

UNC Health Care System

**Annual Report
FY 2003-2004**

**Committee on Educational
Planning, Policies, and Programs**

UNC Board of Governors

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Contents

The UNC Health Care System

FY 2003-2004 Actions Taken Under Flexibility Legislation

- Personnel
- Purchases
- Property
- Property Construction

Appendices:

Organizational Chart.....	1
UNC Hospitals Uncompensated Care by County.....	2
UNC-CH School of Medicine Alumni and Former Residents of UNC Hospitals.....	3

The UNC Health Care System

Background

The University of North Carolina Health Care System was established as of November 1, 1998 with UNC Hospitals and the clinical patient care programs maintained by the UNC School of Medicine as the initial affiliates of the enterprise. The mission of the UNC Health Care System is fourfold: to provide patient care, facilitate the education of physicians and other health care providers, conduct research collaboratively with the health sciences schools of the University of North Carolina at Chapel Hill, and render other services designed to promote the health and well-being of the citizens of North Carolina. The UNC Health Care System continues to evolve in size and complexity, most notably with the addition of Rex Healthcare in April 2000. A current Organizational Chart, shown in Appendix 1, has been included to depict how the various planning committees and the senior administrative staff interact with the component units. Appendix 2 depicts the practicing number of UNC-CH School of Medicine alumni and former residents of UNC Hospitals.

FY 2003-2004 Actions Taken Under Flexibility Legislation

The Board of Directors' actions taken under the authority granted in N.C.G.S. 116-37 subsection (d) – personnel; subsection (h) – purchases; subsection (i) – property; and subsection (j) –property construction are summarized below. The Board of Directors of the UNC Health Care System approved all policies. Further, this information, which primarily summarizes the flexibilities used by the Chapel Hill based components of UNC Health Care System, will be sent to the Joint Legislative Commission on Governmental Operations on or before September 30, 2004 as required by statute.

PERSONNEL FLEXIBILITY:

Classification and Compensation System

Fiscal Year 2004 (FY 04) marked the second year of operation of the Health Care System's performance-based compensation system. Since employee salary increases are now to be determined by performance and relationship to market data, there are no across-the-board increases assured to all employees. During a performance cycle budgeted dollars are allocated, using a departmental compensation ratio formula as determined by a comparison of each employee within a department to the market reference point for the employee's classification, to department managers for their distribution to employees,) This ratio is dependent on accurate and current compensation market data as well as accurate assignment of employees to the appropriate salary band and zone. The budget for salary increases is allocated to management who uses this budget throughout the budget year to reward performance and to move the employee throughout the pay zone. The salary administration plan calls for employee increases to be awarded in the quarter of the year in which an employee's performance is evaluated (i.e., anniversary quarter). In this manner, managers directly connect performance and salary increases since the performance review and the salary increase are communicated

at the same time. Managers are given end-of-quarter due dates for increases to be submitted to the payroll system. Beginning in FY 04, performance increases are given in the anniversary quarter.

Managers give base building increases, non-base building increases, or a combination of these increases. In FY 04, eighty-five percent of employees received base building increases that were dependent upon performance. Twenty percent of employees received non-base building increases as bonuses. Some employees received both base building increases and non-base building bonuses.

Salary data assessment software enables data analysis of purchased market data and salary surveys. This purchased data, when combined with data that is obtained from customized surveys, provides a validated market assessment upon which salary range adjustments are made. The market data is refined through a weighting of the relevant market for each professional class. For example, the nursing market is driven by local health care employers' salary structures so that local salary information sources will carry a greater weight.

Position Classification Activity

Position classification activity was focused primarily on the transition to the new classification plan. All Health Care System positions are now managed under the System's classification and compensation system. Several salary survey databases were evaluated for use within the compensation system. These survey databases include multiple national purchased surveys, regional surveys, statewide health care employer surveys, and in-house surveys. We analyze these surveys together or separately to gather as much meaningful and relevant compensation data as is required to develop a reasonable compensation scheme. Markets are now defined for each profession and job family. Salary markets can be local, regional, national, or a combination of these to assure reasonable and accurate comparability within data surveys. These salary market designations are reviewed and changed annually by the Compensation Steering Committee which includes top management staff, departmental leadership, academic department representatives, and compensation staff.

Additionally, classification staff revised policies around procedures for classification, placing greater responsibility on management to recognize changes in work and to recommend classification levels within the compensation structure. Managers are discouraged from writing extensive, overly detailed job descriptions for reclassification purposes. Rather, managers will highlight key job responsibilities, key characteristics of work, and the relationship of this work to others within a work unit so that market data can be used to appropriately market price the work in a particular position.

In FY 04, management requested 1,339 classification actions, down from 1,561 requests in FY 03. The classification and compensation staff completed 1,278 actions in FY 04 and 1,290 actions in FY 03. Seventy percent of these were completed within ten working

days in FY 04; forty-eight percent were completed within ten working days in FY 03. This represents a significant improvement in action turnaround.

FY 04 Compensation Plan

The UNC Health Care System FY 04 operating budget included a 4.0% increase in its compensation budget. Allocation of this budget to managers and departments was done using a market reference point compensation ratio. Based upon the salary compensation ratios within departments, individual departments had allocations that ranged from 2.72% to 5.05%. The average compensation allocation was 3.86%.

- Managers determined employee salary increases by considering an employee's performance, their current salary in relationship to the market data, and their relationship to salaries and performance of other employees within a work unit performing the same work.
- Increases were implemented on a quarterly basis and linked to employee performance and employee anniversary date.
- Longevity bonuses were budgeted for employees who have ten or more years of service. These bonuses were not related to performance and are a function of years of service.
- Nurse retention bonuses were paid to inpatient staff nurses and ancillary procedure nurses in FY04. Nurse managers are eligible for retention bonuses in recognition of the on-going difficulty of recruiting and retaining qualified nurse managers. In FY 04, nurse manager bonuses are aligned with staff nurse retention improvement, budget performance, and patient satisfaction outcomes.
- The Health Care System continues to use a unique hiring scale for nursing staff that utilizes different hiring rates for inpatient bedside nursing staff; hospital-based outpatient, procedure, and clinic staff; and ambulatory clinic nursing staff, strategically compensating inpatient nurses at a higher rate. This is done to direct pay towards areas where nurse retention and recruitment are most difficult, and we will continually assess these areas.
- The Health Care System made salary adjustments for exceptional market movements of critical classes, such as medical coders and radiology technologists. On-going market analysis indicated that other employers were making aggressive salary increases that affected the Health Care System's recruitment, retention, and competitive position; therefore, it was necessary to make similar adjustments to remain within the market position desired for these professions.

The UNC Health Care System continues to use weekend and night differentials to enhance recruiting and retention of nursing staff for difficult-to-staff shifts. These differentials and staff scheduling options have stabilized staffing for these shifts, and the

differentials remain competitive in the local market. Current pay rates for nursing are competitive, but market pay increases are anticipated as the nursing shortage worsens.

A measure of the compensation plan success is the overall relationship the workforce has to the aggregate compensation market. In terms of a comparison of an individual's salary and the market's average salary, the majority of the workforce should be within 90% - 110% of the market average when measured against the market. This is referred to as the market reference range. Our employee distribution is 18% of employees below 90% of the market, 57% of employees in the range of 90% - 110%, and 25% of employees greater than 110% of the market average. This figure does not reflect longevity pay, differentials, or sign-on bonuses, which are not calculated as a part of the base wage for individual employees. In FY 04, the Health Care System aggregate salary index was at 102% of the market after all annual performance increases were awarded.

Minimum Wage Adjustment

Governor Easley directed all State agencies and Universities to adjust the salaries for the State's lowest paid workers. In January 2004, citing a North Carolina Living Wage Threshold of \$8.80/hour (\$18,312/year), the Governor directed that agencies make these adjustments. As the Health Care System evaluated this minimum wage directive and our recruitment and retention goals, we determined that a minimum wage of \$9.00/hour, or \$18,720/year would be more beneficial in both the personal compensation for this group of important employees and our on-going recruitment efforts. Therefore with the full support and approval of the System's Administration, we took this opportunity to set a higher minimum entry wage. Eligible employees' salaries were adjusted to \$9.00/hour effective March, 2004. Two hundred thirty-two employees, in positions such as OR attendants, housekeeping, food service, and nursing assistants received this adjustment.

Performance Management

The Health Care System has now completed the transition to a fully automated on-line performance management system. This management system is directly linked to the compensation system and requires that performance ratings be done on each employee within the calendar quarter of their employment anniversary. Managers rate employees on a set of behavior standards and a set of job-related functions. The scoring scale is based upon a three-point scale of "does not meet, achieves, and exceeds." The combined score of the job-related functions and the behavior standards, each weighted fifty percent of the total score, is recorded for the employee.

In FY 04, performance scores stabilized. On a three-point rating scale, 31.8% of employees received an "exceeds" score, 67.8% received a "meets" score, and 0.4% received a "does not meet" score. This shows a significant shift in ratings when compared against FY 03 scores, where 61% received an "exceeds" score, 37% received a "meets" score, and 2% received a "did not meet score." This shift indicates that managers were more deliberate in scoring according to the guidelines, and the differential between "meets" and "exceeds" is now more discernable in feedback to the employee and managing their performance.

Employment and Retention

Employment and retention strategy is focused on a positive recruitment image for all applicants and an aggressive retention plan for staff nurses.

The Health Care System's employment brand image was promoted successfully through an internal promotion campaign and an external billboard, radio, and television promotion campaign. The Health Care System continued to display billboards along major road entry points into Chapel Hill and the Triangle area. Through the use of radio spots and radio program sponsorships, we increased general awareness of employment opportunities at UNC Health Care. In March 2004, following a leadership change within the Health Care System, we devised a radio campaign to thank employees for working for the System and to encourage others to consider us for employment. We intended to send the message that we were still an active employer and one who considered the stability of its workforce during leadership transition. Numerous employees and applicants recognized this employment brand marketing campaign with many positive comments regarding its effectiveness.

For other professional recruitment, we utilized targeted vacancy listings, internet job sites, recruitment fairs, printed publications, large local newspaper advertisements, and an extensive array of sign-on, relocation, and referral bonuses. We have programs for educational stipends and training/tuition expenses as well as on-the-job training and mentoring when appropriate. Recruitment has improved to the degree that we now rarely use professional search firms, and we are able to source most recruitment within the employment office.

We continue to utilize sign-on bonuses for difficult recruit employee groups, and we monitor the effectiveness of these bonuses on a quarterly basis. Sign-on bonuses have decreased in frequency, and we have eliminated some bonuses that were not effective. Bonuses are no longer required in professions where we are able to recruit successfully, such as radiology and pharmacy.

Recruitment Activity

At the end of June 2004, there were 300 positions in open recruit status compared to 342 at this time in 2003. Despite the intense competition for health care workers both nationally and locally, 1,169 non-nursing employees and 632 nursing employees were hired in FY 2004. In fact, the employment office reports a significant increase in non-nursing applicants in FY04. Total applications processed were 14,302 in comparison with 11,540 in FY 03, an increase of almost 2800 applications.

Application intake continues to increase monthly due, in part, to our increased presence on various web-based recruitment sites that direct interested applicants to our human resources web site where applicants easily can submit an application electronically.

Applicants and new hires continue to voice concerns about the prohibitively expensive medical insurance premiums and the lack of choice of health care insurance plans. Some offers for employment have been declined when applicants understand the out-of-pocket monthly premium and deductible expenses. A further recruitment disincentive is mandatory participation in the State Employees Retirement Program, where applicants complain about the 6% payroll deduction and the lack of portability found in other retirement program options offered by other employers. These recruitment disincentives are problematic in recruitment campaigns and seen as barriers by hiring managers and applicants alike. While we are able to leverage the attraction of working in an academic medical center and the appeal of a varied and complex patient population, the personal expense of costly health insurance premiums and a mandatory retirement program are becoming more and more difficult to overcome. Employees also complain of costly on-site parking and the inevitable annual increase of parking fees.

In contrast, Rex Healthcare employment statistics demonstrate a steady number of applications, holding at almost 16,000 applications in FY 03 and FY 04. Rex filled 657 non-nursing positions and 224 nursing positions in FY 04, both down slightly from FY 03.

Rex and UNC Health Care are sourcing candidates through other web sites that allow candidates to submit resumes electronically. The Health Care System continues to advertise nationally through recruitment ads and recruitment trips and very aggressively locally through radio and paper advertisements. We have established partnerships with educators and training programs to gain access to new grads, and there are scholarships available for nursing, radiology, phlebotomy, and respiratory care. Employment staff routinely attend career fairs and employment fairs hosted by educators and professional societies as a means of increasing career opportunity awareness.

Nurse Retention/Appreciation Bonus Program 2003/2004

Clinical nursing staffs are paid a retention bonus, the amount of which is dependent on the nursing activity (inpatient unit versus outpatient procedure area) and the difficulty of recruiting to fill vacant positions. Retention bonuses range from \$2000/year to \$10,000/year. The retention bonus was budgeted and renewed for FY 04, with more aggressive payments for difficult to recruit inpatient units. The bonus is paid at two designated points during the fiscal year--February and August). Therefore, a nurse may receive up to two nurse retention/appreciation bonuses per year depending on employment date. A new nurse may be eligible to receive a bonus after successful completion of the probationary period and at the next designated pay point.

The bonus is based on the unit vacancy percentage that is calculated just before the payment date at the end of January and July, with bonus pay outs in February and August. The Unit Vacancy Percentage indexes into a bonus payment amount assigned to one of four tiers. The chart below reflects the Vacancy Percentage Tiers and the assigned Retention Bonus payments.

NURSE RETENTION/APPRECIATION BONUS PROGRAM CHART

RETENTION/APPRECIATION BONUS TIER FOR DIRECT BEDSIDE & PROCEDURE/ANCILLARY NURSES	UNIT VACANCY PERCENTAGE	<u>BONUS AMOUNT</u> (Each 6-Month Period)
I	0-19%	\$1000
II	20-29%	\$2000
III	30% or >	\$3500
IV *As approved by Nursing VP Group and HR	Special Consideration	\$5000

One intended outcome of the retention bonus plan is to reduce the number of traveler nurses within UNC Hospitals. That goal has been met, in that traveler staff have been reduced significantly, although not totally eliminated. The FY 03 average of 149 traveler nurses has been reduced to a FY 2004 average of 120 traveler nurses. By June 2004, this number was reduced to 72 traveler nurses, reflecting the influx of new nurse graduates from stipend programs and successful recruitment and retention of experienced nursing staff.

UNC Hospitals have been similarly successful in recruiting radiology technologist staff and clinical pharmacists through aggressive salary administration and employment marketing. As a result, we have nearly eliminated all traveler staff in radiology; in June 2004, there was one traveler in the ultrasound section of that employee group. There is no traveler pharmacy staff at the Hospitals.

The Health Care System foresees increased compensation market concerns for medical coders and billing specialists. Market salary increases have been implemented off-cycle to improve our salary structure with these staff. We continue to survey the local market for these classes to remain competitive.

Overall employee turnover rates continue to decline. Health Care System-wide turnover rates decreased from 22.4% in FY 02 to 16.5% in FY 03. Turnover in FY 04 was calculated at 17.3%. Nursing turnover rates decreased from 21.9% in FY 02 to 16.1% in FY 03 and is at 17.8% in FY 04.

Although the nursing data indicates an increase in turnover, a portion of the nursing resignations is due to a program initiated in FY 03 that permits a nursing staff member to convert from a full time employee to a per diem employee. Per diem employees receive higher wages, do not receive benefits or contribute to employee retirement, and have work schedules that better suit their individual needs. In FY 03, 96 nursing staff converted to per diem status. In FY 04, that number rose to 278 nursing staff. The per diem program is an innovative way to retain staff and provides them with employment

alternatives more attractive than becoming a traveling/contract nurse, while helping the Health Care System stabilize its critical work force. This employment model also provides an alternative from other health care employers and encourages nursing staff who do not need benefits to choose employment with the Health Care System in lieu of other employers.

Nursing and Allied Health Educational Loan and Stipend Support Program

UNC Hospitals sponsors an educational loan and stipend support program that provides funds to students in nursing and allied health programs in exchange for a time-related work commitment. These funds are provided to students in four-year baccalaureate programs, community college programs, and accelerated certificate programs or associate degree programs. Many educators cite the program as a strong incentive for students to enter educational programs and to consider health care careers. It also leads students to commit to UNC Hospitals' employment over other employers, thereby improving our ability to attract these graduates who might otherwise consider other employer job offers. Students must maintain a 2.5 grade point average while in an educational program, agree by contract and promissory note to repay the loan as a work commitment in clinical areas in which the Hospitals have a staffing need, and agree to work a 36-40 hour week when employed. Students may choose types and settings of work (e.g., med-surg nursing or labor and delivery nursing) and the amount of funding support they desire. The work commitments range from 18 months to 36 months to repay the funding support, which ranges from \$12,000 to \$36,000. The higher support levels are designed to draw new graduates to difficult-to-staff nursing areas. To date, 380 students have taken advantage of this funding program. Total expenses to the program are \$5.4 million. However, costs of this program are offset because it helps eliminate very costly traveler and contract staff, reduces recruitment costs, and reduces the need to recruit nationally and internationally. Use of traveler and contract staff has decreased from 166 in June 2003 to 86 in June 2004.

Implementation of an On-line Recruitment, Application, and Employment System

The Health Care System Employment Office has completed the implementation of an on-line recruitment, application, and employment system. The system, named STAR, fully automates position vacancy advertising, application submittal, and application routing. Applicants search for vacant positions on-line, complete an application, and forward it electronically to our applicant database. Hiring managers have immediate access to all applications on file for positions they are recruiting to fill. They can recruit, interview, and make hiring decisions within their own timeframe. The on-line application system avoids delays inherent in the Employment Office paper process, maintains data files, and facilitates hiring processes to a degree that hiring managers now have full control over the hiring process timeline. Managers report much faster access to the applicant pool; a better means to determine skills and work experience, and an easier communication process between them and the Employment Office. Of note, the Employment Office staff can now devote former paper processing time to the more beneficial process of applicant recruitment, identification, and applicant/job matching. Employment staff are now

deployed to find applicants for difficult-to-fill positions; and they work with hiring managers to develop specific recruitment campaigns. Attendance at job fairs and career events have increased as more time is available to aggressively seek talent.

Employee Opinion Survey

During November and December 2003, UNC Health Care System employees participated in an employee opinion survey. This voluntary survey was made available to employees through three modalities: paper, web-based, and portable computerized stations. Seventy-four percent of the UNC Health Care System employees (n = 3992) completed the survey. This percentage is significant in that it assures that the data can be representative of the whole employee population.

The Health Care System human resources staff developed an extensive manager training, communication, and roll out process for release of the survey data. All levels of management received training and assistance in communicating the survey findings, using employee feedback on the interpretation of the data, and involving employees in action planning to make workplace improvements. The survey vendor designated our roll out process as a “best practice” and noted the thorough and extensive support provided to managers as they discussed and integrated the survey findings.

The survey vendor provided consultant services and cited the following key outcomes of the survey:

- All fifteen-employee survey variables numerically surpassed their 2002 score; thirteen of these variables exceeded the previous scores by a statistically significant margin.
- All fourteen management survey variables (i.e., those variables that measure management’s response to survey questions) numerically surpassed the 2002 results.
- The Organizational Health Index, a work climate index that is highly correlated with overall employee satisfaction, varied insignificantly from the vendor database mean. Improvement was noted as we moved from the twenty-first percentile to the thirty-eighth percentile of the database.
- The Work Environment Index, most useful at measuring satisfaction at the department level, scored above the vendor database at the sixtieth percentile.
- Both employees and managers view the organization as a quality organization worthy of their pride of association. Nearly 83% of staff and 95% of managers indicate they are personally proud to be employed by the Health Care System.

- Nearly 84% of the employees and 92% of the managers who understand the goals, mission, and future direction indicate confidence that the system is headed in a positive direction.
- Nearly 82% of the staff and over 92% of the managers see the Health Care System as a “quality organization.” The same percentages hold true for “the organization being headed in the right direction.”
- The positive identification with one’s job and immediate work environment appear sufficient to provide acceptable levels of job satisfaction. Over 71% of staff are satisfied with their jobs; and 27% indicate that their personal job satisfaction level has remained increased over the past year.
- Customer service and respect for diversity within the workplace received high scores by staff and managers. Ninety-seven percent of staff indicate customer service is an important part of their responsibilities; and 82% of staff indicate that customer service is at a high level within their department. Over 78% feel that people of different races are treated equally in their department.
- Overall communications and employee involvement in decision-making requires sustained improvement. The survey vendor noted, “the scores related to overall communications have improved by 6.4%, an impressive movement in an area very difficult to improve.”
- Employee “engagement” in the organization can be improved by more attention to staff growth, feedback to staff, more staff involvement, and responsiveness to staff identified needs.
- Most employees see the Health Care System as an organization they can remain with for some time; 73% indicate they are committed to the System and its mission.
- Employees with less than one year of service are significantly more positive than those with more than ten years of service.

Throughout the year, management continued to stress the employee opinion survey as a priority, providing on-going training, communication assistance, and consultants to improve department and organization scores.

The Health Care System will re-survey its employees in May-June 2005. Managers are reminded that improvement in employee satisfaction is a key strategy in employee retention. Hospitals managers have been given a budget allocation for use as an employee recognition and rewards tool. The Health Care System has formed an Employee Rewards and Recognition Task Force to improve these practices and to create new ways to express appreciation to our employees.

Resident Duty Hours

New accreditation guidelines for resident duty hours became effective July 1, 2003. The guidelines define maximum resident duty hours that may be worked for medical residents in training. These guidelines are intended to respond to concerns that residents in training have been exposed to excessive work and on-call schedules. It is hoped that the revised number of duty hours will contribute to patient safety, resident health and well being, and effective training.

The Graduate Medical Education Committee (GMEC) addressed the duty hour requirements, evaluating training programs that could potentially exceed some of these guidelines. Subcommittees composed of program directors, GME staff, and residents devised work schedules and on-call assignments to meet the requirements without compromising education or patient care. Housestaff have identified tasks and duties that do not contribute to their learning and can be assigned to others, and recommendations were made to a senior executive panel that subsequently endorsed the recommendations. In FY 04, the Hospitals funded 16 resident positions and additional pharmacists, phlebotomists, health unit coordinators, interpreters, respiratory therapists, and nursing staff. Full year costs to UNC Hospitals will be \$1.611 million for all of these additional positions.

One program, Neurosurgery, made an application for a 10% increase in duty hours and was granted an exception from the eighty-hour limit. This program was the first exception granted due to their compelling need to permit residents to follow complex cases to their clinical end without interruption from a duty hour limit.

A GMEC subcommittee will investigate allegations of excessive duty hours and report findings to the GMEC. Individual programs report to the GMEC on their duty hour practices and a subcommittee monitors the reports to assure on-going compliance and proactive problem identification and resolution. Program directors note that these guidelines may interfere with the educational and clinical learning process, and close attention is being paid to the clinical learning process and the outcomes of competency monitoring in housestaff training. The UNC Health Care System Executive Council has been briefed on the Accreditation Council for Graduate Medical Education (ACGME) guidelines, and the UNC Health Care System Board of Directors Joint Conference and Quality Committee has received information on this issue.

Workforce Development for Employees in the Health Care System

UNC Hospitals participated in a nation-wide demonstration project called School at Work. In partnership with Durham Community College, Hospitals employees are encouraged to learn about health careers and to prepare them to enter into further learning for these careers. Sixty health care employers across the nation participated in distance learning via broadcast and internet instruction to advance low-wage/low-skill workers to entry level health care occupations. Fifteen employees for Environmental Services,

Nutrition and Food Services, and Radiology Film Management enrolled in the curriculum after a selection and testing process. Participants selected one of two career tracks (clinical or clerical) and began preparation for careers in these fields. Participants noted that this program shows the organization's support of their advancement, allows them an opportunity to advance within the organization, and to become better employees in a chosen job. Four of the participants are expected to enroll in a formal education program in Fall 2004 to pursue associate degrees in health careers.

The Health Care System also provides significant tuition assistance for its employees. In FY 04, 466 employees took advantage of this tuition assistance to pursue associate, bachelor, masters, and doctoral degrees. The expense to the Health Care System was \$189,252.

The Hospitals sponsors high school students who are enrolled in health careers curricula by providing a clinical shadowing experience and by providing a staff member to coordinate student training and experience in health care settings. Both Chapel Hill Carrboro and Orange County School Systems partner with the Hospitals to make these experiences available to students.

The Hospitals also has over 100 student training and educational affiliation agreements with colleges, universities, and technical colleges from across the nation. These partnerships provide clinical training opportunities, externships, internships, and post-graduate fellowships in a variety of clinical and operational specialties ranging from pharmacy to recreation therapy to physical therapy. Students spend time on site in the Hospitals and are exposed to actual clinical care venues so that realistic training under supervision can be extended beyond the classroom. The Hospitals finds these partnerships to be useful in workforce development and a powerful recruitment opportunity for students who complete the training assignments.

PURCHASING FLEXIBILITY:

A number of noteworthy decisions and events occurred in FY 04 as a result of expanded initiatives by the UNC Hospitals' Materials Management Department. The department was able to finalize a number of significant projects that, in addition to favorably impacting the Hospitals financial picture also elevated the level of patient care and safety through the application of state-of-the-art technology. Additionally, under the umbrella of Health Care System purchasing, collaborative efforts with Rex Healthcare further advanced with the decision to establish a committed business relationship with a group purchasing organization (GPO) MedAssets.

The following categories have been used to summarize FY 04 Purchasing Flexibility activity:

- *The Purchasing Department Annual Report* includes documented cost saving initiatives and major accomplishments. Incorporated in the report is a major upgrade to patient physiological monitors and the addition of a medical management module (as an upgrade to infusion pumps) that adds an additional level of patient safety to the bedside.
- A summarization of the decision process and benefits of converting our primary GPO affiliation from Novation to MedAssets in collaboration with Rex Healthcare.
- *The Flexibility Report*, which illustrates purchasing statistics from FY00 through FY04 including purchase orders over \$10,000 in value.

The Purchasing Department Annual Report

The Purchasing Agents in the UNC Hospitals Purchasing Department, in addition to their standard job performance and customer service requirements, have to meet specific department-based criteria designed to promote professionalism within the department. They are also responsible for leading the on-going process of contributing towards organizational expense reduction goals with the hospital-based departments that they service.

All Purchasing Agents, including the Clinical Resource Utilization Specialist who is a member of the Purchasing Department and conducts clinical product evaluations and conversions, are required to complete course work for attaining certification in purchasing management. This and other educational and professional development activities support another key aspect of their position; which is to actively seek, achieve, and document cost savings opportunities. The primary credo behind this performance mandate is that each Purchasing Agent is in a position to reduce cost on a daily basis. From the very small acquisition to the very large, each Agent is required to document the method and value of the savings they have achieved. These figures are compiled

quarterly and reported annually each July. The following table represents the UNC Hospitals Purchasing Department annual report from its inception:

FISCAL YEAR	DOCUMENTED SAVINGS
FY 00	\$1,078,942
FY 01	\$1,999,671
FY 02	\$1,598,958
FY 03	\$1,411,289
FY 04	\$2,880,312

Major Purchasing Accomplishments

Adult Patient Physiological Monitors - Well before the beginning of FY 04, management and clinical staff had expressed the need to move from multiple patient monitoring platforms to a single technology. This process, under the leadership of Jeff Yardley, UNC Hospitals Purchasing Manager, took a full year to complete and included extensive clinical trials in several different areas of the Hospitals. In completing the project, Mr. Yardley created a multi-disciplinary team consisting of representatives from Surgical Services, Cardiac Services, Biomedical Engineering, and Nursing as well as physicians and administration. This team was involved in every phase of the project and eventually reached a consensus to standardize to Philips Medical Systems. This decision brought to the Hospitals the most state-of-the-art technology in adult monitoring for the benefit of patients and staff. Additionally, Mr. Yardley negotiated an overall savings of greater than \$500,000 with prices remaining firm for the duration of the purchases despite a price increase from Philips in April 2004. Installation is now underway and will continue well into FY05. It will involve total upgrades in 14 in-patient units and Surgical Services as well as a full upgrade of telemetry systems.

Medical Management Module Upgrade – Beginning late last August (DATE), Abbott Laboratories, the manufacturer of the Plum A+ infusion pump used at the Hospitals, partnered with the UNC Hospitals Pharmacy Department to develop a medical management module for the pump. UNC Hospitals was the lead hospital of three hospitals that Abbott chose nationally for this project. The module, when inserted and activated within the pump, is designed to provide an extra level of patient safety at the bedside by utilizing soft and hard pre-defined limitations on drug doses.

Due to UNC Hospitals' commitment to the development of this product and its strong business relationship with Abbott Laboratories, a 57% discount was received off market value for the modules, resulting in an overall savings to the Hospitals of approximately \$539,525 over a 5-year period. Additionally, the upgrades were implemented in April 2004 with no capital outlay and all payments deferred until July 2004.

Group Purchasing Organization Conversion

In September 2003, a team consisting of materials management and administrative personnel from UNC Hospitals and Rex Healthcare collaborated to examine the group purchasing organization (GPO) marketplace to determine if an alternative GPO could deliver significantly greater value to the Health Care System beyond the current relationship, which was with Novation. A formal Request for Proposal (RFP) was created and released to Novation and three other GPOs. The objective was to identify the potential for achieving specific and sustainable reductions in the Health Care System supply and service expense as well as to enhance purchasing contract utilization and to maximize product standardization.

In order to facilitate and enhance the decision-making process, a series of half-day presentations by the GPOs were scheduled. Key stakeholders, such as Surgical Services, Radiology, ISD, and the Pharmacy, from both hospitals were represented at the presentations. With feedback from the stakeholders, coupled with a thorough analysis of the proposals, the team selected MedAssets as the primary GPO for the Health Care System.

The decision to move away from Novation was difficult. However, the team felt very strongly, in the final analysis, that MedAssets offered significantly greater value in two key areas. Their WEB-based information technology systems will help to insure that both institutions are paying the right contract-based price for a product at the inception of the purchase order. Both institutions will be able to compare and aggregate the purchases of identical products, which will enhance both institutions' bargaining position with vendors and allow greater access to discounts. The other key area had to do with the product group referred to as Physician Preference Items (PPI). MedAssets, through a company they own called Aspen Metrics, has superior resources and expertise to support expense reduction initiatives with these items, which are high cost products that are not effectively covered by traditional GPO agreements.

As part of our partnership agreement with MedAssets, a target of \$5,000,000 was established in supply and service expense reductions over the first 18 months of the agreement for the Health Care System.

Purchasing Activities

Purchase Order Stats		
<u>FY00</u>	<u>All Purchase Orders</u>	<u>Purchase Order Totals Over</u>
		<u>10K</u>
Number of Purchase Orders	46554	2858
Total Dollars*	\$143,774,707	\$87,507,181
Average Dollar Per PO	\$3,088	\$30,618
<u>FY01</u>	<u>All Purchase Orders</u>	<u>Purchase Order Totals Over</u>
		<u>10K</u>
Number of Purchase Orders	45939	3079
Total Dollars*	\$167,908,964	\$111,976,967
Average Dollar Per PO	\$3,655	\$36,368
<u>FY02</u>	<u>All Purchase Orders</u>	<u>Purchase Order Totals Over</u>
		<u>10K</u>
Number of Purchase Orders	48807	3592
Total Dollars*	\$174,469,663	\$114,703,994
Average Dollar Per PO	\$3,575	\$31,933
<u>FY03</u>	<u>All Purchase Orders</u>	<u>Purchase Order Totals Over</u>
		<u>10K</u>
Number of Purchase Orders	50968	4558
Total Dollars*	\$239,028,570	\$174,444,765
Average Dollar Per PO	\$4,690	\$38,272
<u>FY04</u>	<u>All Purchase Orders</u>	<u>Purchase Order Totals Over</u>
		<u>10K</u>
Number of Purchase Orders	49953	4444
Total Dollars*	\$230,014,333	\$165,902,468
Average Dollar Per PO	\$4,605	\$37,332
* Total Dollars includes all PO costs (i.e., Goods, Services, Tax, Freight, Handling Fees, etc.)		

FLEXIBILITY IN PROPERTY MATTERS:

The Property Oversight Committee, as established by the UNC Health Care System Board of Directors, oversees real property transactions. This committee considers transactions involving real property that is leased or purchased. The protocol of the Real Property Committee effectively reduces the timing of real property transactions by as much as sixty days or more as compared to the former method involving the State Property Office. The State Property Office provides periodic helpful consultation in this process.

Property Involving Leased Space for Clinical Programs:

- UNC School of Medicine's Department of Obstetrics/Gynecology (Raleigh) - 1185 sq. ft.
- UNC Health Care System (Central Medical Park, Durham) renewal - 3,701 sq. ft.
- UNC Health Care System (Chatham Crossing, Chapel Hill) - 8,000 sq. ft.
- UNC School of Medicine's Department of Pediatrics (Highgate, Durham) 4,034 sq. ft.
- Children's Cardiology (Wake Med) - 1,860 sq. ft.
- UNC Employee Services and Management program (Chapel Hill) renewal 626 sq. ft.
- UNC Health Care System (Chapel Hill North) - 9,000 sq. ft.
- UNC School of Medicine (Speech and Hearing) Chapel Hill - 3,400 sq. ft.
- UNC Health Care System (Brace Shop) Durham - 641 sq. ft.

Property Involving Leased Space for Administrative Functions:

- UNC School of Medicine's Department of Pediatrics (Chapel Hill) reassigned from the INTRAH program - 6,094 sq. ft.
- Warehouse storage (Chapel Hill) renewal - 14,090 sq. ft.
- Medical Records storage (Chapel Hill) renewal - 1,440 sq. ft.
- UNC P&A Administrative offices (Chapel Hill) - 8,718 sq. ft.

FLEXIBILITY IN CONSTRUCTION MATTERS:

The Construction Bidding Oversight Committee developed and uses approved criteria to determine when to utilize alternative forms of construction bidding (e.g., single prime versus multi-prime, etc.). The criteria require a formal presentation, review, and discussion of projects proposed for construction using an alternative bidding methodology. Single prime bidding is most often used, but UNC Hospitals is also utilizing construction management at risk as a form of bidding for large projects.

The following projects and their proposed construction bidding methods were considered and approved by the Construction Bidding Oversight Committee during the past year:

- N. C. Cancer Hospital-construction manager at risk
- Fourth Floor Operating Rooms Renovations - single prime
- Anesthesia/Pain/Spine Clinic – single prime
- Cytogenetics – single prime
- Emergency Department Renovations – single prime
- Inpatient Bed Relocation and Renovations – single prime
- Cardiac Graphics Renovation – single prime
- Ground Floor Fire Code Exit Renovations – single prime

Design contracts were approved for the following projects in accordance with the designer selection procedures approved by the UNC Health Care System Board of Directors:

- N. C. Cancer Hospital
- Vascular Interventional Radiology
- Pediatric Cardiology Clinic and Catheterization Laboratory
- Coffee Shop Renovations
- Gastro Intestinal Procedures