APPENDIX G

UNC Health Care System
Annual Report

FY 2004-2005

Committee on Educational Planning, Policies, and Programs

UNC Board of Governors

Submitted
September 9, 2005

UNC Health Care System - Executive Summary

The UNC Health Care System continues to benefit from N.C.G.S. 116-37, which delegates flexibility as it relates to personnel, purchases, property, and property construction matters. The vision of the UNC Health Care System is to be the Nation's leading public academic health care system and this flexibility has allowed us to significantly respond to the changing environmental forces that impact the delivery of health care services to the people of North Carolina. The following summarizes several operational areas that have been improved as a result of management having the appropriate flexibility status.

Fiscal year 2005 marked the third full year that the Health Care System's performance-based compensation system has been in operation. Having the ability to reward and retain our best employees enables us to provide optimal service to the citizens of North Carolina. The average performance-based compensation increase for our employees was 3.48%. This enabled the Health Care System to maintain an average salary index at 102% of the market average after all annual performance increases were awarded. As a result, there were 175 positions open at the end of June 2005, compared to 300 at the same time last year. Our aggressive plan to retain staff nurses resulted in a reduction of traveler nurses from an average of 120 in FY 04 to 62.1 in FY 05. This effort significantly benefits our patients through the continuity of care our staff nurses provide.

UNC Hospitals continues to sponsor an education loan and stipend program that provides funds to students in nursing and allied health programs in exchange for a time-related work commitment. This program provides UNC Hospitals a recruitment advantage through the employment commitments of graduates who might otherwise consider other offers for employment. To date, 500 students have taken advantage of this funding and the need for traveler and contract staff has decreased from 166 in June 2003 to 72 in June 2005 and has been completely eliminated in radiology, pharmacy, and nurse anesthetists. Also in FY 05, 323 Health Care System employees took advantage of our tuition assistance program to improve their skills that directly benefit us through enhanced patient care.

In FY 05, the materials management department put into operation a new primary group purchasing organization contract and began the process of converting nearly $100 million in supply and service contracts from Novation to MedAssets. Targeted savings in excess of $2 million were achieved for capital purchases and operational expenses. Purchasing flexibility has allowed the Health Care System to compete in the rapidly changing materials management environment and respond to the constant emergence of new technologies.

The delegated flexibility in property and construction matters has expedited a number of transactions that are cited in more detail in the full report. We have been able to optimize the expansion of off-campus programs and streamline the procurement of optimal locations for market share retention. The rapid development of a cosmetic dermatology clinic that utilizes the expertise of two new medical staff and the expansion of the ENT clinic to an off-site location are just two of many examples.

The UNC Health Care System initiated the Performance Improvement Project in September 2004 to increase financial margins by optimizing performance and cost competitiveness while maintaining quality of care, customer satisfaction, and commitment to academic excellence. This initiative focuses on revenue cycle management, patient throughput and capacity management, and the development of a productivity-based clinical compensation plan.

This is an exciting time for the UNC Health Care System as we make improvements that would not be possible without our flexibility status.

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The University of North Carolina
Health Care System

Background

The University of North Carolina Health Care System was established on November 1, 1998 to integrate UNC Hospitals with the clinical patient care programs maintained by the UNC School of Medicine. The vision of the UNC Health Care System is to be the Nation's leading public academic health care system—leading, teaching, caring. Our primary focus must be improving the health of our patients and meeting their needs. We must deliver excellent service and operate leading programs. We must be deeply and broadly engaged with the people of North Carolina and the Nation to meet their health challenges. Throughout, we must maintain financial viability for the Health Care System, with margins sufficient to support our missions.

The addition of Rex Healthcare in April 2000 is an example of how the UNC Health Care System continues to evolve in size and complexity. The current structure of the Health Care System is illustrated in the organizational charts shown in Appendix 1A and 1B.

Actions Taken Under Flexibility Legislation - FY 2004-2005

The authority granted in N.C.G.S. 116-37 subsection (d) personnel; subsection (h) purchases; subsection (i) property; and subsection (j) property construction has allowed the Board of Directors of the UNC Health Care System to approve the policies summarized below. The following report, depicting how this flexibility is utilized by the Chapel Hill component of the UNC Health Care System, will be sent to the Joint Legislative Commission on Governmental Operations on or before September 30, 2005, as required by statute.

FLEXIBILITY IN PERSONNEL POLICIES

Compensation

The 2005 fiscal year marked the third full year that the Health Care System's performance-based compensation system has been in operation. The flexibility granted the HCS enables us to award salary increases based on merit and relationship to market competition, rather than assuring standardized across-the-board increases to all employees irrespective of performance. Having the ability to reward and retain our best employees helps us to provide optimal service to the people of North Carolina. Through the decentralization of salary decisions, managers have more control over the budget and its allocation throughout the fiscal year. The salary administration plan calls for increases to be awarded during the anniversary quarter in which an employee's performance is evaluated. This enables managers to communicate to employees the direct connection between performance evaluation and salary increase.

Salary range adjustments are made using data assessment software that analyzes purchased market data combined with customized surveys. This information is then weighed against relevant market data for each professional class. For example, information on local salary structures carries greater weight in determining the pay scale for nurses because the nursing market is driven by local healthcare employers. Other markets may be limited to a few local employers, and some markets are selected from academic medical centers and health care employers of similar mission, size or complexity.

FY 05 Compensation Plan

The FY 05 operating budget included a 3.5% increase for employee compensation. The budget allocated to managers and departments was based on a market reference point compensation ratio. Individual departments were given allocations ranging from 2.70% to 4.43% of the base compensation budget. The average compensation allocation was 3.48%. The flexibility afforded the Health Care System provides the following advantages:

- Managers were able to base employee salary increases on performance, current salary in relationship to market data, and comparison to salaries and performance of other employees within a work unit performing the same type of work.
- Managers could offer either base-building increases, non-base-building bonuses, or a combination of both. In FY 05, 77% of our employees received base-building increases; 12% received non-base-building bonuses; and 9% received both increases and bonuses.
- Longevity bonuses were budgeted for employees with ten or more years of service. These bonuses were based solely on years of service, without regard to performance.
- Bonuses were paid to inpatient staff nurses and ancillary procedure nurses in FY 05 as an incentive for attendance and retention. Staff nurses were eligible for a total of two $1000 bonuses, distributed in six-month increments over the fiscal year.
- Nurse Managers were eligible for bonuses of up to $5,000 based on their unit's fiscal performance, staff retention, and the results of employee opinion and patient satisfaction surveys. These bonuses help us to meet the increasing challenge of recruiting and retaining qualified nurse managers and to demonstrate the value these employees hold for the Health Care System.
- Our unique hiring scale for nursing staff utilizes different rates for inpatient bedside, hospital-based outpatient, procedure, clinic, and ambulatory clinic nursing staff--with inpatient nursing, where staffing is most difficult, at the higher end of the scale. Market data indicates that rates vary among inpatient and outpatient care settings.

The aggregate compensation market is used to measure the effectiveness of our compensation plan. The majority of the workforce should be compensated within 90-110% of the market average, according to the "market reference range." Our employee distribution is as follows: 21% of employees are below 90%, 55% of employees are within 90-110%, and 24% of employees are at more than 110% of the market average. This does not reflect longevity pay, differentials, or sign-on bonuses, which are not calculated as part of the base wage for individual employees. In FY 05, the Health Care System's aggregate salary index was at 102% of the market average after all annual performance increases were awarded.

Position Classification Activity

Several salary databases are utilized in the design of our compensation system. These databases include multiple purchased national surveys, regional surveys, statewide healthcare employer surveys, and in-house surveys. We analyze these surveys together or separately to gather the data relevant to developing a cohesive compensation scheme. Markets have now been defined for each profession and job category. Salary markets may be local, regional, national, or any combination of these to assure reasonable and accurate comparability within data surveys. These salary market designations are reviewed and revised annually by our Compensation Steering Committee, which includes academic department representatives as well as senior management, departmental leadership, and compensation staff.

Classification procedure policies were revised to place greater responsibility on management to recognize changes in work and recommend classification levels within the compensation structure. Rather than writing extensive job descriptions for reclassification purposes, managers are encouraged to emphasize key job responsibilities and characteristics and the relationship this work has to other positions within a specific work unit so that market data can be used to appropriately gauge the market value of a particular position.

Management requested 1,563 classification actions in FY 05, up from 1,339 requests in FY 04. Our classification and compensation staff completed 1,484 classifications in FY 05, compared to 1,278 in FY 04. A significant improvement in turnaround time is demonstrated by the fact that 83% of these actions were completed within ten working days during FY 05, where only 70% were completed within the same time frame in FY 04.

Recruitment Activity

There were 175 positions open at the end of June 2005, compared to 300 at the same time last year. Despite national and local competition for healthcare workers, 758 non-nursing employees and 687 nursing employees were hired in FY 05, with a significant increase in non-nursing applicants. There were 17,711 applications processed in FY 05, compared to 14,302 in FY 04, reflecting an increase of almost 3,400 applications.

Rex Healthcare employment statistics demonstrate a steady number of applications, holding at 16,770 in FY 05. Rex filled 772 non-nursing positions and 283 nursing positions in FY 05, an increase in both categories from the 657 non-nursing and 224 nursing positions in FY 04.

Nurse Employment

Offering weekend and night differentials has stabilized staffing by helping us to recruit and retain nurses for the shifts most difficult to staff. These differentials remain competitive within the local market. While our current rates for nurses are competitive, market increases are anticipated with the escalating nursing shortage. Our strategies of workforce development, aggressive compensation management, and retention efforts have stabilized our nursing workforce. Although we continue to add nursing positions, especially to correct staffing and patient acuity ratios, we believe that our reputation as a preferred employer within the local market helps us attract and retain staff.

Employment and Retention

Our employment and retention strategy focuses on presenting a positive recruitment image to all applicants and an aggressive plan to retain staff nurses. A targeted, more selective recruitment approach has resulted in fewer vacant positions than in recent history. With retention being a targeted strategy and competency for managers, employee turnover has stabilized due to managers focusing on employee satisfaction, communication, and involvement in decision-making. System-wide turnover rates have held steady from 17.3% in FY 04 to 17.4% in FY 05. Nursing turnover rates also remained steady at 17.8% in FY 04 and 17.7% in FY 05.

Per Diem Nursing

Per diem employees receive higher wages and greater scheduling flexibility but do not receive benefits or contributions to employee retirement funds. Per diem staff generally work fewer hours per week and are utilized to assure staffing consistency. In FY 03, 96 of our nursing staff converted to per diem status. That number rose to 278 in FY 04, and 491 in FY 05. This innovative program helps the Health Care System to retain qualified staff, thereby stabilizing our critical workforce by providing employment alternatives more attractive than those offered to traveling/contract nurses. The flexibility of the per diem option enables UNC Hospitals to staff inpatient care areas with the professional resources appropriate to fluctuating census and acuity levels. This model also offers advantages over other health care employers for nurses who do not require employment benefits.

Health Insurance Costs as a Recruitment and Retention Issue

Despite our best efforts at recruitment and retention, employees have expressed strong criticism and resentment regarding their health insurance costs. Employees state that:

- With an annual cost of $5,130 for family coverage under the State Health Plan, employees who cannot afford this are electing to go without coverage for their dependents, leaving the children and spouses of these employees uninsured. In some cases, employees must rely on other social programs to partially insure their dependents.
- The lack of a "spouse only" option requires the employee to pay the family premium of $5,130/year to insure a spouse, when there are no children requiring benefits.
- The current plan does not offer the choice in benefits or varying levels of coverage that can lower the cost of co-pays and deductibles. This can discourage employees from seeking treatment in order to avoid high out-of-pocket expenses.
- Competing employers openly cite weaknesses in our health plan when recruiting our employees.
- The rising cost of our health plan impacts the net income of our employees to the extent that it negates the effectiveness of the annual increases awarded through our aggressive compensation plan. Employees have expressed concern over the likelihood that they will continue to be affected by these increases due to the lack of a process at the Plan level to control escalating costs.
- Employees feel that this complex health plan is not responsive and that the benefits provided are not worth the cost of the premiums.

- Our current plan is not competitive with those commonly found in other contemporary labor settings in that it does not offer options for customer-driven choice plans, wellness benefits, etc.

The limitations of our current health plan present a very real and significant barrier in our ability to recruit and retain qualified staff. We have documentation of staff lost to employers offering better health insurance benefits. It is quickly becoming imperative that we address this issue. The flexibility afforded us by the State allows us to consider means such as employer-paid supplemental plans, sliding-scale wage adjustments, conversion of earned PTO to payments toward premiums, and perhaps a plan that is independent of the State Health Plan. Without this, we simply will not be able to recruit and retain top talent, despite our robust compensation system.

It is worth noting that Rex Healthcare, not limited by State Health Plan status, does not receive this negative employee feedback and is not currently in this reactive position.

Nurse Retention/Appreciation Bonus Program 2005

Nurses may receive up to two retention/appreciation bonuses per year depending on eligibility and achievement of targeted goals. These bonuses are paid at two designated points during the fiscal year—February and August—rendering new hires eligible to receive a bonus at the next designated pay point following successful completion of the probationary period.

A primary objective of the bonus plan is to retain existing staff and reduce the number of traveler nurses required by UNC Hospitals. We have met this goal by reducing our traveler staff to little more than half of what it was: an average of 120 traveler nurses in FY 04 dropped to 62.1 in FY 05. We feel this effort significantly benefits our patients through the continuity of care our staff nurses provide.

Nursing Professional Advancement Ladder

UNC Hospitals designed and implemented a Nursing Professional Advancement Ladder in FY 05. This program is a four-tiered performance-based career advancement system that provides a professional framework for developing, evaluating, promoting and rewarding RNs who are direct caregivers. The four levels are based on a possible professional progression from novice/advanced beginner to competent, proficient, and expert. [Benner, P. 1984. *From Novice to Expert: Excellence and power in clinical nursing practice.*] The pathway from novice to expert is described in terms of how a nurse perceives, assimilates, interprets, and acts in response to clinical situations. By combining the novice and advanced beginner levels into a single-entry level of practice, the Hospitals Nursing Professional Advancement Ladder Committee defined a total of four distinct levels of practice: novice (Clinical Nurse I), competent (Clinical Nurse II), proficient (Clinical Nurse III), and expert (Clinical Nurse IV). All RNs are eligible for advancement to Levels III and IV when they meet the established criteria as described in this document. Advancement to Levels III and IV is voluntary. The purpose of the professional advancement system is to recognize that an individual has demonstrated the knowledge, skills, and abilities to advance to a new level once an opportunity is available. Advancement to the next level is granted when a nurse meets the qualifications for CNII, CNIII, or CNIV positions (as determined by the Nurse Manager for Level II, Professional Advancement Review Committees

for Level III or IV). Eligibility for advancement is determined by achieving the goals outlined in an individual's advancement performance plan. Nurses may not advance during active phases of performance discipline. In FY 05, 125 staff advanced to CNIII or CNIV levels, at an estimated cost of $1 million.

Performance Management

The performance management system is directly linked to our compensation system, and requires that each employee's performance be rated within the calendar quarter of his/her employment anniversary. Using a three-point scale, managers rate employees on behavior standards and job-related functions, with each of these categories weighted at 50% of the total score.

Performance scores stabilized in FY 05 with 37% of employees receiving an "exceeds" score, 62% receiving a "meets" score, and 1% receiving a "does not meet" score. In FY 04, 31.8% of employees received an "exceeds" score, 67.8% received a "meets" score, and 0.4% received a "does not meet" score. This shift indicates that managers are now scoring more deliberately, in accordance with the guidelines, and that the differential between "meets" and "exceeds" is now more discernable in managing an employee's performance and providing relevant feedback.

Our emphasis on patient safety throughout the UNC Health Care System has caused us to revise the evaluation to include a section on the employee's attention and commitment to keeping patients safe.

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 available for students pursuing four-year baccalaureate, community college, accelerated certificate, or bachelor degrees. Many educators cite this program as a strong incentive for students to pursue education and consider healthcare careers. The program requires that students maintain a minimum 2.5 grade point average, agree by contract and promissory note to repay the loan through a commitment to work in clinical areas where the Hospitals have a staffing need, and agree to work a 36-40 hour week when employed. Students may choose the profession and field they would like to work in, and may select the amount of funding support they desire. Work commitments range from 12 to 36 months to repay funding that ranges from $3,000 to $36,000. The higher support levels are designed to draw new graduates to nursing areas that are difficult to staff. This program provides UNC Hospitals a recruitment advantage through the employment commitment of graduates who might otherwise consider offers from other employers. To date, 500 students have taken advantage of this funding program at a cost of $7.03 million to the HCS. These costs are offset by the benefit the program provides in eliminating the expense of costly traveler and contract staff and reducing general recruitment costs along with the need to recruit nationally and internationally. The need for traveler and contract staff has decreased from 166 in June 2003 to 86 in June 2004 to 72 in June of 2005 and has been completely eliminated in radiology, pharmacy, and nurse anesthetists—in part due to the use of education stipends.

Workforce Development for Employees in the Health Care System

The Health Care System provides significant tuition assistance for its employees. In FY 05, 323 employees took advantage of this assistance to pursue associate, bachelor, masters, and doctoral degrees at a total cost to the Health Care System of $292,700. Further development of this benefit will encourage employee growth in strategically important skills and professions by steering employees toward programs that directly benefit the Health Care System.

Employee Opinion Survey

Based on the results of last year's employee opinion survey, certain departments within the UNC Health Care System were selected to participate, during November/December 2004, in a voluntary survey to identify issues to be addressed prior to the full survey scheduled for June 2005. Of the 98 reportable work units surveyed, which comprise a total of 1868 employees, 57 units showed improvement in scores from the previous survey whereas 23 work units reflected scores that had declined. Several of the improved departments were featured in a subsequent management retreat focused on employee satisfaction. Employees noted improvement in the areas of response to work-related concerns and being shown appreciation for the work they do. Progress was noted in the use of multi-faceted employee communication methods and the employee recognition and rewards program.

In May and June of 2005, the HCS underwent a full organizational employee opinion survey. The results of this survey will guide our continual effort to improve our work environment and organizational structure.

Learning Management System Implementation

The HCS purchased a learning management system (LMS) in response to an ever-growing need for staff education, documentation of completed mandatory training, and the ability to track learning progress both for individuals and groups of employees. The Pathlore Learning Management System was implemented on January 4, 2004--on schedule and below budget. The LMS is a one-stop location for managing staff education. The hundreds of courses offered through the LMS can be accessed through one user-friendly site available from any computer in the workplace or home. All HCS employees, including house staff--along with credentialed medical staff and traveling/agency nurses--have access to the system. When organizations like JCAHO, CMS, or the ACGME want to know what percentage of our staff is in compliance with a required or recommended course, the LMS can easily provide data on the completion rate of mandatory courses for all of these users.

Courses in line with one's job responsibilities or desire for career growth may be selected by an employee or assigned by management as a part of a curriculum. Instructors offer multiple classes for each course to provide optimal scheduling flexibility. Online courses offer even greater convenience and allow students to progress at their own pace. Managers have the ability to monitor progress and work with employees individually throughout the course.

The LMS offers a wide spectrum of courses ranging from mandatory training in infection control, blood borne pathogens, tuberculosis, fire safety, and handling hazardous materials to instruction in operating payroll, billing, and computerized provider order entry (CPOE) systems.

Nursing courses focus on clinical issues such as new policies, procedures, protocols, and equipment in addition to mandatory annual skills updates.

The LMS tracks historical data, as well as information obtained since its implementation, for the more than 6000 employees who currently have access. There are 1,357 courses currently being tracked. Of these courses, 166 (12%) are online. To date, there have been 592,025 registrations in the 58,924 individual classes being led by instructors or offered online. The online courses had 121,570 registrations, 21% of the total number of registrations. Since January 2004, there have been 210,382 registrations in classes. There have been 115,800 online courses completed--55% of the total number of registrations.

Staff Reductions Aimed at Productivity Improvement

In September 2004, the HCS engaged Navigant Consulting, Inc. to perform a system-wide assessment of our operations. The objectives of this engagement were to:

- Improve financial performance and cost competitiveness of the Hospitals, Medical Faculty Practice Plan, and clinical services while maintaining quality of care, customer satisfaction, and our commitment to academic excellence.
- Improve the revenue cycle management to increase net revenue and cash flow.
- Identify opportunities to enhance existing clinical services.
- Align the goals, objectives, operations, and organizational structures of the Hospitals, UNC P&A, and the School of Medicine's clinical departments.

Throughout the fall of 2004, the consultants evaluated financial statements, clinic access processes, staffing documents, contractual relationships, purchasing agreements, and many other aspects of the HCS operations. Recommendations for workforce reductions were made that are expected to result in expense reductions for the Hospitals of $21 million by FY 07.

The Hospitals' management staff immediately addressed the recommended staff reduction target of 200 FTE's. The first phase of this process eliminated more than 100 vacant positions that had been funded for FY 05 and reflected an actual salary expense in the fourth quarter of the prior budget year.

During the second phase, from October 2004 to March 2005, 52 filled positions were eliminated. Consolidations and position eliminations took place in informatics and information systems, social work and care management departments, and clerical and administrative areas. Through exhaustive efforts, 42 of these employees were placed in other positions within the HCS, with the 10 remaining employees either resigning or retiring. No employees were laid off as a result of the FTE elimination. None of the placed employees received salary reductions, and some received increases as they progressed to better-paying positions.

During this process, the HCS human resources staff made several modifications and amendments to the "Reduction in Force Policy" to allow more flexibility in future staff reductions. We can now offer affected employees the option to accept severance in lieu of placement and can more clearly define employee prioritization based on employment status.

Managers will be able to use past performance as a decision criteria when considering individual employees and will benefit from timelines made more explicit in the revised policy. Employees may be offered any position for which they qualify and, once placed, will not retain priority over other candidates.

FLEXIBILITY IN PURCHASING

Overview

The materials management department of UNC Hospitals faced many challenges at the beginning of FY 05, the most significant of which was putting into operation the new primary group purchasing organization (GPO) contract with MedAssets signed in June 2004. It was critically important that the process of converting nearly $100 million in supply and service contracts from Novation to MedAssets be seamless and transparent to the users of these products. The ultimate success of our agreement with MedAssets rested on two essential elements of the contract:

- Accessing MedAssets contracts through conversion and attaining the projected spend levels rather than continuing with Novation.
- Realizing the anticipated targeted amount of supply expense savings.

Targeted savings are measured at the Health Care System level, requiring that UNC Hospitals' purchasing department meet or exceed its fiscal year operational expense reduction target.

One of the most significant challenges in reducing supply costs is the amount spent on a group of products commonly referred to as Physician Preference Items (PPI). The purchasing of these products--such as knee and hip implants, drug eluding stents, defibrillators, pacemakers, and other highly specialized implantable items--is driven by physician preference. These are some of the most expensive products purchased by UNC Hospitals, and their manufacturers are generally difficult to negotiate with.

MedAssets is committed to reducing this expense, having identified PPI as a major factor in the steady decline of profitability in hospitals nationwide. Working closely with Aspen Healthcare Metrics, a consulting firm wholly owned by MedAssets that specializes in negotiating with PPI vendors, both UNC Hospitals and Rex Healthcare collaborated on a number of initiatives designed to gain favorable pricing in the PPI marketplace. These initiatives achieved varying degrees of success as illustrated in the following portion of the Yardley Report.

Cardiac Rhythm Management		Contract Status	Effective Date	Contract Term	Initial Savings Identified (YTD ending June 2004) – UNC*	Annual Savings to be realized- UNC*	Savings UNC FY 2005
Company:	St. Jude	Signed	12/15/2004	3 yrs	$344,200	$357,932	$178,966
	Biotronik	Signed	12/10/2004	2 yrs	$328,800	$270,300	$135,150
	Medtronic	Signed	4/1/2005	2 yrs	$666,898	$27,402	$6,851
	Guidant	Pending	4/1/2005		$405,190	$305,452	$76,363
				Total:	**$1,745,088**	**$961,086**	**$397,330**
Trauma							
Company:	Stryker	Signed	1/1/2005	3 yrs	$324,000	$324,000	$162,000
	EBI	Signed	1/1/2005	3 yrs	$6,181	$6,181	$3,091
	S&N Depuy	Signed	1/1/2005	3 yrs	$30,306	$30,306	$15,153
				Total:	**$360,487**	**$360,487**	**$180,244**

**All savings are from prices in effect as of June 2004*

While the results have been mixed, this is an ongoing process; and the insight gained into the PPI marketplace will be helpful with future initiatives. In the final analysis, it is the continuous application of purchasing flexibility that has allowed UNC Hospitals to compete in the rapidly changing and increasingly challenging world of healthcare materials management.

The Purchasing Department Annual Report

The Yardley Report is just one of many that identify a type of supply expense savings. Each report is a snapshot of a specific product group benchmarked against a point in time. Because cost reduction efforts are widespread, it can be difficult to determine where one savings report ends and another begins. The Purchasing Department Annual Report, in addition to documenting the efforts of our purchasing agents to reduce cost, serves as a triple net report for all supply chain savings within a given fiscal year for UNC Hospitals. This report totals all documented cost reduction efforts into the summary report shown below. Quarterly updates are released to the Chief Financial Officer, with the final fiscal year's report submitted no later than the second week in July.

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
FY 05	$ 3,443,312

The figures shown above include savings from capital purchases as well as operational expenses. Capital acquisition savings are calculated against the original quote to UNC Hospitals, not the list price of the item purchased.

The Flexibility Report

The Flexibility Report illustrates the number of purchase orders, total dollars spent, and the average dollar amount per purchase order for each fiscal year since FY 00. It also isolates that same information for all purchase orders totaling more than $10,000. Prior to being granted flexibility, all purchases orders totaling $10,000 or more had to be sent to the State of North Carolina's Department of Administration's Purchase and Contracts Division in Raleigh for processing. This practice caused extensive delays in completing the order and ultimately cost UNC Hospitals time and money.

Purchase Order Stats		
FY00	***All Purchase Orders***	***Purchase Order Totals Over 10K***
Number of Purchase Orders	46554	2858
Total Dollars*	$143,774,707	$87,507,181
Average Dollar Per PO	$3,088	$30,618
FY01	***All Purchase Orders***	***Purchase Order Totals Over 10K***
Number of Purchase Orders	45939	3079
Total Dollars*	$167,908,964	$111,976,967
Average Dollar Per PO	$3,655	$36,368
FY02	***All Purchase Orders***	***Purchase Order Totals Over 10K***
Number of Purchase Orders	48807	3592
Total Dollars*	$174,469,663	$114,703,994
Average Dollar Per PO	$3,575	$31,933
FY03	***All Purchase Orders***	***Purchase Order Totals Over 10K***
Number of Purchase Orders	50968	4558
Total Dollars*	$239,028,570	$174,444,765
Average Dollar Per PO	$4,690	$38,272
FY04	***All Purchase Orders***	***Purchase Order Totals Over 10K***
Number of Purchase Orders	49953	4444
Total Dollars*	$230,014,333	$165,902,468
Average Dollar Per PO	$4,605	$37,332
FY05	***All Purchase Orders***	***Purchase Order Totals Over 10K***
Number of Purchase Orders	48841	3673
Total Dollars*	$251,120,363	$191,778,602
Average Dollar Per PO	$5,142	$52,213
* Total Dollars includes all PO costs (e.g., Goods, Services, Tax, Freight, Handling Fees, etc.)		

Guidelines were developed in February 2001 to respond to requests for extending purchasing flexibility to UNC Physicians & Associates for specific situations. In FY 05, sixteen requests were approved.

Major Purchasing Accomplishments and Milestones

Protected Health Information

HIPPA regulations require that a Business Associate Agreement (BAA) be signed by any vendor who, while providing goods or services, may be exposed to or have access to protected health information (PHI). The purchasing department is responsible for managing BAAs with all vendors and, between January 6 and March 16, 2005, sent these agreements to more than 400 vendors.

Contract Management Implementation

Working closely with the Legal Service Department, the Purchasing Department implemented a system for contract management that defines how contracts are to be routed for review and authorization. At the end of the process, executed contracts are sent to the Purchasing Department where they are logged into a database and filed in designated fireproof cabinets.

Defibrillator Standardization

UNC Hospitals has, for a long time, been using a number of different manufacturers' models of external defibrillators. Working with Dr. Jeffrey Berman and the Code Committee, the Purchasing Department conducted a bidding process that included a clinical review of the marketplace for the purpose of standardizing with one manufacturer and model. As a result, Zoll Corporation was selected as our single source for external defibrillation equipment. Even with a standard in place, UNC Hospitals still has many different types of defibrillators in use that are in good working condition. In order to move quickly to a single platform, UNC Hospitals Purchasing Manager Jeff Yardley negotiated a contract to replace all 162 defibrillators throughout UNC Hospitals with the selected Zoll model at a 40% overall discount, 0% interest for three years, and no charge for biomedical loaners, battery testers, training devices and simulators for staff education--equipment worth a total of $242,195.

Clinical Resource Coordinator

A registered nurse and member of the Materials Management Department since November 2001, Ms. Kathleen Stickane was hired as UNC Hospitals' Clinical Resource Coordinator, acting as liaison between Materials Management and the clinical staff. This type of position has been gaining prominence in the healthcare industry for a number of years, and Ms. Stickane has been instrumental in coordinating issues and communications with her counterparts throughout the country. The group held their first national meeting in October 2003 at UNC Hospitals in Chapel Hill, hosting nearly 50 clinically trained materials management professionals. The organization now known as the Association of Healthcare Value Analysis Professionals, with over 200 members, elected Ms. Stickane in July 2004 to serve a two-year term as the association's first president.

In addition to her critical role in contract and product conversions, Ms. Stickane is integrally involved in patient and staff safety issues and is the first point of contact for product-related concerns. Some of the achievements in FY 05 that can be accredited to Ms. Stickane were:

- Exposure of a product flaw in a foley catheter closed system kit that was subsequently corrected by the manufacturer.
- Introduction of a new dressing for patient care designed to fit around a boney prominence and keep central lines in place.
- Standardization of code carts and added safety supplies.
- Presentation of a safety device review report to the Needlestick Committee. (Ms. Stickane is required to make this presentation semi-annually.)
- Acquisition of a completely new line of patient restraints for enhanced patient and staff safety.

Pharmacy Distribution Agreement

In October 2004, a multi-disciplinary task force including both Rex Healthcare and UNC Hospitals staff was called together to bid and award pharmacy products distribution business at the Health Care System level. Despite extensive efforts, the two hospitals could not agree on a sole distributor. In January 2005, UNC Hospitals signed a five-year prime vendor pharmacy distribution agreement with Cardinal Health that will save the pharmacy drug budget approximately $350,000 per year.

Materials Management Technology Enhancements

The Materials Management Department implemented applications to introduce wireless and other new technologies to the supply chain. Inventory counts can now be transmitted remotely from the inventory location while staff performance can be tracked more precisely. Electronic signature capability for package delivery and wireless receiving enables us to receive product directly into our information system from the receiving dock or even from within the delivery truck.

Copiers/Printers/Fax Machines

Following a bid process and extensive analysis of the marketplace, UNC Hospitals entered into agreement with a local vendor for the service and acquisition of copiers, printers and fax machines. Individual departments previously budgeted for and purchased this equipment on their own, resulting in a large variety of manufacturers and models. We now have standardized to two manufacturers, Canon and Hewlett Packard, and are using multi-function machines that combine copying, printing, and fax functions, where applicable. A process now exists to replace old machines, wherein our Information Services staff work with the contracted vendor to make recommendations for equipment that best serves the department's needs. In January 2005, two new high-speed black and white copiers and one new high volume color copier were installed in the Copy Center located in UNC Hospitals. These machines are connected to the hospital network, which allows departments to e-mail their print jobs directly to the Copy Center. We can now produce high speed, high quality black and white and color print jobs at a fraction of the cost charged by outside copying services.

Fiscal Year 2006

Medical Management Upgrade with Infusion Pumps

Last year UNC Hospitals was able to upgrade infusion pumps to the Medical Management module, which it helped to develop with Abbott Laboratories approximately two years ago. As this technology continues to advance, our relationship with Hospira (formally Abbott Laboratories) continues to pay dividends and allows UNC Hospitals to maintain its position as a leader in patient safety. We will soon be upgrading all infusion pumps to a wireless technology platform that will allow us to update the drug libraries in each pump during FY 06. Due to our special relationship with Hospira, this upgrade is being performed at no charge, which represents a savings of $425,000 for UNC Hospitals.

Capital Equipment Committee

The primary purpose of creating a Capital Equipment Committee (CEC) is to take the methodology that we applied to adult physiological monitors in FY 04 and defibrillators in FY 05 and apply it to a much wider range of approved capital and minor equipment purchases for FY 06 and future years. The CEC will report on equipment standardization efforts and acquisition savings to the UNC Hospitals Internal Operations Committee on a prescribed basis.

Purchasing Data Management

In early FY 06, we will be implementing a WEB-based tool from MedAssets called Strategic Information (SI). Utilizing a file we send MedAssets every month that includes all purchasing, invoicing, and receiving activity from the previous month, SI is able to compare our negotiated contract pricing against the actual invoice price. This SI tool also can compare products purchased by UNC Hospitals with similar products purchased by Rex Healthcare to identify opportunities for gaining a larger discount. The Purchasing Agents are scheduled to be trained on SI in September 2005.

Distribution Annex

Construction was started in June 2005 on a 21,000-square-foot, three-story distribution center just four miles from UNC Hospitals. Our Distribution Annex (DA) will be an active distribution center servicing both the Hospitals and the on-site storeroom, which will be reduced in size to accommodate other departmental relocations. Targeted occupation for the DA is late 2005 or early 2006.

Freight Management

In July 2005, we entered into a three-year agreement with a company called HLS to aid in the management of both inbound and outbound freight expense. We believe that a significant savings opportunity exists in channeling our inbound and outbound freight through a designated carrier. Through this program, we will further centralize the freight expense budget for increased control purposes.

FLEXIBILITY IN PROPERTY MATTERS

Real property transactions are overseen by the Property Oversight Committee as established by the UNC Health Care System Board of Directors. The Property Oversight Committee considers transactions involving real property that is leased or purchased. The protocol of the real Property Committee effectively expedites the timing of real property transactions by as much as 60 days or more as compared to the former method involving the State Property Office. The following examples depict the benefit the UNC Health Care System derives from having flexibility in property matters.

Due to the rapid emergence of new technologies and the competitive nature of medicine, frequent changes in the marketplace often require rapid responses by the UNC Health Care System that would not be possible without the delegated flexibility provided by the state. To take full advantage of these flexibilities and optimize our competitiveness in the health care market, we have also made structural changes under Dr. Roper's leadership. We have streamlined the process by which we decide whether we need to add outpatient medical care as illustrated by two specific examples. Previously, if a chair or program needed to expand off-campus, the decision would be made over a period of many months with input from a number of committees. We have placed the authority to make recommendations in a single ambulatory care committee chaired by Dr. Al Daugird.

In spring 2005, Dr. Luis Diaz proposed the development of a cosmetic dermatology clinic to offer services in this area and take advantage of the expertise of two new faculty he had recruited. The Ambulatory Care Committee, in a single meeting held a week after Dr. Diaz' request, decided to support this proposal and then promptly worked through the P&A Board and the Dean to provide final approval within another week. Ms. Mary Beck and Mr. Glen Wright were then able to procure space quickly, due to the flexibility granted to the Health Care System, and the clinic will be in operation by late fall of this year. Dr. Rick Pillsbury requested consideration for an ENT clinic at the intersection of I40 and Highway 54 in late July. Again, this was quickly approved by the Ambulatory Care Committee, and then through the P&A Board and the Dean. Rental agreements have already been signed to open this clinic in late fall 2005.

During the past year, the following transactions were considered and recommended by the Property Oversight Committee.

Property involving leased space for clinical programs:

- UNC School of Medicine's Department of Ophthalmology (Chapel Hill) 1,765 sq. ft.
- UNC School of Medicine's Department of Pediatric Surgery (Raleigh) 1,544 sq. ft.
- UNC School of Medicine's Department of Obstetrics/Gynecology (Rex Health Care Raleigh) 4,515 sq. ft.
- UNC School of Medicine's Department of Medicine (Central Medical Park, Durham) renewal 3,701 sq. ft.

- UNC School of Medicine's Department of Medicine (Chatham Crossing, Chatham County) 5,000 sq. ft.
- UNC School of Medicine's Department of OT/PT (Hillsborough) 2,450 sq. ft.
- UNC School of Medicine's Department of Psychiatry (Chapel Hill) 1,600 sq. ft.
- UNC Outpatient Dialysis (Siler City) 2,450 sq. ft.
- UNC School of Medicine's Department of Nephrology. (Burlington) 1,610 sq. ft.

Property involving leased space for administrative functions:

- Warehouse storage (lease renewal, Chapel Hill) 14,090 sq. ft.
- Medical Records storage (lease renewal, Chapel Hill) 1,440 sq. ft.
- UNC P&A Administrative offices (Chapel Hill) 8,718 sq. ft.
- UNC Hospital's Home Health/Hospice program (Pittsboro) 3,975 sq. ft.
- Warehouse storage (lease renewal, Starpoint – Chatham Co.) 6,000 sq. ft.

Acquisition by Deed:

- 2.29-acre lot with 10,444 sq. ft. building (Aurora Restaurant)

FLEXIBILITY IN CONSTRUCTION MATTERS

The Construction Bidding Oversight Committee uses approved criteria to determine when to utilize alternative forms of construction bidding (i.e., single-prime versus multi-prime, etc.). The criteria require a formal presentation, review, and discussion of all projects proposed for construction using an alternative bidding methodology. Single-prime bidding was the alternate bidding method approved for projects requiring an alternate form of bidding. Other bidding methods were evaluated and discussed but were not approved for any projects.

During the past year, the following projects were considered and approved by the Construction Bidding Oversight Committee to use the single-prime contracting method:

- Abdominal Transplant Clinic
- Coffee Shop Renovations
- Pediatric Cardiac Cath Lab
- Pediatric Cardiac Diagnostic Clinic
- Second Floor Corridor Upgrade
- Sleep Studies
- Vascular Interventional Radiology
- Clinical Cancer Center Renovations

- Timberlyne Renovations

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.

- Abdominal Transplant Clinic
- CT Scanner Addition
- MRI 5 Addition
- Chiller Plant Upgrades

All Construction Bidding Oversight Committee discussions are documented and maintained for review.

FLEXIBILITY IN OTHER AREAS

The UNC Health Care System continues to benefit from the flexibility delegated to us by the State in ways that we might not have initially imagined. This is an exciting time for the UNC Health Care System as we make improvements that would not be possible without our flexibility status. The following two areas represent ways in which this status has allowed us to significantly improve our operations and better serve the people of North Carolina.

UNC Health Care System's Performance Improvement Project

We engaged Navigant Consulting, Inc. in September 2004 to provide a comprehensive view of the Health Care System's operations. The goal was to increase the System's financial margins by improving performance and cost competitiveness while maintaining quality of care, customer satisfaction, and commitment to academic excellence. The consultants provided 793 recommendations to improve the procedures and processes of UNC Hospitals and UNC Physicians & Associates (P&A), and their clinics.

The recommendations fell into three broad categories: Improvements in revenue cycle management, patient throughput and capacity management, and the development of a productivity-based clinical compensation plan. Many of these recommendations have already been implemented.

- The UNC Health Care System's Board of Directors approved a financial assistance plan in keeping with our mission to serve our state's most vulnerable populations. The plan offers a comprehensive discount and charity policy for UNC Hospitals and P&A. As of August 1, 2005 all uninsured patients are eligible for a 25% discount on all Hospitals and P&A charges. Beginning January 1, 2006, patients below 250% of the federal poverty guidelines ($48,375 for a family of four) will not be charged for services beyond co-payments at the time of service.

- Additional processes and procedures are being initiated to inform patients, prior to their arrival, of the cost of the services they are scheduled to receive. We also will notify Medicare patients of services not covered, prior to providing these services.
- The Clinical Care Management Department was created in May 2005, comprising Clinical Resource Management, Social Work, Pre-authorization, and Bed Assignment. Significant changes include an increased focus on discharge planning and better coordination with nursing and physicians. All discharges are tracked within the Canopy database, and standards for discharge metrics have been established.
- The Surgical Operations Governance Group was created to govern day-to-day activities of all operating room areas. Members of this group include representatives from Hospitals Administration, Anesthesiology, Surgical Services, and surgical departments. Implementing performance metrics for all areas of the operating rooms is a primary goal of this group. Another objective is to provide those who use the operating room with an opportunity to participate in improvements in capacity, operations, and throughput in order to fully utilize this important resource.
- The productivity-based clinical compensation plan provides a common framework for clinical chairs to reference when determining salaries and bonuses for clinicians. This is the first time UNC Health Care has attempted to create and implement a system-wide compensation plan. The plan will function as a guideline for chairs, who will be able to tailor the plan to suit their department's needs. Demonstration of incentives to increase productivity, the main thrust of plan, must be retained in any changes made by department chairs.

Recommendations will continue to be implemented as part of an ongoing process over the next two years, especially in the areas of increasing access to outpatient appointments, management of data, and improvements in emergency room throughput.

Revitalization of UNC Physicians and Associates

UNC Physicians and Associates (P&A) occupies a unique position in the Health Care System. The UNC School of Medicine has 17 clinical departments, all of which are involved in teaching, research, and providing clinical care in both the inpatient and outpatient settings. These clinical activities are integrated through P&A and are a component of the UNC Health Care System. P&A is directed by Dr. Marschall Runge, President of UNC Physicians, and Mr. Keith Gran, Chief Operating Officer of UNC P&A.

The importance of the clinical faculty and their medical practice cannot be overstated. The performance of any hospital is entirely dependent on the physicians who practice there. The only physicians who practice medicine at UNC Hospitals or in the UNC Ambulatory Clinics are faculty in the School of Medicine and the vast majority of their clinical practice occurs in these settings, though there are a small percentage of practices in Raleigh and other parts of North Carolina.

Major advantages of the position of P&A in the Health Care System include the potential to improve clinical care across all areas of practice, and the potential to align the interests of our physicians with those of the UNC Health Care System—not possible in a private practice model.

To realize these goals, P&A relies on its two major roles in the Health Care System.

First, P&A represents a "group practice" of medicine. The decision-making process involves an executive committee, the Budget and Finance Committee, chaired by Dr. Alan Stiles, which makes recommendations to the P&A Board, chaired by Dr. William Roper. Final decisions are made by the P&A Board on a wide range of topics involving the practice of medicine, organizational and financial issues, managed care contracting, and the operation of P&A itself. It is not uncommon for the P&A Board to have to make decisions that may benefit one group of physicians (or component of the System) while negatively impacting another.

Second, P&A is a service organization. In this role, the goal of P&A is to provide excellent billing and collections for the clinical departments, leadership in the revenue cycle (related to billing and collections), superb managed care contracting expertise, and to obtain necessary insurance coverage (malpractice, supplemental health, life, disability, etc.) at the most competitive rates. In all of these functions, P&A works in collaboration with UNC Hospitals.

Since Dr. Runge and Mr. Gran assumed authority of P&A in March 2004, their goal has been to further improve the performance of the organization. As documented below, there have been substantial improvements in all areas. This has been done while improving the overall morale of the organization, substantially reducing turnover as well as significantly reducing the costs associated with the principle functions of P&A.

FY 05 was an exceptional year for P&A. Our net gain of $6.7 million exceeds any year since 1997. Physician productivity increased by 8% and revenue improvements were up 12% from FY 04. We also were able to control expenses. Savings by the P&A central office alone contributed $1.5M to the net gain in FY 05. We had an 11% increase with a 1% positive budget variance. While controlling expenses, we were still able to reduce clinical department taxes by $1.5M and improve our service and relationship to physicians.

These remarkable outcomes can be attributed to several factors, foremost the new era of improved integration and cooperation across the Health Care System in FY 05. Dynamic clinical leadership has fostered sustained increases in productivity that cannot be overemphasized. We were able to seize an opportunity at a unique point in history for the Health Care System to improve our relationships with physicians and the hospital. Clinical department satisfaction is higher while expenses were held at 3% growth in the FYTD. Leadership and structural changes at P&A were possible because of the major cultural changes happening at UNC. Staff reorganization and communication efforts at P&A quickly led to better performance from P&A employees. We held several town hall meetings, created an employee suggestion program, conducted mini-surveys, hosted staff luncheons and provided incentives for performance. As a result, turnover at P&A is at its lowest in available history, down from 15% to 9%.

In addition to our communication efforts within P&A, we also worked diligently to improve communications with physicians practicing medicine in the UNC clinics and at UNCH. We have enhanced the role of the Budget & Finance committee and assigned physician leaders to P&A workgroups for Managed Care and Billing & Collections Operations. We also distribute a weekly newsletter to over 1,200 people affiliated with the Health Care System, which brings together news from UNC Hospitals, School of Medicine, and P&A. Our revised approach to

decision-making has led to the reduced P&A tax rate, quick approval of the UNC Dermatology clinic, new structure for clinic business staff, revenue cycle initiatives, and approval of the Enterprise Fund.

P&A will strive to build upon these successes in the coming year. The unprecedented changes we've made in front-end processes and reporting structure will increase patient service revenue through reduction in bad debt and third party denials. These improvements also will increase staff efficiency and enhance patient satisfaction. We will continue to analyze and improve P&A's back-end processes for further efficiency and revenue improvements.