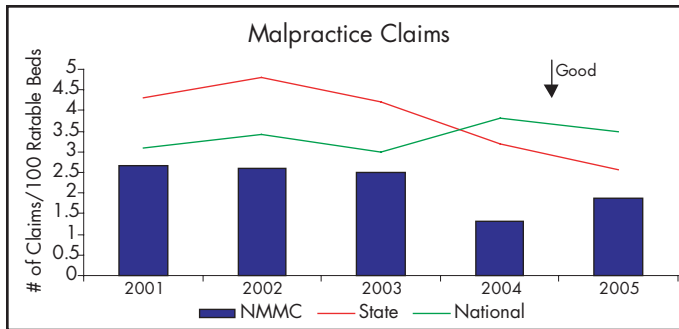
7.6-3 This table represents NMMC’s ethics measures and current results. In addition to the external assessments described in 7.6-11, we perform extensive, systematic internal assessments.



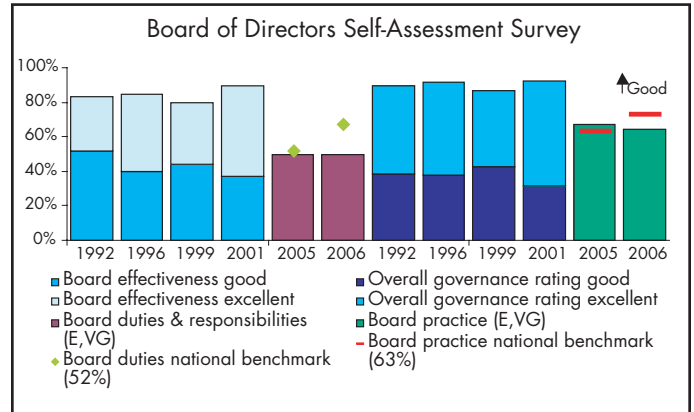
7.6-1 Mississippi is a medically underserved state and NMMC has overcome its strategic challenge of having to recruit physicians to compensate for a shortage of healthcare providers. Increasing the physician base is essential to expanding services and NMMC’s service area’s market share. 2006 data AOS.



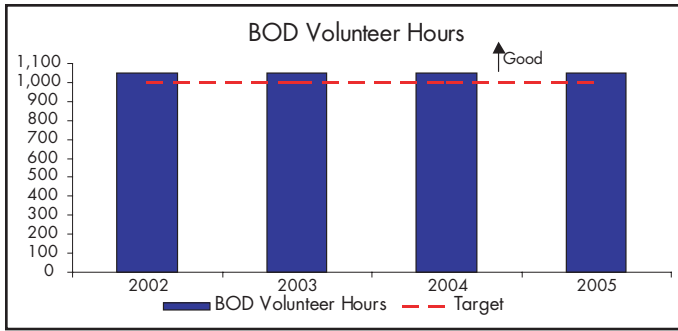
7.6-4 NMMC’s anti-discrimination policies and routine responses to employee concerns have resulted in significantly fewer NMMC employees filing external charges of discrimination compared to other U.S. employees.



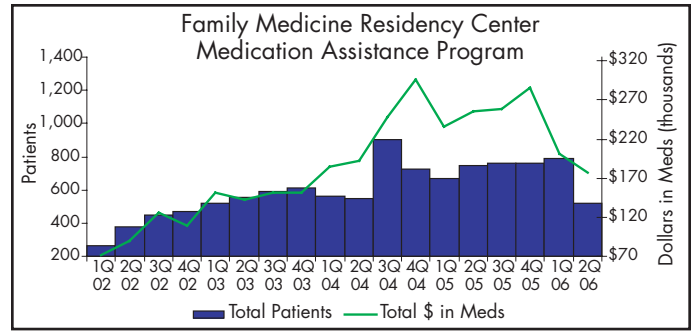
7.6-2 NMMC provides high quality and safe care to its patients, and this is reflected in malpractice claims frequencies. NMMC’s malpractice claims frequencies are well below the state and nation for five straight years and have shown consistent reduction (Fig.1.1-2).



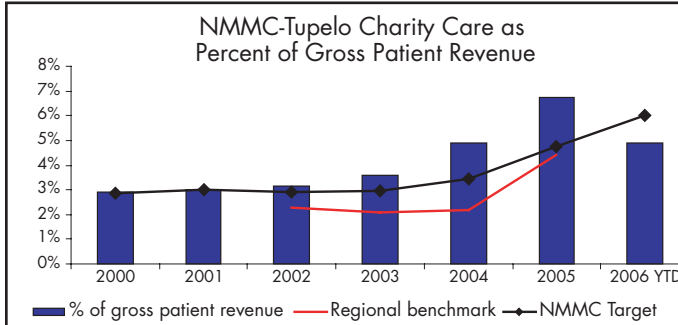
7.6-5 Today’s unforgiving healthcare environment demands nothing less than excellence in health care governance. NMMC’s BOD is periodically surveyed by the Governance Institute to assess the board’s past performance and planning efforts. Over the past five surveys, the board members’ perception of their overall governance and effectiveness has maintained a high rating. In 2005, the items we are tracking changed to Board Duties and Responsibilities (focuses on how effectively the board performs its duties and responsibilities) and Board Practices (focuses on how often the board and/or a committee of the board follow certain board practices).



7.6-6 NMMC’s strong governance has played a vital role in the success of the organization through their high level of participation on committees and task forces.



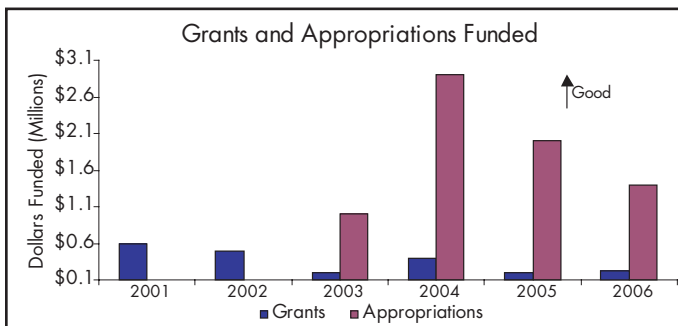
7.6-9 The FMRC provides the Medical Assistance Program (MAP) as a safety net to patients who cannot afford to pay for their medications. A number of pharmaceutical companies provide medications at reduced or no cost to low-income patients who do not have prescription coverage. The FMRC’s MAP helps patients to navigate these “indigent care” programs for optimal prescription medication coverage. In addition, eight patient care funds, maintained through employee and community contributions, help provide medications and other services to patients in need in all NMMC areas.



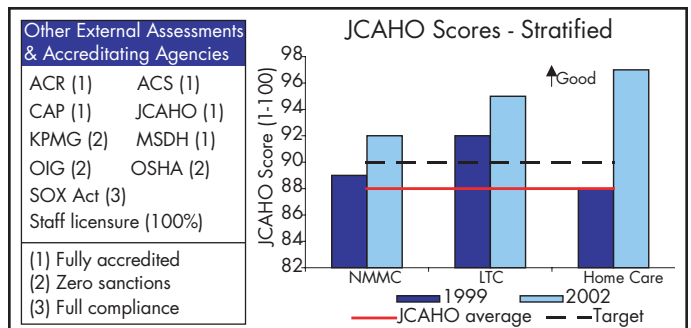
7.6-7 The healthcare industry as a whole has seen significant increase in the volume of charity care during the past few years, and NMMC has shared in that trend. In 2000, NMMC invested 2.9% of its gross revenue in charity care. NMMC’s investments continue to grow and are well above other regional hospitals in the KPMG database. NMMC began a strategy in 1995 to increase the size of its investment portfolio in order to generate investment income that could be used to replace the operating income that would be lost to charity care. Because of that strategy, NMMC’s investment portfolio has grown to more than \$300 million, and the investment income from that portfolio represents a substantial portion of NMMC’s bottom line. Thus, as operating margins have declined, those margins have been replaced with investment income, and NMMC has protected its ability to continue funding the capital investment needed to successfully fulfill its mission in the communities it serves (refer to 7.3-9).

	Actual	Budget	Variance	
			Dollar	Percent
Net Revenue:				
2000	\$ 350,523,260	\$ 319,261,844	\$ 31,261,416	9.79%
2001	\$ 372,784,575	\$ 356,452,609	\$ 16,331,966	4.58%
2002	\$ 390,195,066	\$ 393,070,589	\$ (2,875,523)	-0.73%
2003	\$ 433,419,336	\$ 417,639,908	\$ 15,779,428	3.78%
2004	\$ 456,266,374	\$ 451,795,140	\$ 4,471,234	0.99%
2005	\$ 460,230,232	\$ 477,293,789	\$ (17,063,557)	-3.58%
2006 Projected	\$ 502,864,941	\$ 490,194,449	\$ 12,670,492	2.58%
6-Year Total	\$ 2,615,760,524	\$ 2,586,446,484	\$ 29,314,040	1.13%
Expenses:				
2000	\$ 296,733,757	\$ 284,616,622	\$ 12,117,135	4.26%
2001	\$ 320,077,755	\$ 312,611,852	\$ 7,465,903	2.39%
2002	\$ 342,566,133	\$ 343,610,962	\$ (1,044,829)	-0.30%
2003	\$ 376,497,424	\$ 368,636,275	\$ 7,861,149	2.13%
2004	\$ 414,527,953	\$ 395,983,824	\$ 18,544,129	4.68%
2005	\$ 428,826,515	\$ 435,182,627	\$ (6,356,112)	-1.46%
2006 Projected	\$ 441,220,730	\$ 443,222,303	\$ (2,001,573)	-0.45%
6-Year Total	\$ 2,323,716,510	\$ 2,299,247,843	\$ 24,468,667	1.06%

7.6-10 During the annual budget process, each DH/SLA is responsible for budgeting revenue and cost for their area along with any capital needs for the coming FY. Over the past six years, NMMC has achieved actual revenue of 1.98% over budget while incurring expenses of 1.8% over budget. The ability to predict, within a small margin, revenue and cost reflects the strength of our planning process. Our miss in 2004 was due to an anomaly and our current plans now incorporate this issue. Annual revenue to budget proposed is accurate to within 5% which helps control cost of care.



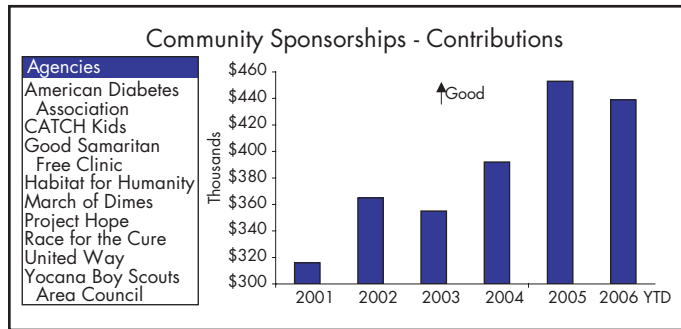
7.6-8 NMMC seeks private and federal grant funding and federal appropriations for projects that support its mission. For example, NMMC just completed a four-year federally-funded study on using the CPA process to increase the number of organ donations and we are currently collaborating with the DOD on assessment of our PACS project.



7.6-11 NMMC’s goal is to be fully accredited by JCAHO and by every appropriate accrediting agency. NMMC consistently strives to surpass minimum requirements set by JCAHO and other accrediting agencies. NMMC sets its goals well above the median score of JCAHO hospitals. We are accredited and in full compliance with all applicable standards effective April 23, 2005.

NMMC Community Benefits	
Charitable donations	\$10,000,000
Charity care	\$27,000,000
Medical cost savings	\$22,000,000
Volunteer services	\$12,000,000
Total	\$71,000,000

7.6-12 To assess NMMC’s contribution to the communities it serves, NMMC contracted with a consulting firm to perform an economic and community benefit study. The study found that NMMC’s employees and physicians generated nearly \$50 million in charitable donations, volunteer service and charity care. This number does not include the \$22 million medical cost savings (charges less than for-profit hospitals) that the community identifies to be valuable.



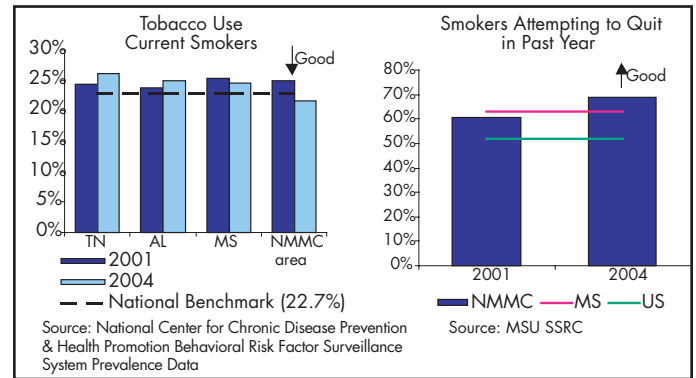
7.6-13 NMMC contributes substantially to the community, giving more than \$450,000 in 2005 and is on track to exceed this amount in 2006. A few of the organizations that received sponsorships are United Way, March of Dimes and Habitat for Humanity. NMMC is not content to just aid its local community by providing financial support. NMMC donates its used computers to local schools to help educate students and uplift its position of being last in the nation in education. Over the last five years, NMMC has donated 3,143 PCs with a total value of \$2.9 million to local schools. (1.2c & 4.2a(4)).

"Live Well" Community Outreach					
	2002	2003	2004	2005	2006 YTD
Participants in health fairs, screenings, health education classes, CPR classes, immunization programs	93,917	167,831	155,981	171,376	172,814
Screening mammograms	6,690	6,132	7,286	8,540	9,453
Participants in community blood pressure screenings	5,530	11,431	7,964	5,746	5,773
Wellness Center membership	4,153	5,560	5,424	5,639	7,100
Healthcare professionals volunteer hours at the free clinic	745	832	825	813	783
Athletic trainers (students)	30,594	111,840	100,302	93,955	73,500

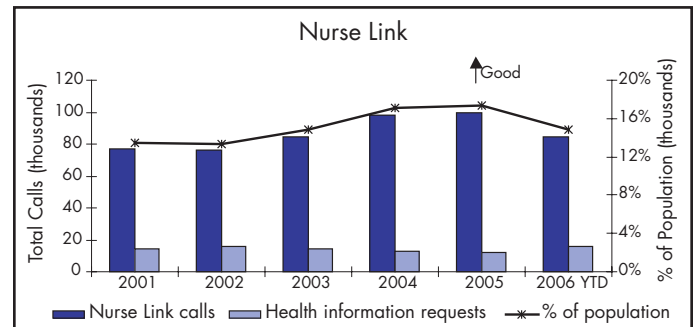
7.6-14 NMMC reaches out to the community we serve by conducting free health screenings throughout the year. Through the "Live Well" initiative, NMMC provides health fairs, safety, smoking cessation, nutrition, alcohol and health education classes, blood pressure screenings, PSA screenings and colon health information (1.2c). The number of participants in NMMC’s community services has sustained at high levels the past five years. The number of participants increased in 2003, 2005 and 2006 because NMMC now conducts health fairs on a biannual basis for several large companies.

Indicator	NMMC 2001	NMMC 2004	MS	US
Adults Reporting:				
Overall poor health status	25.1%	24.5%	21.2%	15.0%
Obesity	26.8%	26.4%	32.5%	22.2%
Positive blood stool test in past year	22.3%	21.0%	19.5%	N/A
Children wear bicycle helmets	19.4%	14.7%	23.7%	44.8%
Smokers - attempted to quit in past year	60.6%	68.7%	62.9%	51.8%
Binge drinking in past month	13.8%	9.2%	9.9%	16.5%

7.6-15 The CHA is repeated every three years and serves a three-fold purpose: It assesses the community health; identifies Live Well needs (7.6-14); and also provides baseline and follow-up data (1.2c). NMMC’s commitment to prevention and wellness is making a difference (1.2c).



7.6-16 Although tobacco use in the surrounding states has increased, smoking rates in the NMMC’s service area and overall state are decreasing. The CHA conducted by the SSRC of MSU also shows in 2001 more than 60% of adults in the NMMC region who smoke had attempted to quit smoking. The percentage increased by 8% in 2004 and is an indicator of our focused smoking cessation campaign’s impact.



7.6-17 Nurse Link is a free community service initiated to assist callers with health information, triage symptom-based calls and make recommendations by utilizing physician approved, computerized protocols and reference material (3.2a(2)). Nurse Link has maintained a high volume of calls each year, including calls for health information requests. Nurse Link calls as a percentage of NMMC’s Mississippi service area population have increased (7.2-8).

GLOSSARY & SUMMARY OF TERMS

3M - Coding and severity rating database

90-day AP - 90-day Action Plan

Acclaim - Health Link's claims administrator

ACCME - Accreditation Council for Continuing Medical Education

ACEI - Cardiac medication

ACLS - Advanced cardiac life support

ACR - American College of Radiology

ACS - American College of Surgeons

ADA - American Disabilities Act

AHA - American Heart Association, American Hospital Association

AHA-SCIP - American Hospital Association Surgical Care Improvement Project

AHRQ - Association for Healthcare Research and Quality

AMI - Acute myocardial infarction

AMS - Advance Medical System - Materials Management information system

AnRev - Annual Review - Required education for all employees

AOS - Available on site

AP - Action plan

BAR - Budget Accountability Report

BOD - Board of Directors

BP - Blood pressure

BSRT(R)MR - Bachelor of Science in Radiologic Technology (Registered Technologist) and Registered in Magnetic Resonance Imaging

CABG - Coronary artery bypass graft

CAP - College of American Pathologists; Community Acquired Pneumonia

Careline - A free phone line for NMMC customers to offer complaints, compliments or comments

CARES - NMMC values: Compassion, Accountability, Respect, Excellence Smile; NMMC customer service model

CareScience - Internet-based software company with risk adjusted patient outcomes

CBCM - Care-Based Cost Management

CBH - Center for Business Health - NMHS subsidiary corporation that operates Health Link health plans

CBT - Computer based training

CCU - Critical Care Unit

CDC - Centers for Disease Control & Prevention

CE - Continuing education

CEO - Chief Executive Officer

CFO - Chief Financial Officer

CHA - Community health assessment

CHF - Congestive heart failure

Checkup - Biweekly in-house newsletter

CIDS - Cost Information Decision Support

CIO - Chief Information Officer

CME - Continuing medical education

CMI - Case mix index - Medicare's resource allocation methodology and represents the relative cost of caring for the average patient

CMO - Chief Medical Officer

CMS - Centers for Medicare and Medicaid Services

CO - Clinical Outcomes

COfficer - Compliance Officer

COI - Conflict of interest

Compliance Hotline - A phone line used by NMMC employees to voice concerns and report possible wrongdoing

CPA - Clinical practice analysis

CPAD - Cost Per Adjusted Discharge

CPR - Cardio-pulmonary resuscitation

CQ - Clinical Quality

CRF - Community Relations Facilitator - The facilitator holds frank, two-way discussions with the communities we serve and relays information to the senior leadership team

CSF - Critical Success Factor - People, Service, Quality, Financial, Growth

CST - Customer Service Team - Critical success factor team focused on customer service

CT - Computerized tomography

CV - Cardiovascular

Dashboard Report - A one-page high level tracking and alignment tool that shows graphs for turnover rate, patient satisfaction, composite quality score, productivity per pay period, cost per adjusted discharge and market share arranged by CSFs

Davies Award - An annual award sponsored by HIMSS that encourages and recognizes excellence in the implementation of Electronic Health Record Systems

DH - Department head

DoD - Department of Defense

DOS - Department of Strategy

EA - Environmental assessment

E-Careline - Compliment/Complaint Management System

ECRI - Emergency Care Research Institute

ECS - Employee communication sessions - these "town hall meetings," conducted 3-4 times per year, are for all employees and led by the senior leadership team

EDI - Electronic data interchange

EEOC - Equal Employment Opportunity Commission

EMR - Electronic medical record

EOS - Employee Opinion Survey

EPP - Evidence-Based Planning Process

ESD - Emergency Services Department

EXCEL - NMMC's performance management system

FMEA - Failure Mode and Effect Analysis - A pro-active performance improvement methodology

FMLA - Family Medical Leave Act

FMRC - Family Medicine Residency Center

FONS - Financial Online Network System

FTE - Full time equivalent

FY - Fiscal Year

GB - Grow the business goals

GroupSystems - A computerized decision support laboratory

GSFC - Good Samaritan Free Clinic - This clinic provides medical care to the area's working poor and NMMC has supported it since it was established in 1992

Health Link - Preferred provider organization associated with NMHS

HF - Heart Failure

HIMSS - Healthcare Information Management Systems Society

HIPAA - Health Insurance Portability and Accountability Act

Hospital Acquired Infection - An infection not present or incubating prior to admittance to the hospital, but generally occurring 72 hours after admittance

Hospital Acquired Pressure Ulcer - Skin breakdown not documented as present on admission

HR - Human resources

HRSRP - Human Resources Strategic Resource Plan

IE - Ideas for Excellence - Empowerment system that encourages employees to submit suggestions for improving service, productivity, or effectiveness

IHI 100K Lives Campaign - Institute for Healthcare Improvement. The 100K lives campaign is an effort to save 100,000 lives per year through promoting evidence-based care in six areas. NMMC has joined this campaign and implemented all recommendations

Incentive Plan - Opportunity for all employees to earn up to 5% of their wages if the organization meets established targets

IQH - Information and Quality Healthcare-Mississippi's Medicare quality improvement organization

IRB - Institutional Review Board

IS - Information systems

ISMP - Institute for Safe Medical Practice

IT - Information technology

JCAHO - Joint Commission on the Accreditation of Healthcare Organizations

JCAHO Core Measures - Outcome and process measures developed by JCAHO in collaboration with CMS

Keys to Success Card - A small card employees carry with their name badge which lists NMMC Mission, Vision, Values, Critical Success Factors, Department/Unit goals and personal goals

Knowledge Board - Staff education tool

Key Drivers - Areas of patient dissatisfaction that if improved will affect overall satisfaction scores

KSA - Knowledge, skills, abilities

LD - Leadership Development

LDI - Leadership Development Institute

LD/SP - Leadership Development/Succession Planning

Leadership - Senior leaders, department heads and key supervisors that meet quarterly

Leapfrog - An initiative driven by organizations that buy health care who are working to initiate breakthrough improvements in the safety, quality and affordability of health care for Americans

Live Well Community Health Initiative - A series of health education programs, health screening and support groups offered free of charge to the public and staff

Live Well Employee Incentive Plan - A program that provides a monetary incentive to employees who meet healthy lifestyle criteria

LOS - Length of stay

LPR - Leadership Planning Retreat - held annually in the spring with participants from the Board of Directors and senior leadership of administration/medical staff/supplier

LRP - Long Range Plans

LTC - Long-Term Care - Also known as nursing home

MDEQ - Mississippi Department of Environmental Quality

MDOH - Mississippi Department of Health

MEC - Medical Executive Committee

MIS - Management Information Systems

MOD - 10 Check Digit - Used for error detection (transposition errors) and is calculated from an algorithm (called the Luhn formula or MOD 10)

Morbidity - The quality of life after an acute episode of illness

Mortality Rate - Death rate

Most Wired Award - An annual award by Hospitals and Health Networks that ranks the 100 Most Wired Hospitals based on a survey that emphasizes the use of online technology

Most Wireless Award - An annual award by Hospitals and Health Networks that ranks the 25 Most Wireless Hospitals based on a survey that emphasizes wireless technologies

MRI - Magnetic resonance imaging

MRS - Management Reporting System - Internal productivity system for clinical and support departments

MSDH - Mississippi State Department of Health

MT(ASCP) - Registered Medical Technologist (American Society for Clinical Pathology)

MSU - Mississippi State University

MVV - Mission, Vision, Values

NEO - New Employee Orientation

NFP - Not-for-profit

NM - Nurse Manager - Individual responsible for delivery of nursing care on one or more patient care units

- NMHS** - North Mississippi Health Services
- NMMC** - North Mississippi Medical Center
- No Excuses/Results Orientation** - Relentless focus on achieving desired outcomes
- No Secrets** - Culture in which information is shared with all staff
- Nurse Link** - A nurse triage/medical information phone line
- OCL** - Off campus locations
- OFI** - Opportunity for improvement
- OI** - Operations improvement
- OIG** - Office of Inspector General
- Open Door Policy** - Culture of encouraging frank, two-way communication among leaders, physicians and employees
- Order Sets** - Comprehensive group of orders for a diagnosis or surgical procedure
- OSHA** - Occupational Safety and Health Administration
- Outcomes and Safety Fair** - Annual day set aside to illustrate current outcome improvements and safety projects
- PACS** - Picture Archive and Communication System
- PCC** - Patient-centered care - Collaborative effort of health care workers closely aligned with and responsive to the patient's wants, needs and preferences
- PDCA** - Plan-Do-Check-Act - Performance Improvement model
- PET** - Positron emission tomography
- PGA** - Press Ganey and Associates - The nation's largest comparative database of patient satisfaction
- Physician Consult Line** - Provides referring physicians immediate and toll-free access to physician specialists
- PI** - Performance improvement
- POC** - Plan of care
- PPO** - Preferred Provider Organization
- Practice Notes** - Medical staff newsletter
- PRC** - Professional Research Consultants - patient satisfaction survey company
- President** - Chief officer of NMMC, reports to CEO of NMHS
- PSA** - Prostate specific antigen
- PSC** - Performance scorecard
- PSOG** - Patient Safety Operations Group
- QCCR** - Quality Care Control Report
- QMS** - Database for QCCRs
- RB** - Run the business goals
- RCA** - Root Cause Analysis - A retrospective performance improvement methodology
- Resource Center** - Contains more than 60 current medical journals, medical books, continuing education materials, patient education materials and a full-time librarian that can assist users in the quest for literature
- RFI** - Request for Information
- RFP** - Request for proposal
- RHIA** - Registered Health Information Administrator
- RN** - Registered nurse
- RRT** - Registered Respiratory Therapist
- School Health Center Initiative** - NMMC provides 17 school nurses to 23 schools in seven counties serving 16,000 K- 8th grade students
- Senior Leader Rounding/Visibility** - SLT members visit places where front line employees and physicians work or congregate
- Sentinel Event** - An unexpected occurrence involving unanticipated death or serious physical or psychological injury or permanent loss of function to patients, visitors, or others
- SEPC** - Safety and Emergency Preparedness Committee
- Servant Leadership** - A leadership approach that includes the following behaviors: humility, patience, kindness, respectfulness, selflessness, forgiveness, honesty, commitment, results orientation, and ego directed toward team accomplishments
- Sixty Second Housecall** - Twice daily health information segment on local TV station featuring NMMC's CMO
- SL** - Service Line
- SLA** - Service Line Administrator
- SLOG** - Service Line Operating Group
- SYSLT** - System Leadership Team
- SLT** - Senior Leadership Team
- Solucient** - A company with the largest health care comparative database in the United States provides clinical, operational, financial and marketing data and benchmarks. Our subscription includes Market Planner Plus, Polaris, ACTION O-I and Market Impact Modeler
- SOX & NFP Hospitals** - Sarbanes-Oxley & Not-For-Profit - Reporting relationship between internal and external auditors and the Audit Committee; certification of financial statement by CEO and CFO; and development and evaluation of internal controls
- SP** - Succession Planning
- Spirit of Women** - Unites the individual efforts of hospitals throughout the United States to educate and care for women in a community-based initiative that addresses the issues of family, health and work through a variety of venues such as educational events, networking opportunities, consumer loyalty programs, national awards and promotion of research
- SRP** - Strategic Resource Plan - Rolling five-year plan for strategic resources, including facilities, clinical technology, information technology, human resources, medical staff manpower and capital
- SSRC** - Social Sciences Research Center
- Stars On-Line** - Recognition program that provides employees the opportunity to nominate fellow employees for exceptional service
- Stat Facts** - Communication of real-time results
- STS** - Society for Thoracic Surgery
- SWOT** - Strengths, Weaknesses, Opportunities, Threats
- TAC** - Technology Advisory Committee

The Desk - NMMC's toll-free appointment and information number (1-800-THE DESK)

Top Box - Excellent, the best

Vim & Vigor - A family health magazine mailed to 38,000 households, using "calls to action" to prompt customer inquiries about NMMC services. An annual readership survey is distributed through Vim & Vigor to help determine the health information customers want to receive

VP - Vice President

VPN - Virtual Private Network

WAN - Wide-Area Network

Women's Health Task Force - A subcommittee of the Board of Directors utilizing female community leaders, physicians and staff who meet to address women's health issues

Women's Network 9 - A joint effort with a local TV station to increase awareness of breast cancer and emphasize the vital importance of monthly self-breast exams

Work Link - A comprehensive occupational health program providing more than 180 companies with workplace services