BILL PURCELL
MAYOR

METROPOLITAN
GOVERNMENT OF NASHVILLE
AND DAVIDSON COUNTY

DEPARTMENT OF FINANCE
INTERNAL AUDIT SECTION

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February 22, 2005

Dr. Roxane B. Spitzer, Chief Executive Officer
Metropolitan Nashville General Hospital
Hospital Authority Board of Trustees
1818 Albion Street
Nashville, TN 37208

Report of Internal Audit Section

Dear Dr. Spitzer and Board of Trustee Members:

We have recently completed a performance audit of General Hospital. *Government Auditing Standards* issued by the Comptroller General of the United States define performance audits as follows:

> Performance audits entail an objective and systematic examination of evidence to provide an independent assessment of the performance and management of a program against objective criteria as well as assessments that provide a prospective focus or that synthesize information on best practices or cross-cutting issues. Performance audits provide information to improve program operations and facilitate decision-making by parties with responsibility to oversee or initiate corrective action, and improve public accountability.

A performance audit is different than a financial statement audit, which is limited to auditing financial statements and controls, without reviewing operations and performance. In performing this audit, we retained Ernst & Young LLP to work under our direction. Their final findings and recommendations report issued February 2005, *Nashville General Hospital at Meharry*, accompanies this letter and is hereby submitted to you. Please refer to the attached report for the specific scope of work performed by Ernst and Young.

General Hospital is a publicly supported, academically affiliated, community-based hospital. With the alliance of Meharry Medical College and Vanderbilt University, the medical staff and employees provide an educational and research environment based on the provision of comprehensive, compassionate, acute care services for those in need. General Hospital is staffed for 127 beds.

General Hospital has over a 100 year history that began as a city hospital located near downtown Nashville. It is now governed by the Nashville Hospital Authority, which was created in March 1999. The Hospital Authority Board of Trustees consists of seven members, each serving five year terms, appointed by the Mayor and confirmed by a majority of the Metro Council. General Hospital is currently located on the Meharry Medical College campus and is managed under contract by Vanderbilt Medical Center, which reports to the Hospital Authority.

General Hospital had a total of 776 budgeted positions for fiscal year 2003-2004. The audited June 30, 2004 financial statements can be summarized as follows.

Revenues	
Net patient service revenue	$44,034,030
Other revenue	951,728
Total operating revenues	44,985,758
Expenses	
Professional care of patients	52,830,841
Other expenses	23,217,229
Total operating expenses	76,048,070
Operating loss	(31,062,312)
Nonoperating revenues/(expenses)	
Metro subsidy	23,505,100
Metro capital contribution	3,158,203
Other nonoperating expenses	(3,791,368)
Net loss	$ (8,190,377)

For fiscal year 2004-2005, the net loss after the Metro subsidy of $20 million was budgeted at $9 million.

Objectives, Scope, and Methodology

The primary objectives of this performance audit included the following.

- A comparison of General's performance to industry norms, peer facility benchmarks and best practices, identifying probable causes for significant variances from industry norms, peers and best practices, along with recommendations for improvement.

- Quantification of the financial impact of TennCare on General Hospital and of General Hospital on TennCare, including a measure of the financial impact TennCare would incur if General Hospital ceased operations.

- An evaluation of operational efficiency and effectiveness for services provided by General Hospital, including identification of weaknesses and contributing factors, and identification of opportunities to expand revenue and/or reduce costs.

- Evaluation of the relationship with Meharry Medical College as lessor and as contractor for services.

- Development of findings and recommendations for any areas where performance could be improved.

This audit focused primarily on fiscal years 2003 and 2004 budgeted and actual financial balances, transactions and performance and on the processes in place during the time of the audit. Certain analyses required the consideration of financial results, performance and operations outside of that time period.

The methodology employed throughout this audit was one of objectively reviewing various forms of documentation, including written policies and procedures, financial information and various other forms of data, reports and information maintained by General Hospital. Management, administrative and operational personnel, as well as personnel from other Metro departments and other stakeholders were interviewed, and various aspects of General Hospital operations were directly observed. Data obtained from various sources were analyzed, and various aspects of performance, cost and practices were compared to those of peers and to best practices.

We performed the audit procedures in accordance with generally accepted government auditing standards.

Findings and Recommendations

The Ernst & Young report addresses the General Hospital operation and the resulting findings and recommendations in detail. Following is an overview of some of the more significant findings and recommendations included in their report.

Ernst & Young's key findings can be summarized as follows.

- In addition to the annual subsidy appropriated through the budget process, General Hospital has been receiving additional open ended support from Metro through access to Metro's primary operational bank account. Although the Hospital Authority was established as a separate legal entity in 1999, corresponding funding mechanisms and banking arrangements in place for Metro's other large separate legal entities were not established. The effect is that any budget overages General Hospital has incurred over the years have been funded by borrowing cash from other Metro funds. By June 30, 2004 General Hospital's cash deficit had grown to $43 million, and there is currently no plan in place to repay this liability that is owed to other Metro funds. The liability was $48 million at December 31, 2004, and it could exceed $50 million by the end of this fiscal year.

- In comparison to peers, General Hospital's expenses are comparable, but the revenues are lower. The lower revenues are largely attributable to the mix of the types of insurance received for patient care. Ernst & Young estimates that General Hospital could reduce its net loss by approximately $3.8 million through a combination of improved revenue collection practices and savings opportunities, several of which were in process before their assessment began.

- For the 2002 fiscal year, the state of Tennessee received approximately $19 million in federal matching funds related to General Hospital, while General Hospital only received approximately $6 million of essential access payments from TennCare.

- Ernst & Young concluded that the lease agreement with Meharry Medical College is reasonable as compared to the market. However, Ernst & Young could not fully assess the professional services agreement surrounding physician and other medical staffing Meharry provides to General, because Meharry is not providing documentation of those services as required under the related contract.

- Based on historical operating funding that has been provided to General Hospital (including both the subsidy and the budget overages), capital funding needs, estimated TennCare funding that could be lost under recent proposed changes, and funding needed to repay the liability to other Metro funds, General Hospital requires an estimated $39 million to $53 million annually to support current operations.

Ernst & Young's overall recommendations are as follows.

- Work with the Hospital Authority to establish a separate bank account for General Hospital operations, and evaluate the current practice of automatically funding budget overages. Future budget appropriations should be based on the full actual subsidy needed to fund operations.

- Pursue all possible additional revenue sources, including additional state funding and alliances with additional community physicians.

- Determine actual past services received from Meharry under the professional services agreement, and determine the market value of those services. General Hospital should evaluate the development of an alternative fee arrangement for the service agreement.

- Explore alternatives for meeting the inpatient hospital and outpatient clinic healthcare needs of General Hospital's patients, including assessing possible impacts these alternatives would have on the patients and on other healthcare providers.

In addition to the Ernst & Young work, Internal Audit staff reviewed procedures and controls surrounding financial and other operations and noted internal control and other issues in several areas that need to be addressed. Management has been provided with detailed information about specific processes and/or transactions giving rise to the findings below, and management had taken steps to address these issues prior to the issuance of this report.

- Petty cash reimbursements tested often lacked adequate documentation and justification, and two bank account reconciliations had not been prepared timely.

- The business purpose of several procurement card transactions and one cash disbursement tested were not fully documented with clear approvals, and exceptions to travel authorization policies were noted.

- In testing payroll, we noted inconsistencies in applying shift and weekend differential pay, and we noted that leave was being accrued at the beginning instead of the end of the month.

- General Hospital maintains a fixed asset listing that had not been reconciled to Metro's central fixed asset ledgers, which are the records for fixed assets reported in the financial statements.

Management has taken corrective action on the issues listed above and on other issues of lesser significance that were discussed with management.

Additional findings and recommendations can be found in the Ernst & Young report accompanying this report.

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Management's response to the audit recommendations is attached to this report.

We appreciate the cooperation and help provided by all General Hospital staff.

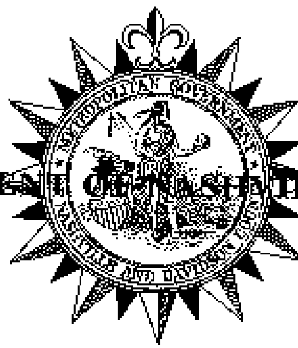
This report is intended for the information of the management of the Metropolitan Government of Nashville and Davidson County. This restriction is not intended to limit the distribution of this report, which is a matter of public record.

Internal Audit Section

Kim McDoniel
Internal Audit Manager

Copy: Mayor Bill Purcell
Karl F. Dean, Director of Law
David L. Manning, Director of Finance
Eugene Nolan, Associate Director of Finance
Talia Lomax-O'dneal, Deputy Finance Director
Metropolitan Council Audit Committee
Richard V. Norment, Assistant to the Comptroller for County Audit
KPMG, Independent Public Accountant

BILL PURCELL
MAYOR



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

HOSPITAL AUTHORITY
OF THE METROPOLITAN GOVERNMENT
OF NASHVILLE AND DAVIDSON COUNTY

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February 22, 2005

Kim McDoniel
Metro Finance Department
Division of Internal Audit
222 3rd Avenue North, Suite 701
Nashville, Tennessee 37201

Dear Ms. McDoniel,

I am in receipt of the audit done by Ernest & Young for Nashville General Hospital at Meharry. I appreciate the enormous amount of work required to produce the report and the recommendations.

At the time of the audit, we were already in process of implementing both revenue enhancement and additional cost controls (e.g., holiday time) and we shared this information with Ernst & Young. We believe the report should identify the negative financial impact that has occurred at General due to the current healthcare crisis nationally. Since 2003 our uninsured patients have doubled and our governmental subsidies have been reduced. We have never received an inflationary increase while labor, pharmaceutical and technology costs have increased at 5 % per year since FY 1999. In six years that amounts to 25% non compounded.

We are pleased that the audit report reflects our ability to keep our expenses lower or consistent with our peer group. Increasing revenue however; in this environment has been symptomatic of the nature of public hospitals nationally.

Once the formal report has been presented to the board, we will comment and initiate those internal recommendations that we have not already implemented consistent with board direction; however even with a total projected gain by Ernest & Young of $3.8 million dollars, much of which we have already realized, we would continue to fall short of what we need to provide care for our population.

Thank you for your support and the work done by Ernst & Young.

Sincerely,

Roxane Spitzer, Ph.D.
Chief Executive Officer

cc: Richard Ragsdale
David Manning

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ERNST & YOUNG

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To the Internal Audit Director of Metropolitan Government of Nashville and Davidson County:

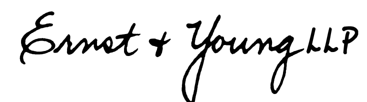
We have completed our engagement to perform the Services as described in our response to RFP 03-140. Our engagement was performed in accordance with Contract Number 15482 dated February 26, 2004 and the contract extension dated January 15, 2005. Our procedures were limited to those described in Contract Number 15482.

Our findings and recommendations resulting from our procedures are provided in:

- Appendix A – Findings and Recommendations - Executive Summary
- Appendix B – Findings and Recommendations

We appreciate the cooperation and assistance provided to us during the course of our work.

This report is intended solely for the information and use of the management of Metropolitan Government of Nashville and Davidson County.



February 18, 2005

Appendix A
Nashville General Hospital at Meharry
Findings and Recommendations - Executive Summary

February 2005

General Hospital Executive Summary

Introduction

The Metropolitan Government of Nashville and Davidson County (Metro) engaged Ernst & Young LLP (E&Y) to complete a performance assessment of Nashville General Hospital at Meharry (NGH or General). Caveats and limitations regarding this executive summary, the assessment, and the detailed report are identified in Appendix B and are an integral component of our report.

The required outcomes of the performance assessment were identified in the Metro Request For Proposal (RFP) and are as follows:

- A comparison of General's performance to industry norms, peer facility benchmarks and best practices.
- An evaluation and analysis of the financial impact of unique regulatory and operational requirements.
- Quantification of the financial impact of TennCare on General and of General on TennCare, including a measure of the financial impact TennCare would incur if General ceased operations.
- Identification of opportunities to expand revenue and/or reduce costs.
- Probable causes for significant variances from industry norms, peers and best practices should be identified and recommendations for improvement made.
- An evaluation of operational efficiency and effectiveness for services provided by General including identification of weaknesses and contributing factors.
- Analysis and quantification of the value of the services provided at General to the citizens and government of Davidson County.
- Findings and recommendations specifically addressing improvements to mental health patient services.
- Results of an impact analysis and comparison of costs and availability of services at General to costs and availability of services if General ceased operations, including the financial impact on other local hospitals, on the community served, and on other community organizations.
- Identification of alternative methods of funding including those utilized by peers and/or industry best practice.
- Evaluation of the relationship with Meharry Medical College as lessor and as contractor for services.

- A description of any instances of non-compliance with laws and regulations, fraud, abuse, or illegal acts discovered during the audit.
- All findings and recommendations for improvement. The recommendations must include detail necessary to facilitate implementation.

The results of the above are reported on in detail within sections 1 through 10 of Appendix B. The following is a summary of the key areas, findings, recommendations, and conclusions from the assessment detailed in Appendix B.

Key Assessment Areas, Findings, and Related Conclusions

1. The past and future financial performance of NGH.

Nashville General Hospital has historically operated at a deficit both before and after the subsidy received from the Metro government. Further, NGH has budgeted a deficit for the fiscal year ending June 30, 2005.

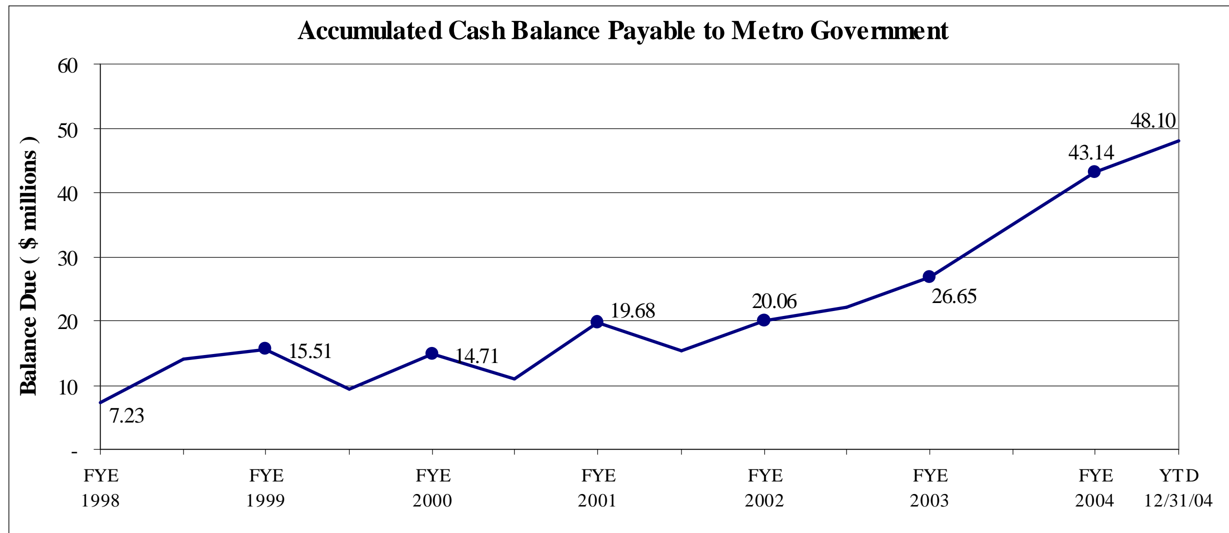
	Audited FYE June 30, 2001	Audited FYE June 30, 2002	Audited FYE June 30, 2003	Audited FYE June 30, 2004	Budgeted FYE[1] June 30, 2005	Cummulative Total Amount
Operating Loss	($25,173,673)	($24,542,306)	($24,303,632)	($31,062,312)	($28,452,213)	($133,534,135)
Interest	(4,162,096)	(3,802,102)	(3,636,710)	(3,323,408)	(3,375,263)	(18,299,579)
Loss on Disposal of Assets	-	-	-	(467,960)	-	(467,960)
One Time Land Transfer	-	-	(737,167)	-	-	(737,167)
Capital Funding[2]	-	-	-	3,158,203	2,805,000	5,963,203
Net Loss before Metro Subsidy	(29,335,768)	(28,344,409)	(28,677,509)	(31,695,477)	(29,022,476)	(147,075,639)
Metro Subsidy	23,505,099	23,822,407	23,734,850	23,505,100	19,979,300	114,546,756
Net Loss after Metro Subsidy	($5,830,669)	($4,522,002)	($4,942,659)	($8,190,377)	($9,043,176)	($32,528,883)

[1]*Budget provided by NGH and Metro management.*

[2]*A major capital project began in FY04 and was budgeted to continue through FY05. Capital funding is separately identified only in the FYE 04 financial statements.*

2. NGH's dependence on the Metro government for funding in excess of the subsidy.

As a result of operating at a deficit, NGH has required operating cash support in addition to the Metro subsidy. Since the establishment of the Hospital Authority, Metro management has indicated that NGH has had open ended access to Metro's cash to meet the operating requirements. At December 31, 2004, NGH's liability to Metro was approximately $48 million.



It does not appear that NGH has developed a formal financial or cash flow plan indicating how or when it will begin repaying the amounts due to Metro.

It should be noted that during July 2004, NGH received approximately $7 million of TennCare Safety Net payments related to FY04. Had NGH received the $7 million prior to June 30, 2004, the amount owed Metro at June 30, 2004 (shown above at $43.14 million) would have been approximately $36 million. Taking the $7 million into consideration, the total level of Metro actual and budgeted funding to NGH for the period FY01 through FY05 – including the $23 million annual subsidy – is as follows:

Summary of Metro Funding to Nashville General Hospital

	Actual FYE June 30, 2001	Actual FYE June 30, 2002	Actual FYE June 30, 2003	Actual FYE June 30, 2004	Budgeted FYE[1] June 30, 2005	Total for FYE01 - FYE05
Metro Subsidy	$23,505,099	$23,822,407	$23,734,850	$23,505,100	$19,979,300	$114,546,756
Increase in payable to Metro	$4,960,593	$386,764	$6,589,252	$16,485,490	$10,000,000	$38,422,099
2004 Essential Access Receivec	-	-	-	($7,000,000)	-	($7,000,000)
Total Operating Funding	$28,465,692	$24,209,171	$30,324,102	$32,990,590	$29,979,300	$145,968,855
Additional Capital Funding[2]	-	$2,005,000	$100,000	$3,158,203	$2,805,000	$8,068,203
Total All Funding	$28,465,692	$26,214,171	$30,424,102	$36,148,793	$32,784,300	$154,037,058

[1]*Budget provided by NGH management, Metro estimated increase in payable for FY05 based on budgeted loss.*
[2]*Additional capital funding amounts provided by Metro management.*

Based on the FY04 net loss and the FY05 budget:

- NGH will continue to require cash support in addition to the approximate $20 million subsidy in the FY05 budget.
- The first 6 months of FY05 (July 1, 2004 through December 31, 2004), NGH exceeded the budgeted loss by $2 million.
- The payable from NGH to the Metro government will likely increase.
- The total NGH cash deficit payable to Metro by June 30, 2005 could exceed $50 million.

3. Pro forma loss by patient payor type.

In order to provide a perspective of the loss by payor, a pro forma analysis was developed to allocate the revenue and expense between certain payor groupings.

Utilizing information from the June 30, 2002 Tennessee Joint Annual Report, which was also used for benchmarking purposes in Appendix B, the following is the pro forma loss by payor type, including TennCare, charity care, Medicare, commercial insurance, and all other.

FYE 2002 PRO FORMA NET INCOME (LOSS) BY PAYOR

	TennCare	Charity Care	Medicare	Commercial	All Other	Total
Operating Income (Loss) before Metro Subsidy	($12,588,382)	($12,283,772)	$1,590,754	($4,729,777)	($17,740)	($28,028,917)
Metro Subsidy	-	$23,822,407	-	-	-	$23,822,407
Net Income (Loss) after Metro Subsidy	($12,588,382)	$11,538,635	$1,590,754	($4,729,777)	($17,740)	($4,206,510)

**Source: State of Tennessee Joint Annual Report, FY2002; Metro subsidy updated by client to reflect actual subsidy paid.*

Utilizing information from the June 30, 2003 Tennessee Joint Annual Report the following is the pro forma loss by payor type, including TennCare, charity care, Medicare, commercial insurance, and all other.

FYE 2003 PRO FORMA NET INCOME (LOSS) BY PAYOR

	TennCare	Charity Care	Medicare	Commercial	All Other	Total
Operating Income (Loss) before Metro Subsidy	($8,634,591)	($16,508,998)	$536,836	($3,834,284)	($6,722)	($28,447,759)
Metro Subsidy	-	$23,734,850	-	-	-	$23,734,850
Net Income (Loss) after Metro Subsidy	($8,634,591)	$7,225,852	$536,836	($3,834,284)	($6,722)	($4,712,909)

**Source: State of Tennessee Joint Annual Report, FY2003; Metro subsidy updated by client to reflect actual subsidy paid.*

In addition to charity care, the Metro subsidy is used to partially fund losses incurred from other payors whose reimbursement fails to cover the cost of providing care to those patients. Based on the FYE 2002 and FYE 2003 pro forma, NGH has incurred a net loss from commercial payors. Prior to accepting or renewing any contracts from these payor types, NGH should evaluate the profitability and other benefits of the contracts. In FYE 2003, additional charity care volumes contributed to the $4 million increase in charity care operating loss (before subsidy).

4. Pro forma loss for outpatient only service

In order to provide a perspective of the loss related to providing outpatient services only, a pro forma analysis was developed based on June 30, 2004 financial information. The pro forma analysis utilizes NGH internal financial reports and management assumptions related to volumes and the nature of NGH services and resources. Revenue (prior to the Metro subsidy) and expenses were allocated between inpatient and outpatient services. The following must be considered when reviewing the pro forma analysis:

- The outpatient costs and revenues identified and allocated by management represent costs and revenues under the current hospital infrastructure, location, contractual obligations, and operating structure.
- Most opportunities associated with providing outpatient-only services would likely occur within a structure different than the current NGH structure and, therefore, the actual results would differ from those shown in the pro forma.

NASHVILLE GENERAL HOSPITAL - PRO FORMA OP ONLY STRUCTURE
BASED ON FYE JUNE 30, 2004

Net Patient Service Revenue	$ 8,869,549
Bad Debt	195,998
Essential Access Payment	-
Other Operating Revenue	100,285
Total Operating Revenue	9,165,832
Direct Patient Care Expense	3,421,579
Allocated Patient Care Expense	5,487,090
Allocated Overhead Expense	7,076,559
Depreciation Expense - Outpatient Only	741,867
Sub Total Expenses	16,727,094
Pro Forma Loss Before Fixed Cost	(7,561,263)
Fixed Cost - Interest on Lease Payment	3,164,011
Fixed Cost - Other Interest	159,398
Fixed Cost - Depreciation Inpatient Only	2,208,058
Pro Forma Loss Before Metro Subsidy	($13,092,729)

The pro forma loss includes fixed cost related to operating an outpatient facility at the current NGH location and under the current NGH operating structure. The significant management assumptions regarding this pro forma are as follows:

- NGH would not be entitled to Essential Access Payments.
- The following services currently provided would be discontinued; therefore no costs or revenues are included:
  - Emergency department
  - Prison Care
  - Certain observation services
- In addition to outpatient clinic visits, NGH would continue to provide outpatient surgical and diagnostic services.
- Expenses are allocated to outpatient services based on various allocation methods.
- Total depreciation, interest and building lease costs would continue to be incurred on the existing facility.

The total NGH outpatient clinic visits (excluding emergency department) for the year ended June 30, 2004 was approximately 38,000. Based on the Medicare Resource Based Relative Value System (RBRVS), an indicator of the cost of providing care for an outpatient visit at a physician office in Tennessee, the NGH cost per visit would range from $30 and $60.

5. NGH's performance was compared to a set of peers and the industry norm to determine the cause of the losses and to identify opportunities and required actions to reduce the losses.

A selected set of financial and operational performance indicators for NGH for the fiscal year ended June 30, 2003 was benchmarked against the industry norm and six selected peer facilities. The assessment indicates:

- NGH treats a greater percentage of TennCare/Medicaid and indigent patients than peers and the industry norm. NGH serves the largest TennCare percentage (as a proportion of total patients) of any other provider in Tennessee (for TennCare detail, please see section 7 in this executive summary). The peers may have a higher percentage of commercial and/or governmental insured patients. These payors may positively impact peer revenues.
- Overall, NGH's revenues compare unfavorably with peers and industry norm.
- Overall, NGH's costs compare favorably with peers and industry norm. NGH focuses on cost containment.

- It seems, based on discussion with management, that NGH peers do not receive additional cash funding in excess of local subsidies received. NGH appears to have a unique arrangement with regard to its direct access to the Metro primary bank account for the funding of operating budget overages.
- The NGH local subsidy received, per adjusted patient day, is greater than the peers.
- The loss incurred at NGH is greater than the peers and industry norm.

Although there are potential operational improvements and cost savings opportunities, the assessment identifies revenue enhancement as the area with the most significant potential for improvement. NGH performs well below the peers and industry norm relative to revenues. NGH and E&Y have identified and detailed many potential revenue enhancement opportunities in Appendix B, with the greatest opportunities to:

- Consider outsourcing the TennCare enrollment function to a private contractor to attempt to increase TennCare revenue.
- Improve charge capture, billing, and collections for all services provided.
- Enhance cash flow by reducing days in accounts receivable.
- Evaluate the profitability of individual commercial contracts to determine the extent to which commercial contracts may be able to offset the losses from other payors.
- Generate additional revenues through grants and philanthropy.

The scope of our assessment and availability of certain information limited our ability to quantify each of the opportunities identified in our report. However, it would appear that if NGH could implement the opportunities identified they would have an annual positive financial impact.

The estimated potential annual financial impact for a limited number of identified revenue opportunities is as follows:

Revenue Opportunities

Opportunity	Amount	Description
Enroll self-pay patients into TennCare	$475,000	Enroll portion of self-pay population into TennCare, possibly through outsourcing.
Increase collections of self-pay patients	$1,700,000	Develop and implement procedures to collect from self pay patients.
Collect all technical fees from Meharry clinics	$220,500	Collect technical fee portion of certain non-governmental payors received by Meharry clinics.
Sum of above revenue opportunitities	**$2,395,500**	

The estimated potential annual financial impact for a limited number of identified cost savings opportunities is as follows:

Cost Savings Opportunities

Opportunity	Amount	Description
Utilize product standardization	$469,000	Development of a closed panel of products that may be selected by physicians and employees.
Utilize inventory management	$335,000	Implement specific inventory control recommended by external material management (HealthCare Logistics) report.
Increase usage of GPO services	$38,000	Savings provided by purchasing additional goods and services through the Group Purchasing Organization (GPO).
Reduce holiday pay	$323,000	Reduced annualized holiday pay from 2.5 times regular pay to the industry-accepted standard of 1.5 times regular pay.
Decrease overtime expense	$183,000	Decrease overtime expense as a percentage of salaries to FY03 levels.
Fully implement 340B program	$73,000	NGH's full participation in this federal drug program may provide additional savings.
Sum of above cost savings opportunitities	**$1,421,000**	

Opportunities for NGH to increase cash flow have been identified and the estimated potential one-time financial impact is as follows:

Cash Flow Opportunities

Opportunity	Amount	Description
Decrease days in accounts receivable	$857,000	Accelerate accounts receivable (A/R) from 99 days (excluding liquidated TennCare MCOs) to the peer average of 85 days.
Decrease DNFB days	$2,669,000	Reduce DNFB (discharged, not final billed) from 27 days to the peer average of 7.
Sum of above cash flow opportunitities	**$3,526,000**	

Other opportunities were identified that would likely bring value to NGH; however, additional analysis is necessary for the quantification of the value. These opportunities include:

Charge Capture - NGH may not be capturing all charges for procedures performed. A sample review is recommended to compare medical records to bills to ensure charge capture.

Charge Description Master (CDM) – The CDM is a primary source for generating charges on a bill. The CDM should be reviewed to ensure proper CDM charge codes.

Payor Contract Analysis/Management – Currently, NGH does not have a contract management system to perform payor contract analysis. The ability to evaluate the payment terms of a payor contract as it relates to the NGH profitability of that contract is necessary.

6. Despite the capacity to treat a greater number of patients, NGH has difficulty attracting additional patients.

The assessment and interviews with members of NGH's management team suggests that NGH has the capacity to increase occupancy and the number of procedures performed. However, it has not been validated that NGH can attract additional patients.

The occupancy rate at NGH is as follows:

	FYE 6/30/01	FYE 6/30/02	FYE 6/30/03	FYE 6/30/04
Available Beds	130	137	130	120
Average Daily Census	82	77	74	76
Occupancy Rate	**63%**	**59%**	**57%**	**63%**

Source: Medicare Cost Report, Worksheet S-3

NGH's exclusive relationship with Meharry Medical College (discussed in the next section), may limit the ability to attract a greater number of insured patients. The exclusivity appears to limit the economic opportunities of private practitioners not affiliated with Meharry, who might otherwise benefit from "coverage" opportunities at NGH. Such opportunities often provide a source of new patients, surgical cases, deliveries, consultations, etc., or a steady source of income from paid staffing or off-hour coverage arrangements, often regardless of whether the patients have third party coverage or not. Also, many private physicians enjoy the status of medical staff leadership positions in local hospitals, which do not appear available at NGH.

The NGH volume from community physician referrals (non-Meharry physicians) appears negligible. There are few community physicians on NGH's medical staff and community physicians cannot head departments at NGH. It is likely that the reimbursement from patients who might be referred by community physicians would exceed the reimbursement currently available to NGH. However, prior to targeting additional patients, NGH should analyze the effect that would have on overall profitability. There appear to be many valid and perceived barriers to developing such referrals from community physicians and increasing the NGH volume.

7. NGH's relationship with Meharry Medical College (Meharry).

There are two primary elements of the contractual relationship between NGH and Meharry.

- The Professional Service Agreement (PSA).
- The loan and lease agreements.

The Professional Service Agreement

Through the exclusive contractual arrangement of the PSA, Meharry provides NGH with physicians that:

- Treat all of the indigent patients of NGH
- Provide physician staffing and coverage to NGH clinical departments
- Fill medical directorships
- Provide supervision for NGH residents and medical students

The cost to NGH for these services is approximately $8 million per year and is based on a Full Time Equivalent (FTE) model, which requires Meharry to provide NGH with a specific number of physician FTEs in various departments. The contract also requires that Meharry, through periodic reporting, provide evidence to NGH that Meharry is fulfilling its contractual obligation.

The assessment, in part, revealed that:

- Meharry was not providing NGH with all physician FTEs that NGH paid for nor did Meharry document the number of actual FTEs it provided. Without documentation, NGH cannot assess to what levels Meharry is providing physician FTE's and complying with the PSA. NGH has notified Meharry that NGH will begin contracting with community physicians to fill positions that Meharry is unable to provide.
- Meharry physicians indicated dissatisfaction with their salary arrangements with the Medical College and have complained that they are not always paid timely.
- Meharry managed care relationships and referring patterns were unknown to NGH.
- Per NGH management, Meharry was billing and retaining some "technical service" payments from certain non-governmental patients treated in Metro facilities which was in violation of PSA paragraph 11.3. NGH management believes that approximately $220,500 in technical fees may have been retained.

- The exclusive relationship with Meharry to perform certain services may be limiting NGH from developing relationships with community physicians and attracting additional patients and revenue.

The Loan and Lease Agreements

Meharry owns the physical plant and real estate where NGH is operating. Therefore, NGH has a 30-year agreement with Meharry to lease the building and real estate at a cost of $4 million per year totaling $120 million over the life of the lease. Unlike most standard lease agreements, this lease agreement:

- Contains a provision that allows NGH to remit the lease payments (due Meharry) directly to a trustee to pay for the costs associated with any debt amount owed related to improvements made to NGH.
- Has a fixed payment amount over the 30-year life of the lease and does not have an inflation factor.
- Does not contain a renewal or purchase option at the end of the lease.

The Metro government incurred debt to fund the required capital improvements to NGH at the inception of the lease. The $4 million annual lease payment owed to Meharry is being paid by the Metro government directly to the trustee to retire this debt. The $4 million is part of the approximately $20 million subsidy to be received in FY05 and is included in NGH expenses. It is estimated that the total payment of principle and interest expense that will be required to retire the debt is approximately $110 million. Therefore, once the $110 million debt is retired, contractually NGH will begin paying the $4 million lease payment directly to Meharry in the final three years until the $120 million lease contract is satisfied.

As of this date, the assessment indicates that the lease arrangement and amount appears to be agreeable to both parties and is within market rate parameters.

8. The interrelationship between NGH and TennCare

TennCare Volume and Net Patient Service Revenue

NGH's single largest payor is TennCare. NGH's TennCare charges were approximately 42% of total charges for the fiscal year ending June 30, 2003. Of Tennessee's top ten public hospitals, NGH has the highest TennCare utilization. However, several Tennessee hospitals treat a larger number of TennCare patients.

Tennessee hospitals may have the following two potential sources of state revenue for the treatment of TennCare and charity care patients:

- Revenue received from TennCare managed care organizations (MCOs)
- TennCare Essential Access Payments (EAP's)

NGH's TennCare revenue per adjusted patient day from these sources is comparable to the top Tennessee public hospitals and hospitals in the Nashville marketplace.

	[1]TennCare Utilization Percentage	TennCare Net Patient Service Revenue (NPSR)	[2]TennCare Essential Access Payments (EAP)	Total TennCare Net Revenue	[3]TennCare Adj. Patient Days (APD)	TennCare Net Revenue per APD	[4]TennCare Net Revenue per APD, CMI Adjusted
Nashville General Hospital	**42.11%**	**18,638,207**	**7,016,729**	**25,654,936**	**20,479**	**$1,252.77**	**$972.84**
Top Tennessee Public Hospitals by TennCare Utilization Percent							
Regional Medical Center (The Med)	37.56%	73,435,978	22,166,833	95,602,811	71,503	$1,337.04	$681.38
Claiborne County Hospital	32.89%	4,486,984	440,166	4,927,150	8,294	$594.05	$586.17
Hardin County General Hospital	31.58%	3,023,578	274,283	3,297,861	6,652	$495.74	$496.93
Humboldt General Hospital	29.41%	1,799,950	283,774	2,083,724	3,203	$650.61	$675.30
Hawkins County Memorial Hospital	27.48%	2,378,106	-	2,378,106	4,282	$555.35	$566.73
Gibson General Hospital	26.90%	1,192,518	75,374	1,267,892	1,729	$733.36	$803.10
Bolivar General Hospital	26.85%	1,379,846	-	1,379,846	1,692	$815.37	$871.26
Erlanger (inc. Erlanger North)	26.54%	67,439,340	5,656,117	73,095,457	38,511	$1,898.06	$1,074.80
University Health Systems	25.49%	61,240,479	6,301,573	67,542,052	49,952	$1,352.13	$1,062.88
Nashville Market Providers							
Vanderbilt University Medical Center	23.18%	81,203,338	6,151,406	87,354,744	82,145	$1,063.42	$547.60
Centennial Medical Center	18.76%	36,877,101	1,876,386	38,753,487	32,887	$1,178.38	$661.69
Baptist Hospital	8.16%	15,660,279	1,218,896	16,879,175	17,814	$947.52	$592.55
St. Thomas Hospital	6.75%	14,284,938	-	14,284,938	11,395	$1,253.64	$582.32

Notes:

1) TennCare utilization based on percentage of TennCare charges to charges for all payors.
2) TennCare Essential Access Payments based on FY04 Pool, as reported by TNPath.
3) TennCare IP days were divided by an outpatient adjustment factor (total TennCare total charges divided by TennCare IP charges) to compensate for variability in outpatient volumes.
4) Medicaid-specific case mix was not available, therefore, net revenue per adjusted patient day was divided by Medicare Case Mix Index for discharges occurring in Federal fiscal year 2003. A hospital's case mix index represents the average diagnosis-related group (DRG) relative weight for that hospital and is calculated by summing the DRG weights for all Medicare discharges during FY2003, and dividing by the number of discharges. It is used to factor in variance in patient severity levels.

Source: Public hospital information, unless otherwise noted, was obtained from Tennessee Hospital Association (THA) calculation of CPE which utilizes 6/30/03 Joint Annual Reports for data.
Nashville market information, unless otherwise noted ,was obtained from 6/30/03 Joint Annual Reports.

TennCare Operating Losses

For the year ended June 30, 2003, NGH operated at a deficit treating TennCare patients. Unlike many other Tennessee hospitals, NGH does not have the volume from insured patients to offset the TennCare deficits. NGH may have the opportunity to negotiate higher rates from the TennCare MCOs.

Certified Public Expenditures

TennCare received $212 million in federal matching revenue attributed to FY 2002 Certified Public Expenditure's (CPE's) incurred by public hospitals. TennCare received approximately $19.3 million of revenue in federal matching funds directly related to NGH's CPE's. If NGH were not operating as a public hospital and incurring CPE's, TennCare would not have received approximately $19.3 million of the $212 million in federal matching funds. NGH received approximately $6.3 million of TennCare Essential Access Payments in FY 2002. Given that TennCare received approximately $19.3 million in federal matching funds related to NGH and NGH only received $6.3 million of Essential Access Payments, Metro and NGH may have the opportunity to negotiate with TennCare for additional funds.

Pro Forma Impact of Proposed TennCare Program Modifications

On January 10, 2005, a proposal was announced to modify the current TennCare program. The new plan would be similar to a traditional state Medicaid plan, a "basic" TennCare plan. The new plan would preserve full coverage for all 612,000 children on the TennCare program and maintain a limited level of benefits for 396,000 adults who are currently TennCare eligible. As many as 323,000 adults currently eligible for TennCare would not be eligible for benefits under the new plan. Those who may lose TennCare eligibility include those with Medicare eligibility, the medically needy, and the uninsured and uninsurable. Of those who remain, annual coverage limits have been proposed including twenty inpatient days, twelve outpatient physician visits and eight outpatient ancillary service encounters.

A pro forma analysis was performed related to the publicized potential modification in the TennCare program. The pro forma was developed after review of various management assumptions and discussions with the Tennessee Hospital Association (THA), NGH management, and other providers in the Nashville market place. The pro forma utilizes FY04 TennCare total volumes provided by management and enrollment mix based on that of Davidson County. Although significant shifts in volume and service mix are expected, they have not been considered in the pro forma. Potential revenue collection from current TennCare enrollees that will not be eligible for Medicaid was not considered. Future TennCare payment rates for Medicaid eligible beneficiaries are assumed to be similar to current rates. Additional reductions in Medicare revenue will result due to the elimination of TennCare days that contribute to the calculation of Medicare disproportionate share (DSH) payments.

Nashville General Hospital

Pro Forma Net Revenue Reduction Under Modified TennCare Program

(Based on June 30, 2004 financial data)

	Low	High
Medically Needy	($713,630)	($1,032,380)
Uninsured	(1,680,250)	(2,294,498)
Cost Limits	(1,073,989)	(1,283,648)
Federal DSH Reduction	(405,115)	(405,115)
Pro Forma TennCare Net Revenue Reduction	***($3,872,984)***	***($5,015,641)***

Details on the modification of the current TennCare program are expected to be forthcoming. A range of the potential reduction in net revenue is presented. The variance between the low and high calculations results from differences in the overall state average revenue per TennCare patient encounter as published by THA and actual FY04 TennCare net revenue per encounter. It is expected that some TennCare patients who lose eligibility or exhaust their benefits may migrate from their current providers-of-choice to other providers. This volume redistribution as well as fluctuations in market activity, demographic trends, and other unexpected factors may materially affect the pro forma loss of NGH TennCare revenue.

9. The NGH Community Benefit

A community impact analysis was not performed as part of this assessment. However, based on other indicators, it is evident that NGH has a positive impact on the community of Nashville and Davidson County as a healthcare provider. The primary mission of NGH is to provide equal access to care for the underserved population. A plan would have to be developed for how the underserved would receive treatment if NGH reduced or eliminated its services. In-patient care could potentially be absorbed by other local hospitals and the Health Department or other clinics could potentially be expanded to absorb outpatient care; however, a capacity study would need to be performed to validate this. A reduction and/or elimination of services at NGH would likely have a major impact on the patterns of access to health services and affect the financial positions of the other providers in the community.

Meharry leadership has also expressed the institution's clinical and financial dependence on NGH. If NGH did not operate, the impact on Meharry would be negative.

Summary and Overall Recommendations

It appears that for the foreseeable future NGH will continue to operate at a deficit and, therefore, require a cash subsidy and other operating and capital cash support from the Metro government. Metro management anticipates that future funding under the current model would likely be in the following range:

Metro Government Pro Forma On-Going Annual Funding Requirement

	Low	High
Total operating funding[1]	$24,000,000	$35,000,000
Capital Funding[2]	$1,800,000	$3,300,000
Metro Funds for Repayment[3]	$10,000,000	$10,000,000
Funding of estimated TennCare loss	$3,900,000	$5,000,000
Total of all funding	$39,700,000	$53,300,000

[1] Total operating funding based on historical and current trends.

[2] Low-end of capital funding based on historical trend, high-end based on industry norms.

[3] Metro will need to fund the estimated $50M debt that NGH may accumulate through 6/30/2005. A five year repayment period is assumed.

Even if NGH were to (1) receive additional revenue support from the State through TennCare, (2) implement a majority of the opportunities identified in the report and (3) increase the number of patients with insurance other than TennCare, it is likely NGH would still require a cash subsidy and other operating capital and cash support from the Metro government. The potential positive financial impact of approximately $3.8 million in additional revenues and cost savings annually and the potential one-time cash acceleration of approximately $3.5 million identified in the report would have little impact on NGH's overall financial position. Metro's management has indicated that it is unlikely that Metro's current open-ended support can continue much longer without damaging Metro's overall financial position.

In order for policy-makers to determine the long-term plan for providing health care to the underserved citizens of Nashville and Davidson County, we recommend that the Metropolitan Government take the following actions:

- Pursue additional state support for the funding of current and future NGH TennCare losses.
- Assess the level of services actually received from Meharry and determine the difference between the market value of Meharry services received and related funding to Meharry for the provision of services, in order to determine any funding that Metro management believes is, in substance, a grant to Meharry.
- Develop a business plan to directly provide or contract services currently provided by the NGH outpatient clinics.

- Commission a survey of area physicians in order to determine the ability of NGH to attract additional volumes through alignment with community physicians.
- Commission a capacity and community impact study to determine the likely impact on the underserved population, including a determination on how and where the underserved would receive treatment, if NGH reduced or eliminated its services.
- Use the above information to develop alternative plans for providing healthcare for the underserved, including considering such options as contract financing arrangements with entities other than NGH and/or providing outpatient services only.
- Utilizing the Centers for Medicare and Medicaid Services quality data, perform a baseline evaluation of quality of care provided at NGH by comparing NGH performance to industry benchmarks.
- Assist NGH in establishing one general ledger (G/L) instead of the current practice of maintaining duplicate G/L systems.
- Assist NGH to establish an independent bank account instead of NGH having access to Metro's main operational bank account.
- Curtail additional capital investment at NGH until alternative plans for providing healthcare for the underserved are adequately pursued, and only provide capital investment when NGH demonstrates through a business plan the required need and/or return on investment.
- As the Metropolitan Government conducts the analyses, ongoing contractual obligations should be considered. For example, the annual Meharry building lease payment of $4 million is scheduled to continue through 2024. There are likely other contractual commitments related to facility and equipment maintenance, service agreements, and other obligations.

We recommend that NGH take the following actions:

- Pursue all of the revenue, cost savings and cash acceleration opportunities identified and implement new initiatives where feasible.
- Develop a deadline for Meharry to comply with physician staffing and reporting requirements and other terms of the current PSA contract. Define specific penalties for non-compliance with contract terms and deadlines.
- Explore the benefits of contractual arrangements with Meharry other than the current FTE model. For example, NGH could pay Meharry based on a fee schedule for patient services performed for charity cases. This would require Meharry provide a patient bill to NGH for the service performed.
- NGH currently utilizes an "open range", performance-based pay plan for mid-level management. This compensation plan should be implemented for all staffing levels.

- Develop a business plan that identifies the near and long-term financial and operating forecast. The plan should be detailed and identify all methods of validation regarding the plan. The plan should include/address at least the following, and should incorporate the financial impact of each:
  - Any realistically expected additional revenues from TennCare and/or additional physician referrals.
  - The revenue opportunities, cost savings and operating efficiencies identified in this assessment.
  - The pros and cons of the exclusive Meharry physician arrangement and the net effect on NGH.
  - Mechanisms to align NGH goals and objectives with Meharry physician incentives.
  - Employee retention initiative that includes “open-range” performance-based pay.

Numerous other findings and recommendations can be found in Appendix B.

Appendix B
Nashville General Hospital at Meharry
Findings and Recommendations

March 2004

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Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Caveats and Limitations

This analysis is subject to the following caveats and limitations:

- No independent verification will be made of information obtained and provided by NGH or Metro; we assume that all such information reflects management's good faith efforts to describe the facts and circumstances.
- Our report will be prepared based on information and financial data provided by NGH and Metro, and through interviews with informed people, and on publicly available data and sources which we have not verified. The information upon which our report has been prepared is assumed to be accurate and reliable. No responsibility is assumed by Ernst & Young, LLP (E&Y) for the accuracy of such information.
- Our findings and recommendations report enumerates our procedures, sets forth our findings, and acknowledges that (1) sufficiency of the procedures is Metro's sole responsibility, and we make no representation regarding the sufficiency of those procedures for Metro's purposes, (2) the procedures do not constitute an audit, review, or agreed upon procedures engagement in accordance with the American Institute of Certified Public Accountants (AICPA) standards (or examination in accordance with professional standards) and had we been engaged to perform additional procedures or make an audit, review, or agreed upon procedures in accordance with AICPA professional standards, matters might have come to our attention that would have been reported and (3) it is restricted to the intended parties and may not be used, relied upon or referred to for any other purpose.
- Our findings and recommendations report references certain pro forma financial analyses. Pro forma financial analyses show how hypothetical or future transactions might affect historical financial results. The pro forma results shown will likely not be achieved.
- Our findings and recommendations report adjusts certain items utilizing a Medicare case mix index. The Medicare case mix index was utilized in lieu of an overall case mix index. An overall case mix index was not available. It is likely that if an overall case mix index was available and utilized, the results shown would be different.
- Annex 2 (Supplemental Terms and Conditions) of the Contract states "The services and the reports provided pursuant to the Contract are intended for the information and use of Metro's management."

Caveats and Limitations

This analysis is subject to the following caveats and limitations:

- Our fieldwork was completed in March and unless otherwise directed by Metro management, subsequent events occurring after March 31, 2004 will likely not be reflected in this report. Events and conditions affecting NGH or Metro or the overall business environment subsequent to our report could materially affect our findings. The terms of our engagement are such that we have no obligation to update our report or to revise our report because of events and transactions occurring subsequent to the report date.
- As of January 10, 2005, the governor has proposed a plan for "basic TennCare" which preserves full coverage for TennCare eligible children and maintains a reasonable level of benefits for 396,000 adults who are eligible for Medicaid. This findings and recommendations report does not consider these policy changes. However, a pro forma of the magnitude of the initial impact is contained in the executive summary. At this time, it is not possible to take into consideration all of the ramifications of this shift in policy. Some of these unknown ramifications could materially affect the findings of our report.
  - "Governor Phil Bredesen today announced TennCare changes are moving forward under a plan that stops short of returning to traditional Medicaid by preserving full coverage for children, and limiting benefits and reducing enrollment for adults. - *Excerpted from January 24, 2005 Tennessee Governor's Communication Office.*

Section 1: Benchmarking

Approach

1. Compared NGH's FY01, FY02, FY03, and FY04 Income Statements.
2. Compared NGH's performance to industry norms and peer facility benchmarks.
3. Met with Metro and NGH management to understand their desired outcomes.
4. Worked with management to identify six peer organizations.
5. Identified the metrics to benchmark (glossary of benchmarks found in Attachment E) within the following categories:
   - General Information
   - Utilization
   - Liquidity
   - Revenues, Expenses, and Profitability
   - Productivity and Efficiency
6. Evaluated NGH's strategic plan and NGH's progress against stated strategic goals.
7. Data was obtained from publicly available sources or directly from the peer organization.
8. Based on available data, selected a time period for comparison.
9. When applicable, wage index adjusted and case mix index adjusted peer data and industry norms.
10. Identified variances to peers and to industry norms. The industry norms are either the median or the 50th percentile for all acute care hospitals considered by the benchmarking source.
11. Where possible, identified contributing factors for variance areas.
12. Where possible, provided recommendations on improvement opportunities.
13. Utilization data is for all departments and business units of the hospital, peer subcomponents (i.e. Rehab, SNF, etc.) were included in this analysis.

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Benchmarking – Approach (continued)

Peer Selection

E&Y identified over 40 hospitals across the U.S. that matched the following criteria established by management and Metro's internal audit personnel: 1) bed size; 2) location - urban; 3) publicly owned; and 4) academic / teaching. Of the 40 plus facilities that had similar characteristics, NGH management selected the following six facilities to use in a comparison:

1. Denver Health Medical Center - Denver, CO
2. Regional Medical Center ("the Med") - Memphis, TN
3. Cooper Green Hospital - Birmingham, AL
4. Durham Regional Hospital - Durham, NC
5. University Hospital - Albuquerque, NM
6. Columbia Regional Hospital - Columbia, MO

All but Columbia Regional and The Med are *government controlled*. The Med was selected because of geographic similarity and high TennCare utilization and Columbia was selected for its similar size and volume levels.

Time Period Used for Analysis

- *Benchmarking* – We obtained the latest publicly available data for each peer and the industry norm. Due to the differences in peer fiscal year ends and compliance with reporting requirements, the available data ranged from years ending June 30, 2001 to June 30, 2003 (see page 8 for the peer specific year end date of the data obtained). Based on the dates of the peer information obtained, the NGH June 30, 2003 fiscal year was utilized for benchmark.
- TennCare and Community Benefits – We utilized NGH's FY2002 year end and FY2002 State Joint Annual Report to compare NGH to area hospitals. The FY2002 State Joint Annual Report is the latest year available to obtain other area hospital data.

Peer Data Sources

Unless otherwise noted, the sources for all financial and operational data related to NGH and peers were obtained through American Hospital Directory which is a repository for U.S. acute care hospital Medicare Cost Reports.

Industry Norm Data Sources

The data for industry norms was obtained from the list of sources noted below. The specific source for a metric is identified in each benchmarking matrix with one of the following letters:

A - 2004 Almanac of Hospital Financial and Operating Indicators AKA CHIPs report using 2002 data, Median, All US Hospitals

B - Moody's Utilization & Financial Statistics, 2002, Mean, Freestanding Hospital & Single-State Healthcare Systems, all ratings

C - Total U.S. median from Solucient 2004 Sourcebook which utilizes 2001 data

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Benchmarking – Findings

NGH Financial Trend Analysis

NASHVILLE GENERAL HOSPITAL

	FYE 6/30/2001	$ per Adj. Patient Day	FYE 6/30/2002	$ per Adj. Patient Day	FYE 6/30/2003	$ per Adj. Patient Day	FYE 6/30/2004	$ per Adj. Patient Day
Net Patient Service Revenue	35,708,178	755	38,688,051	805	37,940,363	794	37,017,312	752
TennCare Safety Net Revenue	1,993,315	42	2,121,089	44	6,319,041	132	7,016,718	142
Revenue to Match Allocated OH	2,600,004	55	3,027,841	63	3,050,171	64	-	-
Other Revenue	309,378	7	971,160	20	1,001,306	21	951,728	19
Total Revenues	**40,610,875**	**859**	**44,808,142**	**932**	**48,310,880**	**1,011**	**44,985,758**	**913**
Salary and Benefits	34,165,810	723	37,101,140	772	38,246,037	801	41,156,965	836
Contract Labor	2,350,974	50	1,903,648	40	2,280,196	48	1,606,803	33
Total Labor Expense	36,516,784	772	39,004,788	811	40,526,233	848	42,763,768	868
Non-Labor Expense	26,667,759	564	27,317,819	568	29,038,108	608	30,234,131	614
Metro Overhead Allocation	2,600,004	55	3,027,841	63	3,050,171	64	3,050,171	62
Total Operating Expenses	**65,784,547**	**1,391**	**69,350,448**	**1,443**	**72,614,512**	**1,520**	**76,048,070**	**1,544**
Operating Income (Loss)	**(25,173,673)**	**(532)**	**(24,542,306)**	**(511)**	**(24,303,632)**	**(509)**	**(31,062,312)**	**(631)**
Metro Gov't Subsidy	23,505,099	497	23,822,407	496	23,734,850	497	23,505,100	477
One Time Land Transfer	-	-	-	-	(737,167)	(15)	-	-
Interest	(4,162,096)	(88)	(3,802,102)	(79)	(3,636,710)	(76)	(3,323,408)	(67)
Loss on Disposal of Assets	-	-	-	-	-	-	(467,960)	(10)
Capital Funding	-	-	-	-	-	-	3,158,203	64
NET INCOME (LOSS)	**(5,830,669)**	**(123)**	**(4,522,002)**	**(94)**	**(4,942,659)**	**(103)**	**(8,190,377)**	**(166)**
Operating Margin (without subsidy)	-61.99%		-54.77%		-50.31%		-69.05%	
Excess Margin (with subsidy)	-14.36%		-10.09%		-10.23%		-18.21%	
Outpatient Adjusted Patient Days	47,286		48,067		47,774		49,258	
Patient Days	28,467		27,415		26,332		27,320	
Outpatient Adjustment Factor	1.66		1.75		1.81		1.80	

Source: For FYE 2001 – 2004, published audited financial statements and related detailed schedules were used.

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Benchmarking – Findings (continued)

NGH Financial Trend Analysis

Observations – FY 2004

- Ø The NGH revenue allocation received from Metro in FY01 through FY03 (to offset the $3M Metro cost allocation) was not received in FY04.
- Ø NGH recognized additional revenue in FY04 from a Metro capital contribution for $3.15M.
- Ø NGH did not incur the costs of providing the In-Line Of Duty (IOD) medical care to Metro employees in FY04. Although these costs were previously covered by the subsidy, the subsidy amount remains unchanged. In future years, the subsidy amount is expected to be reduced by 15%.

Observations – Trends

- Ø The TennCare Safety Net Payment significantly increased from FY02 to FY03, FY04 indicates an increase.
- Ø Overall labor expense per adjusted patient day increased from FY02 to FY04.
- Ø Non-labor expense per adjusted patient day increased from FY02 to FY04.
- Ø There is significant variability in the labor and non-labor cost per adjusted patient day from year to year.
- Ø The loss before subsidy per adjusted patient day has decreased each year from FY01 through FY03; FY04 indicates an increase.

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Benchmarking – Findings (continued)

General Information

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02
Type of control	Government - Hospital District or Authority	N/A	N/A	Government - Hospital District or Authority	Voluntary Non-Profit - Private	Government - Local	Government - Local	Voluntary Non-Profit - Private	Government - State
Fiscal year end	6/30/2003	N/A	N/A	12/31/2002	6/30/2003	9/30/2002	6/30/2001	6/30/2003	6/30/2002
Case Mix Index[1]	1.3478	1.5115	(0.1637)	1.2602	1.4682	1.3966	1.3873	2.1268	1.4296
Wage Index Factor[2]	0.9578	0.9440	0.0138	1.0601	0.8515	0.9222	0.9990	0.8920	0.9390
Outpatient Adjustment Factor[3]	1.8046	1.4895	0.3151	1.6064	1.5792	1.6293	1.5444	1.3261	1.5460

Notes:

1. Case Mix Index data is Medicare only and was obtained from the Centers for Medicare and Medicaid Services (CMS).
2. The wage index factor was obtained from the Federal Register for Federal Fiscal Year beginning October 1, 2002.
3. An outpatient adjustment factor is calculated and applied to certain metrics to consider outpatient volume.

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Benchmarking – Findings (continued)

Financial Information for NGH and Peers

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02
Income Statement Indicators									
Inpatient Revenue	54,422,656	235,429,369	(181,006,713)	345,192,830	85,540,025	41,064,889	185,510,791	484,738,010	270,529,668
Outpatient Revenue	43,787,946	115,247,291	(71,459,345)	209,329,754	49,541,929	25,842,825	100,984,335	158,067,506	147,717,395
Total Patient Revenue	98,210,602	350,676,660	(252,466,058)	554,522,584	135,081,954	66,907,714	286,495,126	642,805,516	418,247,063
Contractual Allowance / Discounts	53,951,198	190,150,581	(136,199,383)	322,828,113	81,686,078	46,292,267	134,763,557	354,702,411	200,631,060
Net Patient Revenues	44,259,404	160,526,079	(116,266,675)	231,694,471	53,395,876	20,615,447	151,731,569	288,103,105	217,616,003
Total Operating Expense	72,614,512	224,104,113	(151,489,601)	378,125,813	56,728,765	71,085,692	205,900,003	360,838,581	271,945,825
Operating Income	(28,355,108)	(63,578,035)	35,222,927	(146,431,342)	(3,332,889)	(50,470,245)	(54,168,434)	(72,735,476)	(54,329,822)
Income from Investments	-	1,658,391	(1,658,391)	6,246,360	(669,827)	272,228	-	-	4,101,583
All Governmental Appropriations	26,785,021	31,987,766	(5,202,745)	99,586,154	-	41,645,060	-	-	50,695,382
Miscellaneous Non-Patient Revenue	1,001,306	22,902,437	(21,901,131)	47,605,889	6,682,876	3,411,218	8,119,415	62,471,315	9,123,906
Total Non-Patient Revenue	27,786,327	57,057,718	(29,271,392)	153,438,403	6,013,049	48,383,256	8,119,415	62,471,315	63,920,871
Total Other Expenses	737,167	1,942,822	(1,205,655)	2,710,924	798,665	426	-	5	8,146,909
Net Income or (Loss)	(1,305,949)	(8,463,138)	7,157,189	4,296,137	1,881,495	(2,087,415)	(46,049,019)	(10,264,166)	1,444,140
Specific Indicators									
Local Subsidy[1]	23,734,850	24,732,075	(997,225)	26,900,004	-	37,000,000	-	34,066,664	50,425,782
Local Subsidy as a percent of total patient revenue	24.2%	7.1%	17.1%	4.9%	0.0%	55.3%	0.0%	5.3%	12.1%
Local Subsidy as a percent of total operating expense	32.7%	11.0%	21.7%	7.1%	0.0%	52.0%	0.0%	9.4%	18.5%

Notes:

1. Local subsidy amounts were obtained from: NGH and The Med – internal financial documents; Denver Health, Columbia, and University Hospital of New Mexico (Bernalillo County mill levy) – audited financial statements; Durham and Cooper Green – from Finance personnel at respective hospitals. Peer average includes all peers, including those reporting $0 subsidy.
2. Peer indicators are not case mix index or wage index adjusted.

§ Indicators are presented per outpatient adjusted patient day on the following page in order to better equalize the variance in volumes between peer facilities.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Benchmarking – Findings (continued)

Financial Information for NGH and Peers $ per Adjusted Patient Day

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02
Income Statement Indicators									
Inpatient Revenue	1,022	2,437	(1,414)	2,988	3,630	955	1,793	3,491	1,762
Outpatient Revenue	822	1,265	(443)	1,812	2,103	601	976	1,138	962
Total Patient Revenue	1,845	3,702	(1,857)	4,801	5,733	1,556	2,770	4,629	2,723
Contractual Allowance / Discounts	1,013	2,084	(1,070)	2,795	3,467	1,076	1,303	2,554	1,306
Net Patient Revenues	831	1,618	(787)	2,006	2,266	479	1,467	2,075	1,417
Total Operating Expense	1,364	2,282	(918)	3,274	2,408	1,653	1,990	2,599	1,771
Operating Income	(533)	(664)	131	(1,268)	(141)	(1,173)	(524)	(524)	(354)
Income from Investments	0	10	(10)	54	(28)	6	0	0	27
All Governmental Appropriations	503	360	143	862	0	968	0	0	330
Miscellaneous Non-Patient Revenue	19	227	(208)	412	284	79	78	450	59
Total Non-Patient Revenue	522	609	(87)	1,328	255	1,125	78	450	416
Total Other Expenses	14	18	(5)	23	34	0	0	0	53
Net Income or (Loss)	(25)	(74)	49	37	80	(49)	(445)	(74)	9
Specific Indicators									
Local Subsidy[1]	446	278	168	233	0	860	0	245	328
Local Subsidy as a percent of total patient revenue	24.2%	7.5%	16.7%	4.9%	0.0%	55.3%	0.0%	5.3%	12.1%
Local Subsidy as a percent of total operating expense	32.7%	12.2%	20.5%	7.1%	0.0%	52.0%	0.0%	9.4%	18.5%
Patient Days	*29,503*	*64,043*	*(34,540)*	*71,904*	*14,921*	*26,397*	*66,982*	*104,717*	*99,334*
Outpatient Adjustment Factor	*1.8046*	*1.4895*	*0.3151*	*1.6064*	*1.5792*	*1.6293*	*1.5444*	*1.3261*	*1.5460*
Outpatient Adjusted Patient Days	*53,241*	*95,393*	*(42,152)*	*115,508*	*23,563*	*43,009*	*103,444*	*138,864*	*153,573*

Notes:

1. Local subsidy amounts were obtained from: NGH and The Med – internal financial documents; Denver Health, Columbia, and University Hospital of New Mexico (Bernalillo County mill levy) – audited financial statements; Durham and Cooper Green – from Finance personnel at respective hospitals. Peer average includes all peers, including those reporting $0 subsidy.
2. Peer indicators are not case mix index or wage index adjusted.

Observations

§ NGH subsidy of $446 per patient day is higher than peer average of $278.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Benchmarking – Findings (continued)

Utilization

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02	Industry Norm	Industry Norm Variance	Industry Norm Source
Licensed Beds	150	406	(256)	398	265	319	391	631	431	N/A	N/A	N/A
Staffed Beds[1]	127	249	(122)	291	219	141	216	370	259	N/A	N/A	N/A
Patient Days	29,503	64,043	(34,540)	71,904	14,921	26,397	66,982	104,717	99,334	N/A	N/A	N/A
Discharges	5,740	13,932	(8,192)	18,943	3,269	6,082	16,295	19,886	19,115	N/A	N/A	N/A
Outpatient Adjusted Discharges	10,358	20,751	(10,393)	30,430	5,162	9,910	25,165	26,371	29,552	N/A	N/A	N/A
Medicare Days	4,993	13,475	(8,482)	7,991	9,062	2,924	32,779	14,439	13,656	N/A	N/A	N/A
Medicaid Days	14,267	16,279	(2,012)	18,462	838	10,613	8,294	42,824	16,645	N/A	N/A	N/A
Medicaid Utilization Percentage	48.4%	25.4%	22.9%	25.7%	5.6%	40.2%	12.4%	40.9%	16.8%	N/A	N/A	N/A
Average Daily Census	81	175	(95)	197	41	72	184	287	272	N/A	N/A	N/A
Occupancy Rate, Licensed Beds	53.9%	43.2%	10.7%	49.5%	15.4%	22.7%	46.9%	45.5%	63.1%	46.6%	7.3%	A
Occupancy Rate, Staffed Beds	63.6%	70.4%	-6.7%	67.7%	18.7%	51.3%	85.0%	77.5%	105.1%	46.6%	17.1%	A
Average Length of Stay (ALOS), CMI Adjusted	3.81	3.04	0.77	3.01	3.11	3.11	2.96	2.48	3.64	3.71	0.10	A

Notes:

1. Staffed beds were obtained from the AHA Annual Survey Database (AHA cutoff 12/10/2003) and represent the best data available.

Observations

- NGH's staffed bed occupancy rate of 63.6% is below the peer average and the industry norm. Typically, a higher occupancy rate indicates higher marginal profitability because of increased volumes to spread fixed costs.
- NGH's CMI-adjusted average length of stay (ALOS) of 3.81 is 0.77 higher than the peer average and 0.10 higher than the industry norm. Generally, the longer the ALOS, the greater the operating cost.
- NGH's TennCare/Medicaid utilization is greater than each of the peers.

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Benchmarking – Findings (continued)

Liquidity

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02	Industry Norm	Industry Norm Variance	Industry Norm Source
Days in Net Patient Accounts Receivable	64.8	43.9	20.9	50.7	45.7	34.3	43.6	35.4	53.5	59.4	5.4	A
Average Payment Period (days)	130.0	84.6	45.4	57.4	286.6	21.4	59.4	39.2	43.7	55.4	74.6	A

Observations

- NGH's days in net accounts receivable is greater than each peer, the peer average, and industry norms (days in net accounts receivable is a measurement of cash flow and collection effort).
- NGH's days average payment period exceeds the peer average and industry norms (a measurement of cash flow).

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Benchmarking – Findings (continued)

Revenues, Expenses, and Profitability

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02	Industry Norm	Industry Norm Variance	Industry Norm Source
Operating Margin[1] (Before Subsidy)	(50.3%)	(35.1%)	(15.2%)	(63.2%)	(6.2%)	(244.8%)	(35.7%)	(25.2%)	(25.0%)	1.5%	(51.8%)	B
Excess Margin (After Subsidy)	(0.8%)	(3.0%)	2.2%	1.8%	4.5%	(3.0%)	(28.8%)	(2.9%)	3.4%	3.8%	(4.6%)	B
Gross Revenue Per Outpatient Adjusted Discharge, CMI & Wage index adjusted	$7,255	$11,674	($4,420)	$13,878	$20,029	$5,124	$8,212	$12,447	$10,356	$10,307	($3,052)	A
Net Patient Revenue per Outpatient Adjusted Discharge, CMI & Wage index adjusted[1]	$3,269	$5,806	($2,537)	$5,799	$7,917	$1,579	$4,349	$5,578	$5,388	N/A	N/A	N/A
Operating Expense per Outpatient Adjusted Discharge, CMI and Wage index adjusted	$5,364	$7,157	($1,793)	$9,463	$8,411	$5,444	$5,902	$6,987	$6,734	$5,819	($455)	A

Notes:

1. Although Cooper Green is generally considered a peer, the reporting of net loss was inconsistent with other peers, therefore, operating margin and net patient revenue per adjusted discharge were considered outliers and not included in the peer averages.

Observations

- NGH's operating margin indicates losses greater than the peer average and industry norm.
- NGH's gross and net patient revenue per inpatient discharge was adjusted to equalize variance in outpatient volumes between target and peer facilities. NGH's gross and net patient revenue per adjusted discharge is below the peer average.
- Operating expenses per inpatient discharge is adjusted to equalize variance in outpatient volumes between target and peer facilities. NGH's operating expenses per adjusted discharge is lower than the peer average and the industry norm.

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Benchmarking – Findings (continued)

Productivity and Efficiency

Metric	Nashville General Hospital A/F/S FYE 6/30/03	Peer Avg	Variance to Peer Average	Denver Health Medical System FYE 12/31/02	Columbia Regional FYE 6/30/03	Cooper Green Hospital FYE 9/30/02	Durham Regional FYE 6/30/01	The Med (Memphis) FYE 6/30/03	University Hospital NM FYE 6/30/02	Industry Norm	Industry Norm Variance	Industry Norm Source
Salaries	30,557,201	85,793,429	(55,236,228)	188,111,248	17,787,710	30,674,949	62,101,096	100,713,151	115,372,419	N/A	N/A	N/A
Benefits[1]	7,688,836	13,119,182	(5,430,346)	23,953,157	3,625,046	5,789,444	13,712,476	12,766,917	18,868,053	N/A	N/A	N/A
Contract Labor[3]	2,280,196	7,946,274	(5,666,078)	-	4,729,081	1,388,869	8,930,098	4,346,452	20,336,872	N/A	N/A	N/A
FTEs[2]	756	1,794	(1,037)	3,598	486	700	1,588	2,097	2,292	N/A	N/A	N/A
Interns and residents (FTEs)[2]	48	104	(56)	148	-	1	27	144	304	N/A	N/A	N/A
FTEs per Outpatient Adjusted Occupied Beds (CMI adjusted)[2]	3.85	3.96	(0.12)	9.02	5.13	4.25	4.04	2.59	3.81	4.65	(0.80)	A
Salary & Benefits Expense as percent of Total Operating Expense	52.7%	44.1%	8.5%	56.1%	37.7%	51.3%	36.8%	31.4%	49.4%	47.7%	5.0%	C
Salary per FTE (WI adj)[2]	$40,395	$47,835	($7,440)	$52,282	$36,601	$43,840	$39,099	$48,027	$50,336	$42,423	($2,028)	A
Benefit Cost per FTE (WI adj)[2]	$10,164	$7,315	$2,849	$6,657	$7,459	$8,274	$8,633	$6,088	$8,232	$10,182	($18)	A
Salary and Benefit cost per FTE	$50,559	$55,150	($4,591)	$58,940	$44,060	$52,114	$47,732	$54,115	$58,568	$52,605	($2,046)	A
Benefit Cost as % of Salaries and Wages	25.2%	15.3%	9.9%	12.7%	20.4%	18.9%	22.1%	12.7%	16.4%	24.0%	1.1%	A
Contract labor as % of Total Salaries & Wages	7.5%	7.7%	(0.3%)	0.0%	26.6%	4.5%	14.4%	4.3%	17.6%	N/A	N/A	N/A

Notes:

1. NGH benefits information was obtained from audited financial statements and include Metro allocated benefits; benefits information for Columbia Regional and The Med obtained from 6/30/02 cost reports. All other benefits information was obtained through AHD for the fiscal year indicated.
2. FTE statistic does not include interns and residents.
3. Contract labor was obtained from Worksheet S-3 of the Medicare Cost Report which reports patient care related data only, administrative and other contract labor is not included.

Observations

- *FTEs per adjusted occupied bed* (FTEs per AOB) indicates NGH is below the peer average and the industry norm. NGH senior management has informed us that labor costs, and specifically FTEs, have been a constant focus area.
- NGH's *salary and benefits expense as a percent of total operating expenses* is 8.6% above the peer average and 5% above the industry norm.
- NGH's salary per FTE is lower than the peer average and industry norm while benefit expense per FTE is above the peer average, all peers, and nearly equal to industry norm. The combined benefits and salary amount per FTE is less than the peer and industry averages.

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Variable Pay Practices Analysis

As part of our benchmarking analysis, management requested that we compare NGH variable pay practices to industry norms.

Pay Practice	NGH Policy	Observations
Overtime Compensation for authorized time worked in excess of a forty (40) hour work week.	Non-exempt Associates – All non-exempt Associates receive overtime for any hours worked over 40 hours/week. Overtime will be paid at the rate of 1.5 times base salary Exempt Associates do not receive overtime	E&Y Observation: Consistent with industry norm. NGH does need to continue to monitor amount of overtime. See cost savings opportunity section.
Shift differentials Specified compensation for eligible non-exempt employees required to work on evening and /or night, shifts.	— RN's / Job class9-18 / Job class3-8 Evening — $2.00 / hr / $1.15 / hr / $1.00 / hr Nights — $2.50 / hr / $1.65 / hr / $1.50 / hr	E&Y Observation: Consistent with industry norm. Amounts should be routinely compared to market rates. These amounts need to be competitive to retain staff (especially evening and night staff) and avoid excessive overtime and/or agency usage.
Call Pay a) On-call – compensation based on a pre-determined scheduled time committed by an employee to respond to a department's request to report to work b) Callback – compensation for work required to be performed as a result of being called back to the hospital premises during a scheduled on-call period	Non-direct patient care employees, direct care employees, critical care employees –$2 per hour call pay –If called back, will receive pay at 1.5 times base pay rate –Minimum 2 hours OR staff –$2.50 per hour call pay –If called back, will receive pay at 1.5 times base pay rate –Minimum 2 hours	E&Y Observation: Consistent with industry norm.
Weekend differentials Specified compensation for eligible non-exempt employees required to work on weekend shifts.	— RN's / HS09-HS18 / HS3-HS08 Days / evenings — $5.00 / hr / $1.00 / hr / $0.50 / hr Nights — $6.00 / hr / $1.50 / hr / $0.75 / hr	E&Y Observation: Consistent with industry norm. Amounts should be routinely compared to market rates.

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Benchmarking – Findings (continued)

Variable Pay Practices Analysis

Pay Practices	NGH Policy	Observations
Holiday pay Premium compensation in the amount of 2.5 x hourly rate for holidays worked.	§Non-exempt employees - 2.5 times regular pay rate §Hospital Pool Employees – earn 1.5 times actual hours worked §Exempt employees – Compensatory time off computed at straight time equal to the number of hours actually worked on the holiday	E&Y Observation: NGH should survey other providers to determine if 2.5 times pay is above market rates. Based on limited conversations with HR directors, 1.5 times pay appears to be a more typical rate (see cost savings opportunities section). NGH is currently revising this policy.
Vacation Time	Vacation policy is similar to that of Metro-wide vacation policy. Vacation amount is fully accruable and awarded to employees based on level and tenure.	E&Y Observation: Consistent with industry norms.
Sick Time	Sick pay policy is similar to that of Metro-side policy. All employees are provided 8 hours of sick time per month.	E&Y Observation: Consistent with industry norms.
Bereavement pay Permits up to 40 hours of pay (within a consecutive seven day period) in the event of a death in an employee's immediate family.	Up to 5 consecutive days off	E&Y Observation: Consistent with industry norms.
Preceptor pay Compensation to employees that mentor, train, and educate new employees in clinical areas (specifically on Nursing units) in addition to their assignments.	RN's only - Preceptorship bonus total $500 ($250 after successful orientation and $ 250 after employed 12 months)	E&Y Observation: Consistent with industry norms.
Emergency Pay Emergency pay is provided to exempt employees who assume responsibility for staffing shifts in direct patient care or other critical service areas when adequate staffing cannot be achieved otherwise.	For exempt status employees who are asked to function in staff level roles during critical staffing shortage periods. Normal 12 hour shift. Emergency Pay Rates are as follows: – Weekdays (Monday – Friday, all shifts) $300.00 – Weekends (Saturday – Sunday, all shifts $350.00 – Holidays (All shifts) $500.00	E&Y Observation: This policy is used very infrequently and only in cases of severe need. Consideration should be given to discontinuing this policy to avoid the potential for future abuses.

Note: NGH does not have variable pay practices for charge pay or for extra shift bonuses.

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Strategic Health

As part of our benchmarking analysis we compared the NGH strategic plan goals to goals we typically see at like hospitals.

Goal	Observation
Mission: "The achievement of 100% access to healthcare and zero disparity between populations."	§ Instead of a standard community hospital mission "to improve the health of the people in our communities served," NGH's mission focuses on access and equality. § To help attract insured patients NGH's mission should put more focus on quality.
Goal 1: Financial – Create a breakeven margin before capital including state essential access funding	§ NGH has not met this goal to date. § Without the Metro subsidy and other cash funding, NGH would not be able to meet ongoing financial requirements.
Goal 2: Efficiency & effectiveness – Improve internal business / operating systems, structures and processes	§ Interviewees indicated that significant operational improvements have occurred over the past year. § High management turnover exists causing much inefficiency and a lack of continuity of operations.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Benchmarking – Findings (continued)

Strategic Health

Goal	Observation
Goal 3: Quality – Create and promote a customer-centered philosophy, both perception of and actual delivery of clinical and service quality.	§ Senior management has indicated that customer service is a priority. § NGH conducts patient satisfaction surveys but has a poor return rate (12%). NGH provides monthly meetings that allow for informal forum between management and physicians however, NGH does infrequent physician or volunteer satisfaction surveys. An employee satisfaction survey was completed in March 2004. § Interviewees stated that NGH monitors customer service based on the number of complaints filed in a given month.
Goal 4: Learning organization – Develop a learning / growth environment to achieve vision, mission and strategic goals.	§ Employees take a 2-hour customer service training class. § Clinical employees take required competency training (e.g., RNs). § We did not assess individual training and education plans.
Goal 5: Compliance – Assure organizational compliance with all federal, state, and local regulatory requirements and accreditation requirements.	§ NGH has implemented a HIPAA program and its personnel are cognizant of compliance issues. § Metro engaged LBMC Healthcare Group, LLC in May 2003 to perform semi-annual HIPAA audits of NGH. LBMC provided a report to Metro with their findings on February 9, 2004.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Benchmarking – Findings

OVERALL OBSERVATIONS

1. **Operating and excess margin -** NGH incurs a loss on operations before the Metro subsidy that is greater than its peers and the industry norm. NGH also incurs an overall loss *after* the Metro subsidy (the loss must be funded by Metro with cash proceeds in addition to the subsidy).
2. **Cost performance –** NGH's overall operating expense per adjusted patient discharge compares favorably to both its peers and industry norms. Although NGH's overall costs benchmarked favorably, there are specific cost areas where opportunities were identified. We discuss the specific opportunities in detail throughout many of the sections that follow, but provide the following brief description of the priority findings.
   - **Average Length of Stay** - The NGH average length of stay (case mix adjusted) is greater than the peer average. Generally, the greater the average length of stay, the greater the cost per adjusted patient day. Potential causes for the variance in average length of stay should be evaluated.
   - **Product Standardization** – NGH does not have a formalized hospital wide product standardization program which would assist with the reduction of supply costs.
   - **Compensation practices** – NGH exceeds peers and/or industry norms regarding overtime, holiday pay, and benefit costs.
3. **Revenue performance –** NGH's gross and net revenue per adjusted discharge is significantly below both its peers and industry norms. It appears that a focus on capturing and collecting patient revenue will give NGH the greatest opportunity to minimize operating losses. We discuss the specific revenue variances and opportunities in detail throughout many of the sections that follow, but provide the following brief description of the priority findings.
   - **Unique patient population** – NGH provides care to the underserved and indigent patient population. Therefore, NGH serves a high percentage of self pay patients and incurs a high level of bad debts. Twenty percent of NGH's patients are self pay / charity care which generally translates to little or no revenue. However, NGH does not compare favorably to its peers regarding patient revenues.
   - **Billing and collection efforts –** The results of benchmarking indicate that NGH is below both peers and industry norms in revenue cycle performance. Revenue cycle performance includes days in accounts receivable and collection and billing efforts.
   - **Charge capture** – Per management, several manual processes are in place to capture charges for procedures performed. Therefore, in certain cases, the charges are not captured.
4. **Recommendations for each item identified above and other opportunities identified are discussed throughout the remainder of this document.**

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Section 2: Unique Aspects of NGH

Approach

- Unique operational and regulatory aspects of NGH were discussed with Metro and NGH management. Management identified several potential unique aspects, six of which warranted further evaluation.
  1. **NGH is reimbursed by TennCare through various unique mechanisms.** Please see the TennCare section of this document for detailed analysis.
  2. **NGH has a unique contractual relationship with Meharry Medical College to provide physician services to its patients.** Please see the Meharry section of this document for detailed analysis.
  3. **NGH incurs allocated overhead costs for services provided to all Metro departments.** In the past the allocated expense was matched with revenue provided by Metro having no effect on the operating or excess margin amount. The $3 million of allocated overhead expense and revenue was included for the peer benchmarking, however, in FY 04 NGH has recognized approximately $3 million of expense and no revenue as Metro has discontinued allocating revenue to offset the expense in this year.
  4. **NGH maintains the Tennessee Department of Corrections (TDOC) contract for prisoner health care and provides care for the Metro prisoners.**
  5. **NGH must comply with Metro civil service regulations regarding employee salary adjustments.**
  6. **NGH depends on Metro for cash flow and capital funding in excess of the annual subsidy.**
  7. **NGH limitation on volume growth due to Meharry relationship.** Despite available capacity in both inpatient and outpatient services, NGH believes that it is limited in its ability to generate additional revenue through increased patient volumes, because of the Meharry relationship.

* Please see the pages that follow in this section for additional information on numbers 4, 5, 6, and 7.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Unique Aspects of NGH (continued)

Tennessee Department of Corrections

NGH maintains the Tennessee Department of Corrections contract for prisoner health care and provides care for the Metro prisoners.

Findings:

- NGH has a contract to provide certain inpatient and outpatient health care services to the Tennessee Department of Corrections (TDOC) prisoners. Prisoners are seen in the ER and on the specially constructed 7th floor. The 7th floor has been built to contain security features to ensure prisoners are detained while being cared for at NGH. NGH has the physical space to accommodate maximum security prisoners which is a unique feature and requires special construction for high security purposes.
- NGH bills TDOC for prisoner care much like a commercially insured patient. TDOC also pays NGH $200 per day for each empty bed on the 7th floor TDOC unit. All but 3 beds on the 7th floor are dedicated to TDOC patients. The TDOC contract represents 8% of NGH's payor mix. Although profitability is not measured contract by contract, NGH management believes the TDOC agreement to be one of NGH's best contracts.
- Metro prisoners are also brought to NGH for care. NGH is paid for providing this service through the subsidy.
- NGH must maintain additional security guards throughout the hospital to ensure safety with the TDOC and Metro prisoner patients. The Emergency Department normally has multiple Metro or TDOC prisoners receiving care. Public perception is impacted by having armed guards in the waiting areas and in the patient care areas.

Observations:

- Per NGH management, the TDOC contract for prison care generates revenue for Metro and appears to be a profitable contract.
- The fact that NGH treats prisoners may create a negative image.
- NGH should attempt to get TDOC to recognize the additional three beds as TDOC beds. Because the beds are on the 7th floor, it is unlikely that non-prisoner patients will utilize the beds.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Unique Aspects of NGH (continued)

Compliance with Metro Civil Service Rules

NGH has interpreted compliance with Metro's civil service rule to require the application of the overall Metro salary adjustment percentage to each employee regardless of performance.

NGH has market based salary scales similar to most hospitals. Most hospitals compensate employees based on performance. Under-performing employees receive little or no adjustment allowing high performing employees to receive in excess of the overall adjustment percentage. Annual adjustments are an important component in recruiting and retaining high quality staff – especially for nurses and other clinicians.

Findings:

- Metro does, in fact, determine the annual across the board salary adjustment amount. Last year's overall increase was 3%.
- NGH is not required to give each employee the overall increase amount and could adopt an "open range" pay plan throughout the facility that would base compensation on performance. Poor performers should be given little or no adjustment allowing the top performers an adjustment greater than the overall increase. The total increase in salary dollars can be allocated to employees at NGH's discretion.
- Mid-level management at NGH and other departments of the Metro government have implemented "open range" performance based salary adjustments.

Recommendation:

- We recommend that NGH adopt an "open-range" performance based pay practice including new policies to determine individual annual salary increases to all levels of NGH. Top NGH performers should be rewarded with higher annual pay increases than poor performers.

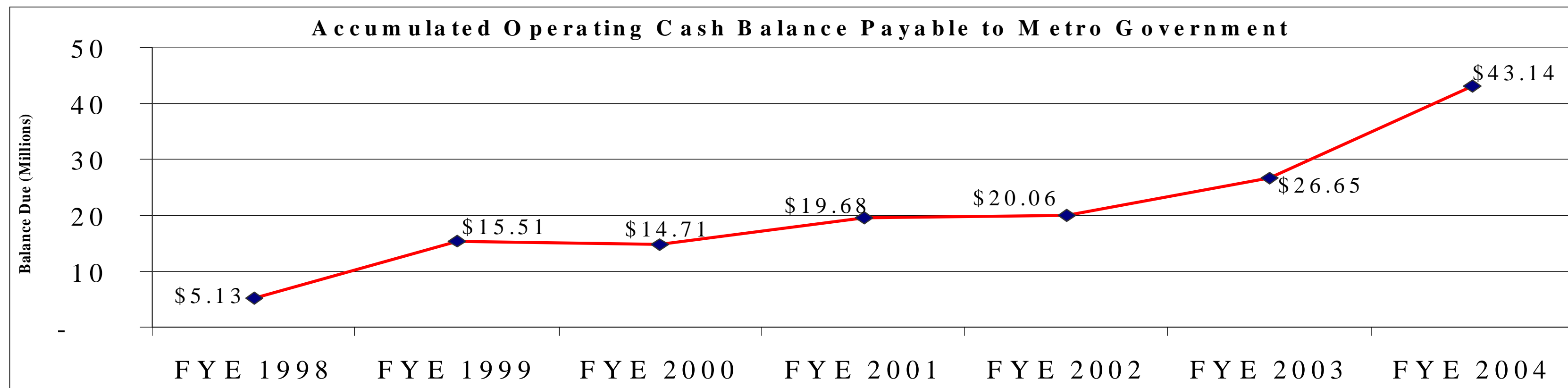
Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

NGH's dependence on Metro for funding in excess of the subsidy.

The Metro government supports the operations of NGH. The financial support is provided through the payment of an annual cash subsidy and on-going cash flow support to fund operations and capital requirements.

Observations:

- NGH was originally treated as a Metro General Fund department; when NGH was carved out under the Hospital Authority no plan was put in place to remove NGH's unlimited access to Metro's cash balance. This unlimited access to funds is unique to NGH relative to it's peers.
- The accumulated balance as of FYE 1998 was $5.13 million. NGH has built up a cash balance payable to the Metro government totaling approximately $43 million. This amount is in addition to the annual subsidies paid to NGH. NGH requires additional funding due to continued losses after the subsidy.



- Based on past performance and actual or budgeted FY04 and FY05 losses (approximately $10 million as presented in NGH FY05 budget), it does not appear NGH will generate the operating income necessary to begin paying the $43 million balance payable. Although NGH paid Metro $7 million in July '04 to reduce the FY04 balance payable, it appears that NGH will continue to require additional operational and capital funding (in excess of the subsidy) and, therefore, the negative cash balance will continue to increase.
- It is likely NGH will continue to require a cash subsidy and other operating capital and cash support from the Metro government. Metro's management has indicated that it is unlikely that Metro's current "unlimited" support can continue much longer without damaging Metro's overall financial position.

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Unique Aspects of NGH (continued)

Factors limiting volume growth

Despite available capacity in both inpatient and outpatient services, NGH believes that it is limited in its ability to generate additional revenue through increased patient volumes, due to the Meharry relationship.

Findings:

- NGH volumes from private practice referrals is limited with Meharry "exclusive" - no private practice physicians on staff and little or no outreach activities to generate relationships or referrals.
- NGH does not contract with community-based physicians to develop or enhance relationships which, in turn, might attract new patient referrals.
- Meharry physician productivity, managed care relationships, and referring practices are unknown.
- Meharry has no PSA requirements or incentives aligned with NGH interests to develop or market NGH services.

Recommendations:

- Discuss NGH economic issues with Meharry leadership.
- Identify any real or perceived barriers to developing referrals from private practice sources and develop marketing strategies:
  - Conduct critical assessment of NGH/Meharry clinical services, identify opportunities, and create joint business development strategies
  - Review NGH policy on granting privileges to non-Meharry practitioners and develop physician recruiting plans
  - Develop a community physician relations program designed to attract referrals to Meharry & NGH
- Review current PSA contractual obligations and consider alternative strategies related to potential contracting relationships with community physicians to broaden NGH's physician base.
- Review potential Meharry issues that may be impacting NGH volumes:
  - Verify that all Meharry physicians (and NGH) contract with all major local managed care companies and actively seek participation
  - Assess Meharry physician referral patterns to identify and correct any leakage issues
  - Benchmark Meharry physician productivity
  - Evaluate Meharry's physician marketing activities and develop joint strategies/support where possible

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Section 3: TennCare Impact

Approach

- Developed a pro forma related to the financial impact of TennCare on Nashville General Hospital and of Nashville General Hospital on TennCare, including a pro forma related to the financial impact on TennCare if Nashville General Hospital ceased operations.
- Obtained and analyzed the following:
  - Calendar Year 2002 Tennessee State Joint Annual Reports for NGH and other providers in Nashville marketplace.
  - Calendar Year 2003 Tennessee State Joint Annual Report for NGH.
  - Internal Analysis of Safety Net Payments on TennCare.
  - McKinsey Report, 2003, assessing viability of current and future state of TennCare system.
  - Southern Legislative Conference Medicaid Report.
  - Tennessee Hospital Association calculation of Certified Public Expenditure payments.
  - Various literature produced by the State of Tennessee related to the TennCare system.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

TennCare is a statewide program that provides health care coverage to Medicaid beneficiaries, uninsured State residents with income levels below specific limits, and uninsurable residents at any income level if they have medical conditions that make them uninsurable.

TennCare provides care to enrollees through managed care organizations (MCOs).

TennCare incurs expenditures and receives matching funds from The Centers for Medicare and Medicaid Services (CMS) for coverage of traditional Medicaid eligible enrollees and other TennCare-eligible enrollees. Additionally, TennCare receives matching federal funds for certified public expenditures (CPE's) and Intergovernmental Transfer Payments (IGT's) although TennCare does not directly incur these costs.

1. TennCare's largest portion of expenditures comes from the program's traditional Medicaid population. TennCare's traditional Medicaid population numbers just over 1 million enrollees and is composed of families on public assistance and other low income residents who are either disabled, pregnant, or under the age of 19. It also includes residents who are eligible for both Medicaid and Medicare (dual eligibles).
2. TennCare also incurs expenditures related to the coverage of the expansion population. This group is composed of approximately 250,000 Tennesseans who are not eligible for traditional Medicaid (i.e. certain uninsured or uninsurable people and various "grandfathered" groups who continue to meet prior eligibility criteria).
3. TennCare receives additional matching funds (from CMS) for Certified Public Expenditures (CPE's) incurred by public hospitals that treat residents who most likely met TennCare eligibility criteria but were not enrolled in the program. This expenditure is calculated based on the estimated TennCare loss and 96% of charity care charges (the 4% reduction is factored in to account for out-of-state charity cases).
   - Estimated TennCare loss is calculated by first applying the Ratio of Cost to Charges (RCC) for all NGH payors to TennCare charges. The TennCare cost estimate resulting from application of the RCC is then reduced by TennCare Net Revenue.
4. Intergovernmental Transfer Payments (IGTs) are incurred from the transfer of funds by public hospitals, nursing homes, and provider tax programs. Certain fund transfers can provide an additional mechanism for TennCare to draw CMS matching funds.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

- The rate at which all funds are matched is determined by CMS based on Tennessee's relative position among other states in terms of personal income.
  - Currently, Tennessee's base match rate is 67.54%. Specifically, for every $1 spent on delivery of care to TennCare recipients, CMS reimburses approximately $.68 and TennCare pays the remaining $.32. The match is limited by budget neutrality and therefore may not actually be 67.54%.
  - The current match rate of 67.54% includes a temporary enhancement made by CMS as part of the Jobs and Growth Tax Relief and Reconciliation Act of 2003. After June 30, 2004, the match rate will be recalculated based on the standard methodology. According to the Tennessee Hospital Association, prior to the Act, the match rate had historically been about 63%.
- The total CPE for FY 2003 was approximately $315 million, of which CMS provided TennCare with $212 million in matching funds. TennCare places the $212 million in the TennCare General Fund for "unrestricted" use.
- Although TennCare places $212 million in matching funds in its general fund, TennCare is only allocated $100 million from its general fund. This $100 million is paid to three groups of hospitals:
  - Safety net hospitals — $50 million
  - Children's hospitals — $ 5 million
  - Other essential hospitals — $45 million
- Metropolitan public hospitals that are contractually staffed and operated for the purpose of providing clinical education and access to care for the medically underserved are considered Safety Net Hospitals. Other essential hospitals are non-public (non-CPE) hospitals that experience a high volume of TennCare patients or TennCare unreimbursed costs and contract with at least one TennCare managed care organization and with TennCare Select (TennCare's self-insured HMO).
- The supplemental payment amount ($100 million) is not expected to change in FY 2004, although the allocation will change based on current year utilization and cost data.
- NGH is eligible for Essential Access Payments based on the criteria previously described and qualifies as a safety net hospital since it is a metropolitan public hospital that is contractually staffed and operated for the purpose of providing clinical education and access to care for the medically underserved.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

- The $50M Safety Net payout was allocated to 6 hospitals based on:
  - TennCare Volume--$25 million
  - Adjusted uncompensated TennCare cost (adjusted for revenue realization from other payors) – $25 million

Safety Net Hospitals, Fiscal Year 2003	
The Regional Medical Center at Memphis	12,277,783
Vanderbilt University Hospital	10,438,845
Erlanger Medical Center	9,325,094
University of TN Memorial Hospital	7,977,769
Metropolitan Nashville General Hospital	**6,319,030**
Johnson City Medical Center	3,661,479
Total Safety Net Payments	**50,000,000**

Source: State of Tennessee, Dept. of Health

- Providers not considered to be Safety Net Hospitals may have been provided supplemental payments ($45M for Other Essential Hospitals) to subsidize their cost of uncompensated care. In total, Davidson County received over 23% of the $100M TennCare supplemental payments. The following is a list of hospitals in Davidson County that received some form of supplemental payment distribution:

TennCare Supplemental Payments, Davidson County, Fiscal Year 2003		
Provider	Amount	Status
Vanderbilt University Hospital	10,438,845	Safety Net Hospital
Metropolitan Nashville General Hospital	**6,319,030**	**Safety Net Hospital**
Centennial Medical Center	2,136,887	Other Essential Hospital
Baptist Hospital Inc.	887,501	Other Essential Hospital
Tennessee Christian Medical Center	726,643	Other Essential Hospital
Saint Thomas Hospital	701,151	Other Essential Hospital
Southern Hills Medical Center	662,956	Other Essential Hospital
Summit Medical Center	636,718	Other Essential Hospital
Skyline Medical Center	577,649	Other Essential Hospital
Total Supplemental Payments, Davidson County	**23,087,380**	

Source: State of Tennessee, Dept. of Health

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

- NGH has the lowest amount of TennCare charges among the select area peers, yet NGH shows the highest TennCare payor mix at 46.78% and the highest self pay at 16.59% of total gross charges.
- NGH has the lowest percentage of Medicare, BCBS, and Commercial payors; these payors are generally sought after because they generally offer higher reimbursement levels.

Gross Charges by Payor Group for NGH and Select Area Peers							
Provider	TennCare	Medicare	BCBS	Commercial	Other	Self Pay	Total Charges
NGH	40,318,053	15,948,493	1,707,256	2,034,716	11,883,178	14,303,806	86,195,502
VUMC	324,915,987	255,412,294	191,009,735	355,587,146	18,654,564	107,445,475	1,253,025,201
Centennial	132,584,497	295,220,578	110,146,815	181,597,134	20,784,618	16,425,272	756,758,914
Baptist	44,699,285	235,984,321	100,309,119	171,764,209	40,185,166	10,665,155	603,607,255
St. Thomas	45,366,403	345,304,918	103,113,844	144,560,774	15,253,609	13,579,514	667,179,062
Total	**587,884,225**	**1,147,870,604**	**506,286,769**	**855,543,979**	**106,761,135**	**162,419,222**	**3,366,765,934**

Payor Mix Based on Gross Charges for NGH and Select Area Peers							
Provider	TennCare	Medicare	BCBS	Commercial	Other	Self Pay	Total Percentage
NGH	46.78%	18.50%	1.98%	2.36%	13.79%	16.59%	100.00%
VUMC	25.93%	20.38%	15.24%	28.38%	1.49%	8.57%	100.00%
Centennial	17.52%	39.01%	14.56%	24.00%	2.75%	2.17%	100.00%
Baptist	7.41%	39.10%	16.62%	28.46%	6.66%	1.77%	100.00%
St. Thomas	6.80%	51.76%	15.46%	21.67%	2.29%	2.04%	100.00%
Average	**17.46%**	**34.09%**	**15.04%**	**25.41%**	**3.17%**	**4.82%**	**100.00%**

Source: Tennessee Dept. of Health 2002 Joint Annual Report

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TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

- Although total TennCare volumes are less than larger areas providers, NGH's TennCare percentage is the highest both in inpatient and outpatient settings.

TennCare Inpatient Days and Market Share				
Provider	Market Share	TennCare Days	Total IP Days	TennCare %
NGH	11.51%	14,080	28,232	49.87%
VUMC	51.32%	62,791	187,524	33.48%
Centennial	21.79%	26,665	139,793	19.07%
Baptist	8.65%	10,590	127,372	8.31%
St. Thomas	6.73%	8,237	128,268	6.42%
Total	**100%**	**122,363**	**611,189**	**20.02%**

TennCare Outpatient Visits and Market Share				
Provider	Market Share	TennCare Visits	Total OP Visits	TennCare %
NGH	14.22%	41,047	90,633	45.29%
VUMC	65.89%	190,230	758,932	25.07%
Centennial	9.74%	28,130	155,389	18.10%
Baptist	5.98%	17,277	179,980	9.60%
St. Thomas	4.17%	12,033	149,451	8.05%
Total	**100%**	**288,717**	**1,334,385**	**21.64%**

Source: Tennessee Dept. of Health 2002 Joint Annual Report

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

TennCare Managed Care Organization Payment Rates to Nashville Area Providers

- TennCare contracts with various managed care organizations (MCO's) to deliver care to TennCare eligible beneficiaries.
- The following four payors represent 99% of inpatient revenue and 93% of outpatient revenue in the Nashville area. The average net revenue is case mix indexed and weighted to account for variance in volumes between payors and providers.

	NGH	VUMC	BAPTIST	CENTENNIAL	ST. THOMAS	AVERAGE
Inpatient Net Revenue per Day (Case Mix Adjusted)						
Xantus (Phoenix)	$541.35	$668.91	$371.26	$811.48	$511.93	$604.20
TennCare Select	$546.45	$628.71	$395.85	$513.72		$563.41
VHP	$487.97	$189.54		$1,216.64		$252.89
Universal	$493.88	$524.78	$389.93	$664.56	$546.39	$568.22
VOLUME WEIGHTED AVERAGE	**$524.90**	**$504.79**	**$377.33**	**$675.11**	**$532.61**	**$530.02**
Outpatient Net Revenue per Visit (Case Mix Adjusted)						
Xantus (Phoenix)	$189.68	$68.94	$234.32	$254.31	$155.84	$153.48
TennCare Select	$85.75		$122.05	$69.89	$487.19	$82.93
VHP	$133.78	$44.27		$78.99		$50.21
Universal	$124.56		$108.72	$165.07	$119.90	$147.18
VOLUME WEIGHTED AVERAGE	**$140.26**	**$51.37**	**$206.64**	**$176.81**	**$137.46**	**$101.39**
TennCare Utilization	49.87%	33.48%	8.31%	19.07%	6.42%	

Notes:

1. Averages are volume-weighted by dividing total inpatient and outpatient revenue per payor by inpatient and outpatient volumes by payor.
2. Low volumes may skew results, for example, Centennial IP VHP volumes and St. Thomas OP TennCare Select volumes were considerably lower than that of other providers, resulting in per unit revenue appearing abnormally high.
3. Source: Tennessee Department of Health, 2002 Joint Annual Report, TennCare Utilization based on IP Days.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

- The two pages that follow calculate a pro forma of NGH operating and total loss for FY2002 based on the information NGH reported in the State Joint Annual Report.
- FY2002 was selected because the FY2002 State Joint Annual Report is the latest year available to obtain other area hospital data.
- The loss is calculated by payor for TennCare, Self Pay, Medicare, and Commercial; all other payors are grouped as "other".
- To calculate the pro forma loss by payor:
  - Net revenue for the applicable payor type was obtained from the Joint Annual Report
  - Expenses and other and non-operating revenues are allocated by payor based on the percentage of gross charges by payor
  - The Safety Net Payment is allocated between TennCare and Self Pay based on Contribution to CPEs
- NGH does not have a decision support system and therefore can not identify cost by payor type. NGH management agreed with the methodology to calculate the pro forma loss. Utilization of a cost accounting system would likely yield different results.
- NGH reported overall FY2002 net loss on the Joint Annual Report materially agrees to the audited financial statement FY2002 loss on page 6 (within approximately $1,000).
- The FY2002 Joint Annual Report does not require adherence to GAAP standards and therefore, detailed revenue and expense items that make up the loss will be reported differently from the FY2002 audited financial statements shown on page 6. The two pages that follow do, however, agree in total (not by line item) to the audit FY2002 financial statements shown on page 6.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

NASHVILLE GENERAL HOSPITAL

Fiscal Year Ending June 30, 2002

	TennCare	Self Pay	Medicare	Commercial	All Other	Total
REVENUES						
Gross Revenue	40,318,053	17,818,161	15,948,493	12,070,695	40,100	86,195,502
Adjustments	22,156,104	16,798,848	1,690,698	7,213,360	25,991	47,885,001
Net Patient Service Revenue	18,161,949	1,019,313	14,257,795	4,857,335	14,109	38,310,501
EXPENSES						
Salaries	14,049,874	6,209,202	5,557,667	4,206,348	13,974	30,037,065
Benefits	3,304,230	1,460,272	1,307,045	989,243	3,286	7,064,076
Contract Labor	1,744,935	771,157	690,239	522,411	1,735	3,730,477
Non Labor	13,701,880	6,055,409	5,420,012	4,102,163	13,628	29,293,092
Metro Overhead Allocation	1,416,276	625,909	560,232	424,015	1,409	3,027,841
TOTAL	34,217,196	15,121,948	13,535,195	10,244,179	34,032	73,152,551
NET LOSS BEFORE OTHER REVENUE	(16,055,247)	(14,102,635)	722,600	(5,386,844)	(19,923)	(34,842,050)
OTHER OPERATING REVENUE						
Metro revenue to match OH Allocation	1,416,276	625,909	560,232	424,015	1,409	3,027,841
Safety Net Payment	1,272,156	848,933	-	-	-	2,121,089
Other (cafeteria, gift shop, etc.)	693,363	306,425	274,271	207,584	690	1,482,332
TOTAL	3,381,795	1,781,267	834,504	631,598	2,098	6,631,262
OPERATING INCOME (LOSS)	(12,673,453)	(12,321,368)	1,557,103	(4,755,246)	(17,825)	(28,210,788)
NON-OPERATING REVENUE						
Metro appropriations	-	23,822,407	-	-	-	23,822,407
Grants	82,253	36,351	32,536	24,625	82	175,847
Other non-operating income	2,818	1,245	1,115	844	3	6,024
TOTAL	85,070	23,860,003	33,651	25,469	85	24,004,278
NET INCOME (LOSS)	(12,588,382)	11,538,635	1,590,754	(4,729,777)	(17,740)	(4,206,510)
Gross Charge Percentage	46.78%	20.67%	18.50%	14.00%	0.05%	100.00%

**Source: State of Tennessee Joint Annual Report, FY2002; Metro Subsidy updated by client.*

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

TennCare Impact – Overview (continued)

Inter-relationship between TennCare and NGH

- TennCare receives unrestricted Federal matching funds from the certified public expenditures (CPE's) of 32 Tennessee public hospitals. The certified public expenditures consists of two components from the State Joint Annual Report (JAR):
  - TennCare Losses
    - TennCare losses are calculated by applying an overall cost to charge ratio to total TennCare charges. The cost is netted against TennCare revenue received. If the TennCare cost exceeds the revenue, a TennCare loss is recognized. Note that the JAR calculated TennCare loss below does not agree to the TennCare loss calculated on the pervious two pages. The JAR TennCare loss is calculated for developing the CPE amount only and allocates cost by payor differently than the previous two pages and does not consider all revenues.
  - Charity Cost
    - Charity costs are calculated by applying an overall cost to charge ratio to total Charity Care charges. Charity care charges include charity, bad debt, and medically indigent gross charges. The costs are reduced by 4% to account for the potential of out-of-state charity patients.

Rank	Top Ten CPE Revenue Provider	A Gross Charges	B Total Expenses	C = B/A Total RCC	D TennCare Charges	E = D*C TennCare Costs	F TennCare Revenue	G = E-F TennCare Loss	H Charity Charges	I = H*C Charity Cost	J 96% of Charity Cost	K = J+G Match-Eligible CPE	Percent of Total CPE	Federal Match (67.54%)
1	Regional Medical Center at Memphis	508,122,241	249,726,121	0.4915	211,162,226	103,779,601	71,252,008	32,527,593	106,929,647	52,552,563	50,450,460	82,978,054	26.38%	56,043,377
2	Erlanger Medical Center (incl. Erlanger North)	792,613,236	340,211,459	0.4292	200,798,604	86,188,298	45,638,311	40,549,987	44,230,697	18,985,035	18,225,634	58,775,621	18.69%	39,697,054
3	University Health Systems	607,261,222	335,231,115	0.5520	170,355,298	94,042,554	66,623,867	27,418,687	31,836,752	17,575,089	16,872,085	44,290,773	14.08%	29,913,988
4	**Nashville General Hospital**	**86,175,502**	**75,425,647**	0.8753	**40,318,053**	**35,288,628**	**18,161,949**	**17,126,679**	**13,601,910**	**11,905,157**	**11,428,951**	**28,555,630**	**9.08%**	**19,286,472**
5	Jackson-Madison County General Hospital	612,773,689	273,073,043	0.4456	117,895,290	52,538,198	40,082,883	12,455,315	23,367,420	10,413,326	9,996,793	22,452,109	7.14%	15,164,154
6	Blount Memorial Hospital	261,841,919	109,675,917	0.4189	38,555,658	16,149,542	6,827,661	9,321,881	7,528,411	3,153,374	3,027,239	12,349,120	3.93%	8,340,596
7	Maury Regional Hospital	250,984,123	139,524,622	0.5559	44,635,724	24,813,452	18,613,290	6,200,162	8,564,159	4,760,903	4,570,467	10,770,629	3.42%	7,274,483
8	Cookeville Regional Medical Center	205,914,811	101,690,319	0.4938	41,210,092	20,351,462	17,316,993	3,034,469	6,155,720	3,039,981	2,918,382	5,952,851	1.89%	4,020,555
9	Williamson Medical Center	138,863,413	75,072,065	0.5406	11,628,097	6,286,359	2,915,414	3,370,945	3,735,345	2,019,395	1,938,619	5,309,564	1.69%	3,586,080
10	Bradley Memorial Hospital	112,716,833	56,288,969	0.4994	19,535,372	9,755,650	7,200,914	2,554,736	4,151,581	2,073,233	1,990,303	4,545,039	1.45%	3,069,719
	TOTAL; All Tennessee Public Hospitals	4,327,196,359	2,137,958,120	0.4941	1,066,611,651	537,335,086	360,697,664	178,239,952	280,891,724	141,970,647	136,291,821	314,531,773	100.00%	212,434,760

Source: THA, Certified Public Expenditures and Eligible but Not Enrolled Expenditures, updated 3/4/2004.

- For the Joint Annual Report period ending 12/31/02, NGH was the 4th largest provider of CPE matching funds with over 9% of total CPEs.

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TennCare Impact – Findings

Impact of TennCare on NGH

1. The allocation of $100 million in Essential Access Payments is not linked to the provider's contribution to CPE. Providers who receive Essential Access Payments do not need to meet the CPE eligibility criteria.
2. NGH receives $6.3 million in Essential Access payments from TennCare based on the TennCare volume and losses.
3. NGH, due to its size, does not care for as many TennCare recipients as some other local healthcare providers. However, TennCare is NGH's largest payor type representing nearly 50% of NGH's volume.
4. After accounting for the Safety Net Payment, TennCare is the highest single net revenue payor for NGH.
5. Based on methodology discussed on the previous page, NGH incurs an operating loss for providing care to TennCare patients.

Impact of NGH on TennCare

1. TennCare receives Federal matching revenue for certain costs (Certified Public Expenditures) incurred by public hospitals.
2. TennCare does not incur any direct expenditures for the CPE amounts (cost incurred by public hospitals) yet in FY02 received $212 million in revenue from Federal matching programs.
3. NGH currently incurs $28,555,630 in certified public expenditures.
4. If NGH were to cease operations, TennCare would stand to lose approximately $19.3 million in Federal matching revenue.
5. Given that TennCare receives approximately $19.3 million in federal matching funds due to NGH's patient care activities and NGH only receives $6.3 million of the $19.3 million, Metro and NGH should negotiate with the state/TennCare for additional funds from TennCare.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Section 4: Cost Saving Opportunities

Approach

- Ø E&Y considered cost savings opportunities to be areas that NGH management should further evaluate and potentially implement to pursue cost savings.
- Ø E&Y performed management and physician interviews, assessed departmental policies and procedures, analyzed trend data for certain hospital functions, and used the findings in the benchmarking analysis to identify cost savings opportunities.
- Ø We did not perform work shadowing, process observation, chart audits, or other means to identify cost saving opportunities.
- Ø E&Y and management evaluated each opportunity identified to gain an understanding of its order of magnitude.
- Ø E&Y and management estimated cost savings related to certain opportunities.
- Ø Cost saving estimates require further analysis and are presented to provide potential savings and order of magnitude. The estimates are based on best available information.

Findings Overview

- Ø Based on the benchmarking analysis contained in this report, NGHs overall cost performance is better than its peers and for certain metrics, better than the industry norm.
- Ø Although NGH's overall costs benchmarked favorably, there are specific cost areas where opportunities were identified.

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Cost Saving Opportunities – Findings and Recommendations

1. **Product Standardization -** A common method of controlling and reducing medical supply and device costs is through product standardization. Product standardization would consolidate the number of like items available for use and reduce the physician's ability to utilize their individual preferences for a wide variety of products.

   NGH does not have an active formalized department wide product standardization process and infrastructure. A product evaluation committee has not been active for several years. A product evaluation committee typically is comprised of physicians and clinicians who monitor and evaluate products used in the hospital and make recommendations to the Medical Staff regarding product standardization opportunities. The products made available will be evaluated based on criteria such as clinical outcome, need and cost.

   Based on our interviews, it appears two departments have recently standardized certain products. Currently, OR custom packs are being revised by MedAssets and MedLine. MedLine has guaranteed a 10% cost savings on the cost of OR custom packs. The director of surgery informed us that, in the past, total knee and total hip replacement device costs ranged from $3,500 to over $10,000. Through standardization, NGH currently has a contract to pay $3,600 per knee implant and $4,900 per hip implant. This should generate cost savings in orthopedic cases.

   NGH has an opportunity to evaluate and consolidate product utilization to realize additional cost savings. We typically see an annual 5% to 10% reduction in overall supply expenditures when a hospital-wide product standardization effort is undertaken.

   A 5% cost reduction in supply expense would equate to $469,043 of annual cost savings based on a $9.38 million supply expense for annualized FY04.

   Recommendations:

   a. Implement a Value Analysis Committee to evaluate, consider, and implement product standardization opportunities.
   b. Develop savings goals and accountable targets including the evaluation of contract services to renegotiate to improve rates.
   c. Perform financial analysis in high spend areas to evaluate cost reduction opportunities and project utilization needs for improved stocking & purchasing.

2. **Inventory management –** HealthCare Logistics Services recently performed and completed (May 2004) a review of materials/inventory management. The report identified a one-time inventory reduction for case cart implementation and a reduction of obsolete items. The cost savings identified in the report totaled approximately $335,000.

   NGH utilizes HBOC Pathways as its materials management information system. However, per our interviews, NGH management believes a small amount of its functionality/capacity is currently being utilized.

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Cost Saving Opportunities – Findings and Recommendations

2. **Inventory management (continued)**

   Recommendations

   a. Optimize use of HBOC Pathways materials management system.
   b. Coordinate inventory management, purchasing with product standardization efforts.
   c. Revise policies and procedures regarding inventory management to tighten overall controls.

3. **MedAssets contract compliance -** NGH contracts with MedAssets, a group purchasing organization (GPO). GPOs negotiate and purchase medical supplies in bulk on behalf of client hospitals at generally lower prices than individual hospitals can negotiate. Although NGH contracts with the GPO, NGH only utilizes 25% of MedAssets available purchasing contracts. We typically see a 2% reduction in supply expense when supplies are purchased through the GPO.

   NGH currently uses MedAssets to purchase approximately $1.6 million of $9.38 million in total medical supply expense (annualized for FY 2004). Using a conservative estimate, an additional $1.88 million of supplies (approximately 20%) through MedAssets, NGH may realize an annual $37,500 cost savings. This savings should continue to be realized and increase as more purchasing is done through the GPO.

   Recommendations:

   a. Optimize use of MedAssets contracts.
   b. Monitor progress and overall utilization of MedAssets available contracts and discount programs.

4. **Consider relocation of the Nursery -** NGH's newborn nursery and the neonatal intensive care unit (NICU) are located on the same floor but are located apart from each other. They are not located close enough to share the same staff or monitor patients between the units. It is common for units of this type be located near each other to allow sharing of staff and patient monitoring.

   Recommendations:

   a. Perform a cost / benefit analysis of relocating the nursery adjacent to the NICU (capital requirements should be considered).

5. **Holiday pay rates –** It appears NGH's policy for holiday pay rates, at 2.5 times pay, is above industry norm. NGH may utilize the above norm holiday rates as a recruiting or retention method.

   A reduction in the holiday pay rate from 2.5 times pay to 1.5 times pay may result in approximately $322,000 in annual cost savings based on annualized FY04 holiday pay.

   Recommendation:

   a. Consider a reduction in the holiday pay rate from 2.5 times pay to 1.5 times pay to come more in line with industry pay practices.

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Cost Saving Opportunities – Findings and Recommendations (continued)

6. **Overtime expense** – Overtime expense is approximately 8% higher in FY04 compared to FY03 while vacancy rates have been low. Interviewees have identified scheduling and staffing processes as problem areas causing high overtime requirements. Interviewees asserted that if the problems were corrected, overtime hours could be reduced. If FY04 overtime was at the same percentage of salary expense as FY03, the annualized FY04 overtime cost amount could be reduced by approximately $183,000.

   Recommendations:

   a. Analyze trends on overtime use by department. Target FY03 overtime hour levels which are lower than current FY04 levels.
   b. Evaluate overall staffing plans and modify as appropriate.
   c. Add positions as necessary to avoid excessive overtime requirements.

7. **340B Federal drug discount program -** NGH has implemented portions of the 340B Federal drug discounting program. The program allows NGH to purchase certain outpatient drugs at discounted prices. Because the program is a Federal program and available only to select hospitals, documenting compliance with the program is critical. Many qualifying hospitals do not take full advantage of the program due to the documentation requirements. Based on interviews with the pharmacy director, NGH has not fully implemented the 340B program.

   Annualized FY04 outpatient drug costs are approximately $730,000. An estimated additional 10% reduction in outpatient drug costs may be realized if the 340B program is fully implemented. The estimated FY04 cost savings is $73,000 annually.

   Recommendations:

   a. Evaluate and implement opportunities to optimize the program to realize cost savings.
   b. Develop policies and procedures to comply with program requirements (e.g., inventory management, billing).

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Section 5: Revenue Opportunities

Approach

- E&Y considered revenue opportunities to be areas that NGH management should further evaluate and potentially implement to pursue increased revenues.
- E&Y performed management and physician interviews, assessed departmental policies and procedures, analyzed trend data for certain hospital functions, and used the findings in the benchmarking analysis to identify revenue opportunities.
- We did not perform work shadowing, process observation, chart audits, or other means to identify revenue opportunities.
- E&Y and management evaluated each opportunity identified to gain an understanding of its order of magnitude.
- E&Y and management estimated the revenue potential related to certain opportunities.
- Revenue opportunity estimates require further analysis analysis and are presented to provide potential savings and order of magnitude. The estimates are based on best available information.

Findings Overview

- Based on the benchmarking analysis contained in this report, NGH's overall net revenue performance is below that of its peers and the industry norm.
- As a public hospital serving the uninsured, NGH will likely always treat a high number of indigent and charity care patients. Therefore, it is and will be a challenge for NGH to consistently attract certain insured patients.
- Given the high level of charity care provided it is critical that NGH realize, bill and collect all potential revenue from the insured patients.
  - NGH management establishes contracted rates with TennCare MCOs and commercial insurers. Higher and accurate negotiated rates will result in higher net revenue and/or profitability.
  - NGH management is responsible for the timely billing and collection of revenues from governmental and commercial payors.
  - NGH management is responsible for up-front cash collections from NGH's access points (e.g., ER, clinics, admitting) from all patient groups.

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Revenue Opportunities – Findings and Recommendations

1. **TennCare enrollment –** Approximately 21% of NGH FY03 total gross revenue is uncollectable self pay considered charity care. A portion of these self pay patients may qualify for TennCare but not be enrolled. Currently, two NGH FTE's, along with two TennCare employees, work within registration to enroll potential TennCare recipients.

   Historically, TennCare has not reimbursed hospitals for services rendered upon enrollment of a patient. Therefore, a hospital could not retrospectively collect from TennCare for services rendered to a patient during the initial enrollment process. Per contact with TennCare, as of March 11, 2004, TennCare changed the coverage policy to allow for the coverage of services rendered from the day the TennCare application is submitted (provided the applicant qualifies for coverage).

   By converting 5% of charity care charges to TennCare, NGH could realize future annual revenue totaling approximately $475,000 (using TennCare's overall discount rate from gross charges applied to 5% of NGH's FY 2003 charity care gross charges).

   Recommendations:

   a. Assess success of current NGH TennCare enrollment processes including a review of viability of outsourcing the enrollment of TennCare eligible patients.
   b. Determine upon patient registration (inpatient or outpatient) if enrollment application should be filled out and faxed to TennCare in order for coverage to be in place at the beginning of care.
   c. Evaluate options and methodologies to improve TennCare enrollment process. Use early enrollment tactics to assess TennCare applicability and educate intake on how to facilitate the completion of TennCare enrollment forms by patient or family.

2. **Billing and collection efforts –** The results of benchmarking indicate that NGH is below both its peers and industry norms in revenue cycle performance. Based on the benchmarking results and interviews with management, we provide our findings and observations on the NGH revenue cycle are provided on the next page.

   NGH believes there may be an opportunity to:

   – For FY04, NGH average net days in accounts receivable was at 109, after the removal of TennCare MCO's that have liquidated the average net days in accounts receivable is 99. If net accounts receivable were reduced from 99 to 85 (peer average) the result would yield an estimated $858,000 net cash acceleration. Reducing net days in accounts receivable to the industry norm of 59 would yield an estimated $2.4 million net cash acceleration (the estimate does not include reduced annual interest expense).

   Recommendations:

   a. Evaluate methods for improving overall billing and collection efforts, including better use of electronic billing and remittance.
   b. Improve cash collection efforts at all NGH access points (e.g., clinics, ER, admitting).
   c. Track progress of billing and collection efforts against new aggressive goals.

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Revenue Opportunities – Findings and Recommendations (continued)

Billing and collection observations

- Significant improvement opportunities exist within NGH's billing and collection processes.
- Accounts receivable balances by payor and aging are all greater than desired (e.g., Medicare, Prison, Commercial) causing cash flow constraints at NGH.
  - There are large receivable amounts of non-charity care greater than 60 and 90 days. Many payors, including certain TennCare MCOs, Medicare, and certain commercial insurers accept claims and pay electronically which should reduce receivable days. Per management, certain TennCare MCOs are no longer in business which is inflating the aging of the TennCare category.
- Actual collections and effort appears low for self pay / charity care patients upon admission to a clinic, ER, or the hospital. Clinic admitting personnel recently began requesting payment from charity care patients with some collection success.
- DNFB (discharge, not final billed) days – see item number three in this section.
- Per management interviews, outdated billing and collection technology systems and human errors add to higher than expected error rates with admission/registration information. To replace the outdated system, per NGH management, NGH received the following cost proposal from McKesson to convert the current system to the Mckesson financial information system product:
  - The proposed total cost for a complete conversion would be $2.8 million (at a 40%discount), including software services, and hardware cost and maintenance for one year. The $2.8 million is estimated from the following:
    - The patient accounting and general ledger conversion, including orders management, DRG tracking, medical records and an interface would cost $1.7 million.
    - The addition of the decision support, contract compliance, denial and appeal analysis, and claims administrator components would cost an additional $1.1 million.
  - Beginning with year two, maintenance will cost $175,000 on the $1.7 million conversion and $121,000 on the $1.1 million conversion.

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Revenue Opportunities – Findings and Recommendations

3. **Discharged, Not Final Billed (DNFB) days -** The revenue cycle metric "Discharged, not final billed" (DNFB) is a measurement of how many days it takes a facility to bill a claim once the patient has been discharged. As of May, 2004, DNFB days at NGH were over 27 days. The larger the DNFB days, the greater the cash flow constraint. A conservative target for DNFB days is 7 days.

   Based on interviews, it appears the physicians are the cause for the large DNFB days. We were told that medical staff physicians are not completing their medical record chart documentation in a timely manner. NGH is unable to issue a bill without finalized medical record chart documentation. Overall, the medical staff is not in compliance with NGH written policies requiring timely chart completion. Recently the NGH medical staff bylaws have been modified to implement suspension provisions if physicians do not complete their charts in the medical records department at least twice a month. The thought was that this change would assist with timely chart completion. No one interviewed, including several physicians, believed this bylaw change will make a difference in lowering DNFB days.

   Lowering DNFB days from 27 days to a target of the conservative 7 days may improve cash flow totaling $2.67 million (not including reduced annual interest expense).

   Recommendations:

   a. Share cash constraint data with physicians along with detailed goals to reduce DNFB by attending physician.
   b. Develop physician incentives/penalties.
   c. Track and monitor improvement.
   d. Communicate improvements in cash flow with physicians, billing and collections, and medical records staff.

4. **Charge capture –** Per management, manual processes for charge capture occur throughout the patient care areas due to the lack of/or antiquated systems. Interviewees informed us that charges not captured for procedures performed could exceed 50% of the captured charges in certain clinical areas. Certain interviewees explained that many staff believe there is no point in capturing charges since the patients are charity care and NGH will not get paid for these services.

   The Supply Scan bar coding system is currently being implemented and will assist with supply charge capture.

   Regardless of the payor mix, NGH should improve charge capture to assist with cost controls, improving utilization management, supply management, and potentially improved reimbursement (many payors do not pay based on charges, therefore an increase in charges may not lead to additional revenue in all cases but likely will in some cases).

   Recommendations:

   a. To estimate any revenue opportunity a sample analysis should be performed comparing the procedures and supplies billed to the procedures and supplies documented in the medical records.
   b. Assess charge capture processes and opportunities for improvement in all inpatient and outpatient areas.
   c. Develop improvement plans to improve charge capture processes in priority areas.
   d. Update charging systems / forms / information systems to improve charge capture opportunities
   e. Update master item file to delete prefixes for unique areas (e.g., CS, OR) to standardize products used.

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Revenue Opportunities – Findings and Recommendations (continued)

5. **Charge description master–**NGH's charge description master (CDM or chargemaster) is manually maintained and updated. The CDM exists on many disparate information systems (e.g., finance, OR, pharmacy, purchasing). Updates to line items are not regularly reconciled between the many copies of the CDM throughout NGH. Duplicate codes exist. If the CDM does not contain a charge code or incorrect charge code, the charge may not be captured and/or revenue not generated.

   Each code in the CDM is assigned a price for the service. Only moderate price adjustments have occurred recently. A 15% across the board price increase was implemented as of July 1, 2003. However, in most cases, NGH is still below the average price by clinical service of Nashville area hospitals. Adjusting prices to market will not guarantee a positive impact on net revenue. Many NGH payors do not pay based on the price/charge of the service but rather based on an agreed upon fee schedule. The chart to the right shows that only 3 of 22 NGH inpatient payors pay based on a percent of charges/price (a greater number of outpatient payors pay based on price/charges).

   Recommendations:

   a. Perform a comprehensive chargemaster assessment and update.
   b. Determine the need for multiple CDMs and implement a process to ensure update to all.
   c. Evaluate implications of price adjustments considering the effect on net revenue, TennCare payment cycle and Safety Net payout.

6. **Contract management -** Currently, NGH does not have a contract management system to perform payor contract analysis. The ability to evaluate the payment terms of a payor contract as it relates to the NGH profitability of that contract is extremely important. It is nearly impossible to determine if a contract will be or is profitable if an automated system is not utilized. There are various contract management systems available (the McKesson system being considered includes this component). Although there is a cost for a system, most hospitals experience a positive return on investment with improved negotiated contract payment terms. System cost could approximate a one time fee between $150,000 to $250,000. In lieu of a purchased system, we often see smaller hospitals develop a "home grown" computer based model to assist them with contract negotiation.

   Please see the recommendations in the next finding, number 7 - TennCare MCO Contracting, for specific methods and benefits of contract management analysis for any payor, not only TennCare.

   Recommendations:

   a. Assess current contract management, contract analysis methodologies, and the gaps that exist with optimal contract management.
   b. Perform an assessment of available contract management systems and conduct a cost/benefit analysis (cost vs. time until the cost is recouped through improved payment) of each potential system.
   c. Implement improved contract management system that is identified to yield the greatest return under NGH's specific payor requirements and payment practices.

Insurance	Contractual Arrangement
Aetna	
BC - Classic	Per Diem
BC - Preferred	DRG
BC - Select	DRG
BlueCare/TennCare Select	DRG
Cigna Gatekeeper	Per Diem
Cigna HMO	Per Diem
Cigna PPO	Per Diem
CMS	Per Diem
GEHA	Per Diem
HealthSpring EPO	Per Diem
HealthSpring HMO	Per Diem
HealthSpring Medicare	Per Diem
Humana ChoiceCare	Per Diem
Medicare	DRG
MultiPlan, Inc.	% of Chgs
Prime Health CompPlus	Per Diem
Signature Alliance	% of Chgs
Synergy	% of Chgs
Tricare (Regions 4 & 5)	
VHP (MMS Panel)	Per Diem
VHP (VMG Panel)	Per Diem

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7. **TennCare MCO Contracting –** In the TennCare section of this report, we compare the amount paid to NGH for a TennCare case to the amount paid to other Nashville area hospitals for a TennCare case, by TennCare Managed Care Organization (MCO) (the comparison takes into consideration the differences in TennCare volumes and acuity). NGH is paid comparable rates to the area hospitals. However, due to the dependence on TennCare volume and large TennCare losses, NGH may have an opportunity to increase net revenue through assertive contract negotiations with TennCare MCOs. There should be further analysis and the development of a negotiation plan for the TennCare MCOs.

   Recommendations:

   a. Complete an internal analysis comparing payment rates and volume-discount relationships among the NGH TennCare MCO payors.
   b. Complete an external, market-based analysis comparing NGH TennCare MCO contracts to area Nashville hospitals. The analysis should be done by modeling NGH and market TennCare contractual rates through actual and/or future NGH TennCare utilization. This provides a control group of utilization data that allows for an accurate assessment of the impact of differences between NGH and market TennCare contractual rates. There are a couple of quantifiable points that are determined through this analysis:
      i. NGH will gain an understanding of where the greatest opportunity is for improvement within their current TennCare contracts (e.g. medical rates, surgical rates, cardiac rates, outpatient surgery, etc.). NGH will have a quantifiable understanding of the magnitude to which contractual provisions are above or below market averages for the types of covered services included in TennCare contracts.
      ii. NGH will have a quantifiable understanding of what it will cost TennCare if NGH "exits the market" by terminating TennCare agreements. In other words, it allows NGH to see what TennCare payors would have to pay if the patients currently being sent to NGH would have to be sent to another facility in the Nashville market. This is a very valuable leverage point in terms of negotiating improved contractual rates.
   c. Complete payor-specific strategic reports that address:
      i. Proposed rate structures that are aligned with net revenue improvement opportunities identified through the internal and external analyses
      ii. Contract language revisions that support targeted areas for improved contractual reimbursement
      iii. Strategic leverage points to be used through the course of negotiations that are tailored to a specific payor's market history and relationship with NGH
      iv. Ad-hoc analyses that address incremental net revenue improvements at various rate structures for key contractual provisions

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Revenue Opportunities – Findings and Recommendations (continued)

8. **Revenue from other counties for provision of care for out-of-county charity care patients -** NGH cares for a relatively small number of indigent patients living outside of Davidson County. NGH should evaluate the financial impact and discuss possible reimbursement from other counties.

The table below shows the number of charity care patients and the related gross charges for patients treated at NGH during FY03 that lived in a county outside of Davidson County. This list does not include counties having 10 patient visits or fewer during FY03.

County	Inpatient Charges	# of In-Patients	Outpatient Charges	# of Out-Patients	Total Charges
Rutherford	$ 65,035	12	$ 132,689	340	$ 197,724
Sumner	$ 29,697	9	$ 97,887	177	$ 127,584
Williamson	$ 41,306	7	$ 66,676	180	$ 107,982
Wilson	$ 53,736	9	$ 51,057	161	$ 104,793
Cheatham	$ 30,734	5	$ 62,108	125	$ 92,842
Dickson	$ 59,793	6	$ 19,958	45	$ 79,751
Robertson	$ -	0	$ 31,863	62	$ 31,863
Maury	$ 18,104	2	$ 10,465	26	$ 28,569
Benton	$ 7,828	1	$ 4,942	14	$ 12,770
Montgomery	$ -	0	$ 11,188	27	$ 11,188
Hickman	$ -	0	$ 10,779	18	$ 10,779
Total	**$ 306,233**	**51**	**$ 499,612**	**1,175**	**$ 805,845**

Recommendations:

a. Evaluate further the number of charity care patients originating from adjacent counties such as Rutherford, Sumner, Williamson, and Wilson counties.

b. Develop a strategy to approach each county for reimbursement to NGH / Metro for services provided to non-Davidson County residents.

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Section 6: Operational Efficiency Opportunities

Approach

- Ø E&Y considered operational efficiency opportunities to be areas that NGH management should further evaluate and potentially implement to realize cost savings, increased revenue or indirect savings through improved productivity, customer service, or market position of the hospital.
- Ø E&Y performed management and physician interviews, assessed departmental policies and procedures, analyzed trend data for certain hospital functions, and used the findings in the benchmarking analysis to identify efficiency opportunities.
- Ø We did not perform work shadowing, process observation, chart audits, or other means to identify efficiency opportunities.
- Ø E&Y and management evaluated each opportunity identified to gain an understanding of its order of magnitude.
- Ø E&Y and management estimated the potential related to certain opportunities.
- Ø Efficiency opportunity estimates require further analysis.

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Operational Efficiency Opportunities – Findings and Recommendations

1. **Reduce management and employee turnover -** NGH has a high employee turnover rate, including a high management turnover rate (a summary of the employee turnover in the past four years is shown on the following page). As an example, at the start of this project we interviewed several members of management that have since resigned NGH to pursue other opportunities. Over the past four years, the average overall annual turnover rate is approximately 27.8% and the average management annual turnover rate is approximately 33.7%. It is extremely difficult to achieve organizational goals, initiate change and demonstrate excellence and stability to employees when there is high management turnover.

   Recommendations:

   a. Evaluate exit interview results.
   b. Identify root causes for management and staff turnover (e.g., culture, compensation, expectations).
   c. Develop and implement plans to improve management and staff retention where possible.

2. **Employee disciplinary actions –** Several members of management stated that NGH's policies for employee discipline are not effective and do not allow for timely and appropriate disciplinary actions. NGH's employee performance, productivity and culture may improve by efficiently and effectively addressing personnel matters and enforcing personnel policies.

   Recommendations:

   a. Management should efficiently and effectively address personnel matters and enforce personnel policies.
   b. Management should take action on poor performing employees. All employees should have documented annual performance evaluations. Poor performers need adequate and frequent documentation.
   c. Managers should ensure that cases where employees are utilizing the FMLA rules have been appropriately documented with medical support. Likewise, employees should be monitored for use of sick time.

3. **Implement timely satisfaction surveys for patients, employees, and physicians -** Hospitals striving to improve customer service regularly survey their key stakeholders to assess satisfaction levels. NGH receives has a low return rate for patient surveys. Interviewees have said NGH measures patient satisfaction by the number of complaints received on a monthly basis, rather than performing a survey. Physician satisfaction surveys are rarely performed. An employee satisfaction survey was completed in March. Previous to March, an employee survey was performed in 2001. An overview of the results of the March employee survey is included on the page after next.

   Recommendations:

   a. NGH should regularly assess and survey customer/patient satisfaction and proactively address issues raised in satisfaction survey results. Routine satisfaction survey results are needed at NGH to further their goal of a customer-centered environment.
   b. Establish satisfaction targets by stakeholder group.
   c. Develop a plan to survey satisfaction and address results.
   d. Monitor results by stakeholder group against targets.

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Management and Staff Turnover at NGH

- In the past four years (January 1,1999 through December 31, 2003) NGH has experienced significant retention issues with over 841 resignations/terminations – 70 of which were management positions. This equates to an approximate 27.8% overall turnover rate and an approximate 33.7% management turnover rate.
- Management turnover was greatest in these departments:
  - Nursing
    - Nurse Managers (9)
    - Nursing Directors (5)
    - Nursing Administrative Supervisors (5)
  - Health Information Management (HIM)
    - HIM Directors (3)
    - HIM Assistant Directors (3)
  - HR, Marketing, and Quality Control
    - Communication/PR Directors (3)
    - Quality Improvement/Utilization Management Directors (2)
    - Human Resources Directors (2)
  - Operations
    - Environmental Service Supervisors (3)
    - Facilities Management Directors (2)
    - Central Services Supervisors (2)
    - Dietary Line Supervisors (2)
  - Other Clinical
    - Primary and Specialty Clinics Managers (3)
    - Medical Imaging Supervisors (2)

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Employee Satisfaction Survey Results – March 2004

- 145 out of 767 employees completed the survey in March 2004 (19% response rate).
- Responses were requested on 1 to 5 scale: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree. One subset of the questions and related results are seen below:

Question	Result
1. Do you think we are closer to achieving our Vision than 3 years ago?	3.51
2. The April 2003 HIPPA requirements have improved patient confidentiality within the organization.	3.85
3. The organizations achieve the mission of 100% access to healthcare and zero disparity.	3.69
4. I feel confident that issues and concerns reported to the Employee Hot Line are addressed with confidentiality.	3.35
5. Would you, a family member, or loved one come to NGH or BLTC for Treatment?	3.08

- Number 5 is an important question about organizational pride and confidence in the services delivered.
- Employees submitted comments and although some comments were positive about NGH and leadership's direction, many comments were negative and pointed. Many comments dealt with issues such as:
  - Lack of confidentiality
  - Lack of cleanliness
  - Management's direction
  - Teamwork issues
  - Reasons why the respondent would not come to NGH as a patient
- These comments by employees should be used by management to address problem areas in a proactive manner.

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4. **Proportion of salaries and benefits are not aligned with the industry –** Salaries per employee are lower than peers while benefits are higher.

   Recommendations:

   a. Evaluate current benefits package against more competitive packages.

   b. Evaluate the application of resources gained from reduction in benefits to increasing salaries under the performance based adjustments (See Unique Aspects Section, Compliance with Metro Civil Service Rules).

5. **Capacity exists to perform more procedures in revenue generating clinical areas** - Based on management interviews, clinical services such as surgery, CT scan, catherization laboratory, and obstetrics have capacity for growth. For example, the Chief of OB/Gynecology stated that NGH could perform 2,500 deliveries per year versus the 1,300 currently being performed. The chief of Surgery stated that NGH could double the surgical volumes.

   Recommendations:

   a. Evaluate capacity in revenue generating clinical areas (diagnostic imaging, surgery, OB/gyn).

   b. Develop a strategy to attract additional revenue producing patient volumes in those clinical areas.

   c. Prepare a business plan indicating income/loss of new business.

6. **Utilization of the 16-slice CT Scanner–** NGH recently purchased and has placed into patient service a state of the art CT scanner. As of April 19, 2004, NGH has spent $900,100 on the project. Based on management interviews, a business plan identifying the financial benefit supporting the purchase was not performed. The scanner was purchased to replace an aging CT scanner.

   The volume of NGH patients that utilize and need the scanner does not fill the capacity of the scanner. Therefore, NGH will have excess capacity to provide advanced diagnostic imaging to non-NGH patients. NGH may have an opportunity to contract with area hospitals and other area providers to provide scanner services. NGH's newly implemented 16-slice CT scanner is only the second one to be installed in the Nashville area (Vanderbilt).

   Recommendations:

   a. Evaluate the potential for contracting with area providers to provide CT scanner services.

   b. Prepare a business plan indicating income/loss of new business.

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Operational Efficiency Opportunities – Findings and Recommendations (continued)

7. **Improve purchase order (PO) process and security -** The PO process, based on management and staff interviews, does not appear to be as controlled as it could/should be. Departmental managers are able to requisition, order, approve, and receive supplies.

   Recommendations:

   a. Assess security access to the materials management information system, HBOC Pathways to evaluate purchasing trends of all departments.

   b. Revise PO process to implement greater purchasing controls.

   c. Update purchasing policies and procedures to reflect supply chain management principles and cost saving goals.

8. **Improve clinic access and operations -** The Medical and Surgical Clinics are located quite a distance from the parking garage. Customer service improvement tactics could be done such as valet parking for patients over 65 years of age.

   Recommendations:

   a. Evaluate and implement clinic access improvement opportunities (e.g., drop offs, valet parking).

   b. Assess clinic operations and develop operational improvement plans to address customer service and improved performance.

9. **Improve decision support -** NGH has recently added 0.5 FTE for decision support. Decision support is a key role in analyzing improvement opportunity areas across hospital operations. Although this function is common in U.S. hospitals, this function has not existed in the past at NGH. Decision support personnel are generally responsible for developing business plans for new/existing services and payor contract analysis.

   Recommendations:

   a. Evaluate decision support needs within NGH (including IT decision support needs).

   b. Staff and utilize this function as appropriate to meet expectations.

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Operational Efficiency Opportunities – Findings and Recommendations (continued)

10. **Contracted rates paid to area providers to care for NGH patients requiring services NGH does not provide -** NGH transfers patients to other providers when the medical services required by the patient are not performed at NGH. NGH has contracts in place with area providers to treat the transferred NGH charity patient. The contracts identify the amount NGH will pay the provider for treating the charity patients. The current contracts contain unfavorable (above market) payment terms for NGH, requiring NGH to pay a percentage of a providers charges. However, NGH is actually paying less than contracted rates and within market.

    Recommendations:

    a. Evaluate contract terms with other providers versus actual payments.
    b. Revise contracts with other providers to reflect actual payments and market rates.

11. **Personnel matters -** Through our interviews we identified the following issues related to the employees of NGH.
    - **Culture** – As a governmental entity, NGH has some long-tenured employees that appear to believe their job is an entitlement and do not demonstrate a desire to improve operations or provide outstanding customer service. However, we did meet many employees and physicians who believe in the NGH mission. Improved communication, trust, and a sense of direction are items employees informed us they desire most in the NGH culture.
    - **Employee morale** – NGH employees are aware of and can sense the poor financial situation of the hospital. They have read the local newspapers stating that the Metro government is attempting to reduce costs and that NGH has been identified as a cost reduction target along with other Metro departments.
    - **Productivity of Meharry physicians** –Meharry physicians informed us that low NGH volumes do not allow for high physician productivity. Also, that the lack of formal and frequent communication between NGH and Meharry impacts overall physician productivity.

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Operational Efficiency Opportunities – Additional Findings

Through our interviews the following general observations have been identified. Although there are no detailed recommendations associated with these observations, management may wish to evaluate the observations further.

1. **Redirect Primary Care Visits -** Many of emergency room visits could be handled by the NGH primary care clinics or Health Department clinics. Redirection of non-emergent care patients into a more appropriate setting is critical to improving financial performance.
2. **Eighth Floor Build-Out -** The eighth floor of NGH is currently shell space. NGH has considered options for "profitable" services on the eighth floor; however, no action has been taken. NGH management should continue to develop a build-out plan and associated business plan for the eighth floor.
3. **Carve out non-TDOC Prisoners for Additional Reimbursement -** To our understanding, city, county and regional (Metro) prisoners are cared for by NGH without receipt of direct and specific payment for providing the care (the services are "reimbursed" for through the Metro subsidy). A payment contract could be developed between NGH and Metro to reimburse NGH based on the specific services rendered instead of inclusion of this population in the subsidy. The measurement of charges incurred can be used in the implementation of cost containment initiatives for various subsidized patient groups.
4. **Increased Volumes –** As stated by NGH directors and Meharry physicians interviewed, NGH has capacity to increase volume with quality revenue. The Meharry and community physicians along with NGH management should develop and implement a strategic plan to increase NGH volume by attracting quality revenue.
5. **Consider creating a new Observation unit (24 or 72 hours) -** Many patients are kept in the ER for observation, or they are admitted as an inpatient for a very short lengths of stay to maintain ER availability. NGH should evaluate alternative bed configurations (e.g. 24 or a 72 hour observation units) to improve bed utilization and overall reimbursement.
6. **Improve turnover –** High turnover results in management inefficiencies and excessive spans of control. Instances of this were identified in such areas as Health Information Management where there were 30 staff to 1 manager. Absence of management due to retention and FMLA are stated reasons by interviewees why inadequate span of control issues occur at NGH. Turnover issues should be addressed and resolved, if this cannot be accomplished, consideration should be given to contingent organizational chains of command.
7. **Improve bed utilization -** NGH physicians and nurses repeatedly told E&Y that beds are frequently unavailable. Although ER bottlenecks are the primary contributors, reviewing bed use by day and by unit, appropriate bed utilization and discharge planning are issues that should be addressed. A summary of census data is included in Attachment D.
8. **Segment ER patients -** Prison patients are currently mixed in with other patients. The presence of prisoners and police guards in adjacent rooms adds to the image proliferated at NGH. NGH should consider segmenting patients away from prison patients within the ER. A cost benefit analysis should be performed for the prisoner segmentation.

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Operational Efficiency Opportunities – Additional Findings (continued)

9. **General Ledger -** NGH Accounts Payable (AP) staff spend their time re-keying entries into Metro's system and the Affinity Hospital system. Additionally, significant effort is required to reconcile NGH general ledger to Metro's FastNet general ledger. NGH should consider using one general ledger. Staff reduction is a possibility if general ledger and journal entry functions are simplified.
10. **Delineate accounts payable and materials management functions -** Responsibilities need to be clearly assigned and monitored for reconciliation functions performed by both accounts payable and materials management staff. Currently, reconciling activities involving invoiced amounts and quantities, purchase orders, contracted prices and terms, and receipt of goods appear to be performed sporadically and are not assigned to specific staff within specific timeframes. These reconciliation activities should be performed monthly to ensure that NGH is receiving the agreed to quantities at the negotiated contract prices and that internal documentation (e.g., purchase order) is kept up to date and accurate.
11. **Laboratory operations -** Many interviewees informed us that the Laboratory has consistently poor customer service. NGH management should focus on improving laboratory operations, including overall customer service.
12. **Pharmacy operations** – Per interviews, pharmacy operations have the following improvement opportunities: 1) ensure compliance with pharmacy policies and procedures and update where needed; 2) assess security and upgrade physical security of outpatient pharmacy; 3) assess space utilization of outpatient pharmacy; 4) assist staff build and implement drug library for new information system; 5) improve billing processes; 6) consolidate multiple inventories where possible; and 7) address and revise the charging and coding problems currently experienced.

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Section 7: Community Benefit

Approach

- Management and E&Y identified, at a high level, the community benefits provided by NGH to the citizens and government of Davidson County.
- Considered community benefits to be tangible or intangible services or outcomes that NGH provides that in some way add to the improved health status of the citizens of Davidson County. Certain community benefits can be quantified while many can not.
- Performed management and physician interviews to identify community benefits provided by NGH. We also used our knowledge of the Nashville health care market, our knowledge of TennCare, and utilized our Center for Business Knowledge to perform a Nashville market analysis (Attachment C) to evaluate the market and identify additional community benefits provided by NGH.
- Evaluated the potential implications of NGH ceasing operations. Specifically, we evaluated current market share percentages of Nashville providers and developed a scenario where NGH volumes are distributed among those providers. We did not perform a provider capacity study and therefore, the distribution contained in the report did not account for the capacity of area providers. A capacity study of other area providers would need to be performed to validate the distribution contained in the report.
- Identified potential implications of key stakeholders if NGH ceased operations.
- Gathered community benefit information per management for services provided by NGH (e.g., Community Outreach Department initiatives).

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Community Benefit – Findings

If NGH ceased operations, what would be the potential implications?

- Approximately 7,000 annual discharges and 28,232 annual inpatient days may be treated by other providers.
- Over 34,000 emergency visits may need to be treated by other providers. However, per NGH management, many of these visits are primary care visits (non emergency). Many of these visits could be handled by the NGH primary care clinics or Health Department clinics. It is recommended in the operational efficiency section that these visits be redirected out of the emergency department.
- Current patients of NGH's medical / surgical outpatient clinics may be required to find other providers, including the Health Department clinics, to receive treatments and medications.
- Access to health services may be more difficult to obtain for uninsured patients.
- Special care patients such as those with HIV/AIDS, sickle cell anemia, cancer requiring chemotherapy drugs, dialysis, and other chronic illnesses may have to find other settings to receive ongoing care. Interviewees have stated that the Health Department clinics provide services for these special patient groups; however, although physical capacity for the additional volumes may exist, current staffing levels are not adequate to absorb this patient population.
- The Tennessee Department of Corrections would be required to contract with one or more other providers for prison care services.
- Over 750 employee positions would be eliminated.
- A community capacity study would be required to identify any cost savings to Metro.
- NGH's current community outreach programs could be absorbed by the Health Department.
- According to Meharry Executive Leadership, Meharry would be financially devastated if NGH closed. We were told by Meharry leadership that it has no other options for a teaching hospital partner.

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Charity Care provided in Nashville

- NGH has the highest charity care utilization percentage of these area hospitals:

Charity Care Charges as a Percent of Total Charges			
Provider	Charity Charges	Total Charges	Charity % of Charges
NGH	$ 13,601,910	$ 86,195,502	15.78%
VUMC	58,731,557	1,253,025,201	4.69%
Centennial	12,964,856	740,644,366	1.75%
Baptist	10,563,919	561,097,737	1.88%
St. Thomas	9,692,704	644,563,883	1.50%
Total	**105,554,946**	**3,285,526,689**	**3.21%**

Source: Tennessee Dept. of Health 2002 Joint Annual Report

- For comparison purposes, NGH charity care is based on the following charges which were reported to the State of Tennessee on the FY2002 Joint Annual Report. This amount is used as a component of the CPE calculation (see TennCare section).
- Although the amounts are similar, charity care charges as reported here are not the same as "Self Pay Uncollectable" reported on the following page.

Bad Debt and Charity Care Charges	
Bad Debt IP	$ 4,667,295
Bad Debt OP	6,319,511
Charity IP	1,072,510
Charity OP	1,542,594
TOTAL	**13,601,910**

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Charity Care provided in Nashville

- Due to the indigent nature of NGH's self-pay population, NGH has the lowest self pay collection percentage of all area hospitals in FY 2002.

Self Pay Collection Percentage			
Provider	Self Pay Gross Charges	Self Pay Net Revenue	Collection Percentage
NGH	$ 14,303,806	$ 1,019,313	7.13%
VUMC	107,445,475	43,256,737	40.26%
Centennial	16,425,272	3,460,416	21.07%
Baptist	10,665,155	5,899,428	55.31%
St. Thomas	13,579,514	3,843,282	28.30%
Total	**162,419,222**	**57,479,176**	**35.39%**

Source: Tennessee Dept. of Health 2002 Joint Annual Report

- Due to the indigent nature of NGH's self-pay population, NGH has the largest bad debt write-offs of all area hospitals (as % of total charges) in FY 2002.

Self Pay Collection Percentage			
Provider	Self Pay Uncollectable	Total Gross Charges	Write-Off Percentage
NGH	$ 13,284,493	$ 86,195,502	15.41%
VUMC	64,188,738	1,253,025,201	5.12%
Centennial	12,964,856	740,644,366	1.75%
Baptist	4,765,727	561,097,737	0.85%
St. Thomas	9,736,232	644,563,883	1.51%
Total	**104,940,046**	**3,285,526,689**	**3.19%**

Source: Tennessee Dept. of Health 2002 Joint Annual Report

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Potential Redistribution of NGH Volumes Should NGH Cease Operations

Inpatient Distribution of NGH Patient Days Based on Current Market Share - FYE 2002

NGH Patient Days to be Redistributed	28,232
NGH Charity Care Days to be Redistributed	3,225

Provider	Inpatient Days	Inpatient Marketshare	Add'l Distributed NGH Patient Days	Add'l Distributed NGH Charity Care Patient Days
VUMC	187,524	32.2%	9,082	1,037
Centennial	139,793	24.0%	6,770	773
Baptist	127,372	21.8%	6,168	705
St. Thomas	128,268	22.0%	6,212	710
Total	582,957	100%	28,232	3,225

Outpatient Distribution of Patient Visits Based on Current Market Share - FYE 2002

NGH Outpatient Visits	90,633
NGH Outpatient Charity Care Visits to be Redistributed	23,577

Provider	Outpatient Visits	Outpatient Marketshare	Add'l Distributed NGH OP Visits	Add'l Distributed NGH Charity Care OP Visits
VUMC	758,932	61.0%	55,304	14,387
Centennial	155,389	12.5%	11,323	2,946
Baptist	179,980	14.5%	13,115	3,412
St. Thomas	149,451	12.0%	10,891	2,833
Total	1,243,752	100%	90,633	23,577

Note: These tables represent a scenario for distributed NGH volumes and are intended for illustrative purposes only.

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Impact of Charity Care on NGH

- NGH incurred $13.6 million in gross charges for charity care patients during FY2002 (per Joint Annual Report).
- Charity care gross charges represents 15.78% of total gross revenue which represents the second largest "payor" class for NGH.
- In FY04, nearly 25% of gross revenue came from charity care and self pay, these combined gross charges represent $29.2 million which could go largely uncollected.
- Charity care charges have been deemed uncollectable at NGH; therefore, billing and collections are pursued on a limited basis for charity care patients.
- Over 80% of the charity care population comes from the closest 12 zip codes to NGH.
- The pro forma loss of providing charity care in FY02 was approximately $12.3 million. NGH received approximately $23.5 million in a subsidy plus additional cash and capital funding during FY02. Therefore, NGH received subsidy revenue in excess of the cost to treating the self pay and charity patients which could be used to fund the care of other patient populations (e.g. TennCare).

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Community Benefit - Recommendations

1. Perform a detailed community impact analysis to evaluate the implications of any change to NGH's operating structure.
2. Metro should perform an analysis to evaluate the best use of community resources and evaluate the best operating structure for NGH. For example, Metro can evaluate a number of various NGH operating structures including:
   - status quo;
   - modify operating structure (e.g., outpatient services only scenario); and
   - close NGH.

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Section 8: Mental Health

Approach

- Ø Interviewed management and key clinical personnel involved with the management and treatment of mental health patients at NGH.
- Ø Understood the scope of services for mental health patients provided at NGH.
- Ø Obtained volume information for mental health patients within the ER.
- Ø Worked with ER personnel to analyze time requirements for police officers to escort patients while at NGH.
- Ø Summarized findings and provided recommendations where possible.

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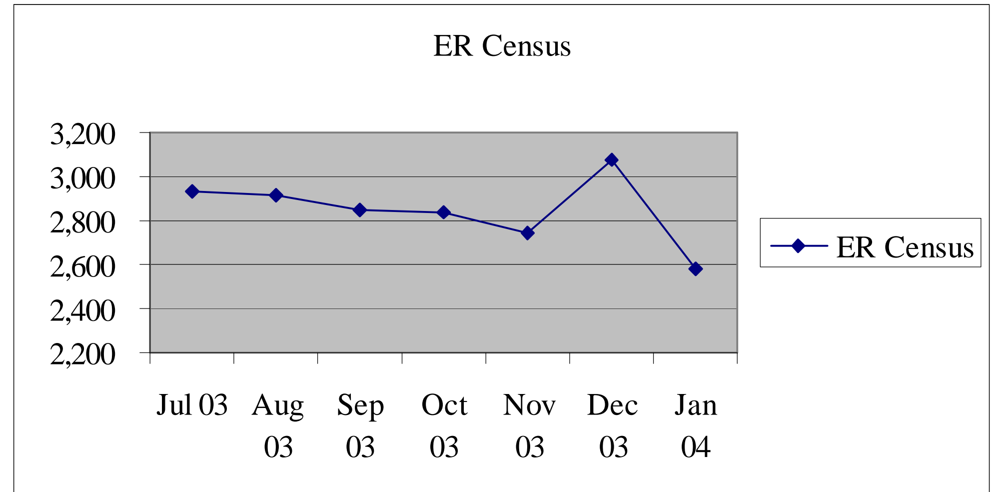
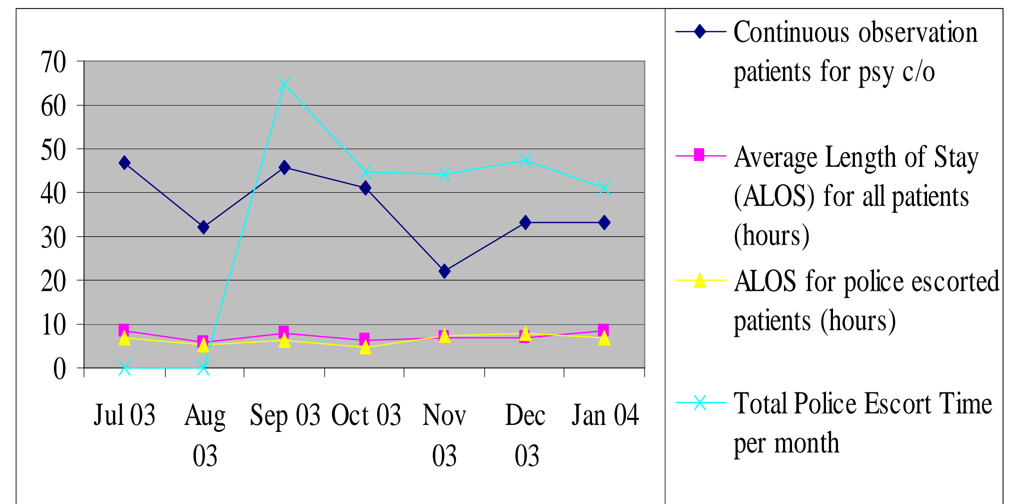
Mental Health – Findings: ER Mental Health Patient Information

	Jul 03	Aug 03	Sep 03	Oct 03	Nov 03	Dec 03	Jan 04
ER Census	2,930	2,917	2,843	2,836	2,739	3,074	2,583
Continuous observation patients for psy c/o	47	32	46	41	22	33	33
Total # hours for all	406	191	369	256	155	228	273
ALOS for all (hours)	8.6	5.9	8	6.2	7	6.9	8.2
ALOS for police escorts (hours)	6.9	5.2	6.5	5	7.4	7.9	6.8
Total # of police escort patients			10	9	6	6	6
Total Police Escort Time per month	N/A	N/A	65.0	45.0	44.4	47.4	40.8

Source: Wava Huddleston, ER RN Manager



- Through interviews, we understand that Metro Police are frustrated regarding the amount of time they spend guarding mental health patients in the NGH ER if the patient could do harm to self or others.
- ER staff attempt to expedite police guarded patients through the disposition process.
- 79% of mental health patients are observed by NGH security.
- Longer lengths of stay are generally attributed to drug or alcohol intoxication. The patient must be alert enough to be interviewed before disposition can occur.
- Police spend an average of 48.5 hours in the NGH ER each month guarding mental health patients.



Source: Internal NGH data.

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Mental Health – Findings and Recommendations

Findings

- NGH does not provide inpatient or outpatient mental health services.
- NGH stabilizes/treats mental health patients in the ER. Per management, mental health patients presenting at the ER are typically substance abusers, suicidal, and/or psychotic.
- Police bring in psychotic patients and must accompany the patient if he or she is dangerous to self or others until that patient is stable or transferred to a mental health inpatient setting.
- Police spend significant time escorting suicidal or harmful psychotic patients. ER staff informed us that they process police-escorted patients through the system faster than the other mental health patients.
- Psychiatric patients are monitored by either security guards or police officers depending on the potential harmfulness of that patient.
- NGH security officers guard mental health patients without police escorts.
- NGH works with the Mental Health Cooperative (Co-op). Upon the patient's entry to the NGH ER, the Co-op's Mobile Crisis Team is alerted. A team is dispatched to NGH to evaluate the patient and provide a care plan for that patient. Should the patient need inpatient mental health services, the Mobile Crisis Team will identify and transfer the patient to the appropriate provider.
- The majority of NGH's mental health ER patients are indigent or charity care.
- NGH is a major user of the Co-op's Mobile Crisis Team. In the past the Co-op was located at NGH.

Recommendations

- Consider moving a Co-op Crisis Team back to NGH or create a satellite office for the Co-op due to the number of mental health patients arriving at the ER each month.
- Segment the mental health patients away from other ER patients. Analysis needs to be performed to evaluate if capital costs will be required to accomplish segmentation of patients (e.g., prisoners, mental health patients). A cost benefit analysis is needed for this patient segmentation initiative.

Section 9: Alternative Funding

Approach

- Identified alternative methods of public funding for NGH including those utilized by peers, other cities/counties and industry best practices.
- Analyzed the following current and alternative fund categories:
  - Metro subsidy
  - Philanthropy / fundraising
  - Grants
  - Other non-operating subsidies
- Interviewed management to understand historical and current alternative funding sources and ongoing initiatives to obtain alternative funds.
- Developed recommendations for pursuing additional alternative funds, where appropriate.

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Alternative Funding – Findings and Recommendations

1. **NGH will treat the indigent patients of the county –** As previously stated in this document, the mission of NGH and the Metro government of Nashville and Davidson County in support of NGH, is to treat and care for the indigent citizens of the county. To continue this mission, NGH will likely always need a public subsidy.
2. **Alternative subsidy funding efforts have been limited -** Through interviews and attendance at an NGH strategic planning session (at the request of management), we found that NGH has had little activity surrounding the pursuit of alternative funds other than the receipt of the annual Metro subsidy payment. NGH has recently hired a person to pursue alternative funds such as philanthropy and grants for the hospital.
3. **Comprehensive fundraising plan / capital campaign -** "Friends in General" is NGH's fundraising arm. Historically, minimal funds have been generated by this fundraising organization. The Guidestar database did not have a Form 990 on file for NGH's Friends in General as the organization had an income of $25,000 or less and was not required to complete a Form 990 by the IRS.

   NGH has a mission that lends itself to charitable giving. NGH has not developed and implemented a comprehensive fundraising plan with an associated capital campaign. Although Nashville has many competing interests for philanthropic donations, NGH's mission and services that benefit the underserved population provide a compelling case for attracting philanthropic gifts. Recently, NGH has hired an FTE to explore fundraising possibilities.

   Recommendation:

   NGH should develop a comprehensive plan to pursue and attract philanthropic gifts both small and large. To do so, NGH will need to build a compelling development plan with incentives for donors. Capital campaigns generally have associated goals, timing requirements, expectations of lead gifts, giving programs, and programs designed to will certain assets to NGH.

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Alternative Funding – Findings and Recommendations

4. **Grants -** Local, regional, state, national and international grants are available for various initiatives. Grants are generally provided for research initiatives. Many foundations exist that fund public hospital initiatives. Based on management interviews, receipt of grants have not been a focus in the past and NGH has received less than $500,000 in grants over a multi-year period (recognizing Meharry is a minority medical school and performs research activities, Meharry has received over $72 million in funded grants over the past five years (per the Guidestar database using Meharry's IRS reported Form 990).

   Recommendation:

   NGH should research and pursue grants available from public and private foundations.

5. **Fund other area hospitals to treat the county indigent patients -** Certain county governments and hospital districts across the U.S. do not operate, manage or fund a dedicated public hospital. Typically governments and county health departments contract with area hospitals at a negotiated payment rates to treat the indigent patients. The counties that do this assert that the government cannot manage a hospital as well as the area hospitals, clinical outcomes are typically better at area hospitals, and because there is not a duplication of management and overhead costs, the negotiated rates paid to area hospitals are below what it would cost for the county to subsidize the public hospital.

   Recommendation:

   Metro should evaluate the possibility of funding the care of indigent patients at facilities other than NGH.

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Section 10: Meharry Relationship

Approach

- Evaluate the relationship with Meharry Medical College as lessor and as contractor for services.
- Assess three areas as they relate to NGH's relationship with Meharry
  - The lease agreement, including the Loan agreement, between NGH and Meharry.
  - The Professional Service Agreement (PSA) between NGH and Meharry.
  - Items of negotiation between NGH and Meharry.

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Meharry Relationship

Lease Agreement - Approach

Obtained and analyzed the following:

- Lease Agreement between The Metropolitan Government of Nashville and Davidson County and Meharry Medical College entered into December 1, 1994, including Exhibits 1.01-A, 2.01-A and 5.02-A.
- Master Agreement entered into on August 18, 1992.
- Nashville General Hospital YTD Expense file for the Fiscal Year 2003.
- Nashville General Hospital Departmental Revenue & Expense Statement for the 12 Months Ended June 30, 2003 (Facilities Management and Security)
- Loan agreement between The Health and Educational Facilities Board of The Metropolitan Government of Nashville and Davidson County and Meharry Medical College entered dated December 1, 1994
- Form 8038, Information Return for Tax-Exempt Private Activity Bond Issues and portions of the Official Statement Dated August 14, 1996 for $55,050,000 The Health and Educational Facilities Board of The Metropolitan Government Nashville and Davidson County, Tennessee Revenue Refunding and Improvement Bonds (Meharry Medical College Project) Series 1996
- Trust Indenture to Suntrust Bank, Nashville, N.A., Nashville, Tennessee Dated as of August 1, 1996 for Revenue Refunding and Improvement Bonds (Meharry Medical College Project) Series 1996 $55,050,000 (pages 18-20 and 31-35 only)
- E&Y industry knowledge

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Meharry Relationship

Lease Agreement - Overview

- Nashville General Hospital ("NGH" or "Tenant") entered into a 30 year lease agreement with Meharry Medical College ("Meharry" or "Landlord") for the purpose of operating an acute care hospital, medical clinic, and other ancillary services.
- The Leased Premises includes:
  1. The hospital building and premises (which was formerly Hubbard hospital) consisting of no less than 328,000 square feet
  2. All space in the building commonly referred to as "The Tower"
  3. All space in the building commonly referred to as "The Low-Rise"
  4. The building commonly referred to as the "Power House"
- Through NGH interviews, the Leased Premises contains approximately 411,338 square feet.
- The rental rate for the Premises is $4 million per year for a total lease payment of $120 million over 30 years.
- Tenant is responsible for electricity and maintenance of the Premises.
- There are no rental increases during the Lease term.
- Tenant leases 450 spaces in the Albion parking garage from Landlord for $99 per month per space. Landlord built this 600 space parking building as outlined in the Lease agreement. Exhibit 2.01-A of the lease agreement describes parking structure total cost of $4.5 million.
- There is no option to extend the Lease term beyond the initial lease period and there is no option to purchase the property.
- There is a "First Right of Refusal" to purchase the property. This First Right of Refusal gives the Tenant the right to purchase the property under the same terms and conditions of a bona fide accepted offer from a third party (should the landlord wish to sell).

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Meharry Relationship

Lease Agreement - Overview

- Ø The $4 million rental payment equates to $9.72 per square foot.
- Ø The parking charge equates to approximately $1.30 per square foot.
- Ø Electrical rates paid by NGH are approximately $2.15 per square foot.
- Ø Landlord was responsible for the tenant improvements to the facility, according to the tenant's specifications.
- Ø The tenant improvements were paid for by the Loan Proceeds as described in the Loan Agreement and discussed on the following page.

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Meharry Relationship

Lease Agreement - Loan Overview

The Health and Educational Facilities Board of the Metropolitan Government of Nashville and Davidson County, Tennessee (the "Issuer") and Meharry Medical College (the "Corporation") entered into this Loan Agreement on December 1, 1994. The Agreement outlines how Bonds will be issued through Issuer and loaned to Corporation for the costs of upgrades and Capital Improvements made to the original Hubbard Hospital, as required by Metro and outlined in the Lease Agreement. Other pertinent issues include:

1. Issuer will deliver to the purchasers $48,725,000 aggregate principal amount of its Series 1994 Bonds, which Series 1994 Bonds shall bear interest, be redeemable, and have such other terms and provisions as set forth in the Indenture.
2. 95% or more of the proceeds of the Series 1994 Bonds will be used to finance activities directly related to the exempt purpose of the Corporation.
3. Term is for 30 years (ending December 2, 2024).
4. Corporation shall pay, throughout the term, the following Basic Loan Payments and the Additional Loan Payments:

   A. Basic Loan Payments: Paid monthly equal to (i) 1/6 of the amount of interest due and payable on the Bonds on the next succeeding Interest Payment Date and (ii) 1/12 of the amount of principal due and payable on the next succeeding Bond Payment Date and (iii) 1/12 on the annual premium for the insurance required.

   B. Basic Loan Payments are credited (reduced) as follows: (i) any amounts paid by the Metropolitan Government to the Trustee under the Lease …, (ii) proceeds paid to the Trustee pursuant to a draw on the Letter of Credit, (iii) any amounts of net income or earnings deposited in the Revenue Fund from the investment of monies in any fund established under the Indenture, and (iv) any amounts applied by the Trustee to the prepayment of the principal of the Bonds.

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Meharry Relationship

Lease Agreement - Loan Overview

- Through interviews with the Trustee, the Series 1994 Bonds, as described on the previous page were scheduled to be called in December 2004. There is currently an escrow account set up to retire these bonds in full.
- Series 1996 Bonds in the amount of $55,050,000 have replaced the Series 1994 Bonds.
- Series 1996 Bonds (issued 9/5/1996) are due to be paid off December 1, 2024. This final maturity date coincides with the end of the Lease term.
- The 1996 Bonds have a variable annual interest rate ranging from 3.85% (1997) to 6.0% (2024). The weighted interest rate is approximately 5.52%.
- The Metro government, on behalf of Meharry, pays the Trustee $333,333.33 each month ($4M annually – the lease amount) in lieu of paying Meharry lease payments, to service the 1996 Bond Issue debt. In most years the annual $4 million paid exceeds the bond amount due (per the annual amortization schedules - variable interest rates).
- Per conversations with Meharry senior management, the Albion parking garage was financed through a separate Bond Issue.
- Per conversations with the Trustee, there is a 1998 Bond Issue for $21,770,000 for the Meharry property known as "Meharry Towers". The Albion parking structure (approximately $4.5M as stated in the Lease agreement) is included in this 1998 Bond Issue. The interest rate on this issue is variable with a cap of 12%. Per the Trustee, the current interest rate on this Issue is 1.7%.

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Meharry Relationship

Lease Agreement - Market Rates for Similar Leases

- Average market rates, based on other on-campus medical office buildings in the Nashville area, are approximately $17.50 per square foot, full service. E&Y's 2003 market assessment indicated that the market might support closer to $21.50 per square foot, full service rental rates.
- Market rates are based on medical office buildings, not acute care hospitals.
- Analysis of the medical office market in Nashville indicates that parking is typically provided free of charge.
- The $17.50 - $21.50 per square foot, full service rent equates to approximately $8.00 - $12.50 per square foot triple net (NNN). This triple net rate is the rate net of all operating expenses - utilities, taxes and maintenance.
- These rates would generally be for Class A type Medical office buildings with existing tenant improvements and/or a tenant improvement allowance, provided by the Landlord, to build out a "shell" space or to make minor changes to existing space.
- The full service market rates include real estate taxes which are approximately $2.00 per square foot.

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Meharry Relationship

Lease Agreement - Market Rates for Similar Leases

Factors and Financial considerations in leasing a different building or constructing a new replacement facility:

Leasing

- Metro may have to pay real estate taxes, property management and/or common area fees elsewhere.
- Existing property is not likely available in this market.

Building replacement facility

- New hospital building costs are between $200-300/square foot, not including equipment or land.
- At 6% interest over 30 years for like size facility:
  - 411,338 sf @ $250/sf = $102.8 million
  - $100 million over 30 years at 6% interest = $7,047,938 per year
  - 30 year mortgage would equate to $17.13/sf NNN or $26.62/sf, full service including electricity.
- Property would be owned free and clear after 30 years
- Financing of this replacement facility may not be feasible.

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Meharry Relationship

Lease Agreement – Findings and Observations

Below is a summary showing a comparison of the current lease rates, market lease rates, and replacement facility rates.

	Current Lease	Market Lease Rates	Replacement Facility
Rent	$9.72	$8.00 - $12.50	$17.13
Parking	1.30		
Total without TIA factor	11.02	8.00 – 12.50	17.13
Tenant Improvement Allowance (TIA)	120.00	80.00 (shell space)	Included in the rent; see Note 3
Total Cost Per Square Foot	$11.02	$13.23 - $17.73	$17.13

Notes:

1. All assumptions based on a 411,338 sf facility
2. The Market Lease rates are for medical office building space and not Hospital space. The Market Lease Rates quoted above include a TIA factor of up to $40/sf. In order to compare appropriately, we add to the Market Rate an additional TIA factor. We added $80/sf TIA (rather than the $120/sf of TIA in the current rent) which is in line with interior build out costs of Hospital space. This also puts the Market Rate space build out on par with the Replacement Facility comparison. The $5.23/sf TIA is calculated at $80/sf over 30 years with the same weighted interested rate average as the current Bonds.
3. Replacement Facility building costs are estimated at $200 - 300 per square foot. $250 per square foot was used for this example. The replacement facility lease rate is based on costs to build over 30 years with a 6% interest factor. Land costs, if any, are not included in this estimate.
4. Operating expenses such as utilities, maintenance and security are assumed to be the same for each scenario.
5. Parking is included as an additional expense in the Current Lease. This is not typically an additional expense in the market.

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Meharry Relationship

Lease Agreement – Findings and Observations

- Based on the analysis on the previous page, the Premises lease rate currently appears to be within current market rates.
- The Lease and Loan Agreements were put into place approximately 10 years ago. A 1994 rental rate study was not conducted, however rental rates have always generally included an annual escalation factor. The NGH base lease rate will remain flat over the next 20 years. Therefore, the lease rate for the Premises will likely continue to drop even further below market rates during the latter part of the lease term. However, the rental rates may have been above market in the earlier years.
- The 1994 bonds were refinanced in 1996 at more favorable terms, Metro may consider refinancing again if there is an opportunity to capitalize on better market rates.
- Tenant financed the facility renovation through Bond Proceeds as previously discussed. Tenant is making payments on these outstanding Bonds in lieu of paying Meharry lease payments . Although it is not standard for Tenant to be responsible for financing major improvements to Landlord's facility, this appears to have been a mutually agreeable financing strategy which was developed at the time of the Lease Agreement.
- Since there are no options to renew at the end of the initial master lease, Metro could lose control of the Building(s)s at the end of the lease term. It appears that it could be possible for a "competitor" to offer a more attractive rental rate to the Landlord and take the Building(s) "as is" in 2024.
- There may be ways of maintaining control provisions in the future, if Metro desires to maintain such control. One way would be to include control provisions in any future Lease Amendment. A second way would be to purchase or sign a long term (i.e. 99 years) land lease for the Land beneath the Building(s). There are many acceptable alternatives in the market in which control on these Building(s) can be managed in the future.
- If Metro were to consider ceasing operations of NGH, Metro and Meharry should evaluate potential use of building and property for other operations.

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Meharry Relationship

Lease Agreement – Findings and Observations

1996 Bond Issue – Hospital Improvements

- Based on an analysis of the total debt service requirements and yield on the 1996 bond, utilizing the most recent amortization schedule, it appears, upon the final payment, the total debt payment is estimated to be $110,221,470.
- The total payment amount may ultimately be below $110,221,470 if Metro continues to pre-pay the debt (paying $4 million per year).
- The $4 million annual lease payment for 30 years equates to $120,000,000.
- Rather than paying Meharry lease payments, NGH pays the Trustee $4 million annually to pay off the bonds.
- Therefore, once the debt is paid off, NGH will be required to begin paying Meharry directly for the lease. Through direct lease payments to Meharry, NGH will pay approximately $9.8 million in excess of the debt requirement.
- Metro should inquire about the intent of the lease agreement. If the intent was to pay off only the bond issuance through the lease agreement, it may be appropriate for Metro to renegotiate the lease agreement to terminate upon payoff of the bond.

1998 Bond Issue – Parking Garage

- A portion of the 1998 bonds was utilized to construct the parking garage.
- The interest on the 1998 Bond Issue, which in part was used for the Albion parking structure, is variable with a cap of 12%. The current rate is 1.7%. E&Y did not have the Trust Indenture on the Series 1998 Bonds and therefore was not able to run a true analysis for the total debt service requirements. The payments calculated below are based on a 30 year fully amortized loan with a $4.5 million principal amount.
- Metro should assess if they bear any liabilities for bonds should Meharry default.
- At the current interest payment of 1.7%, the repayment of the $4.5 million parking structure would be approximately $189,510 per year. NGH utilizes and rents 75% of the garage (450 of 600 parking spaces). The NGH portion (75%) of this annual debt service would be $142,132.
- Using the current 1996 Bond Issue weighted average interest rate of 5.52% rather than the current rate of 1.7%, the repayment on the parking structure would be approximately $294,075 per year. The NGH portion (75%) of this annual debt service would be $220,556.
- NGH currently pays $534,600 per year for the lease of 450 parking spaces.
- Therefore, NGH is annually paying Meharry between $392,468 and $314,044 more than the approximate debt service for the parking structure.
- Metro should inquire about the intent of the parking agreement. If the intent was to pay off only the bond issuance related to the parking garage, it may be appropriate for Metro to renegotiate the parking agreement to equal the bond amount and terminate upon payoff of the bond.

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Meharry Relationship

Professional Services Agreement - Approach

We obtained and assessed the following:

- Ø Professional Services Agreement (PSA) between Metropolitan Nashville General Hospital (NGH) and Meharry Medical College effective July 1, 2001
- Ø The PSA Reconciliation Agreement dated April 30, 2004
- Ø The PSA Staffing Plan, 2003-04
- Ø Internal PSA Assessment and Evaluation documents
- Ø Sample clinical department staffing/call schedules (Pediatrics, Internal Medicine, Orthopaedics and surgery)

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Meharry Relationship

Professional Services Agreement – Overview

- Ø NGH exists to provide adequate hospital services and medical care in the community and provides medical treatment, free of charge, to "Metro patients" defined as :
  - Metro employees injured on the job.
  - Indigent patients living in Davidson County ("indigent" is undefined in the PSA).
  - Inmates incarcerated in facilities owned/operated by Metro.
  - Certain other patient categories within the Hospital Authority system.
- Ø NGH contracts exclusively with Meharry, via the PSA which defines the service expectations and staffing requirements necessary for each party to fulfill its obligations.
- Ø Services Meharry has agreed to provide include:
  - Physician coverage for hospital-based departments (Radiology, Anesthesiology, Pathology, ED).
  - Supervision of all medical, surgical and dental services rendered by the medical staff and house staff, including non-physician practitioners in various settings.
  - One or more Medical Director(s) (Section 1.3.3 of the PSA).
  - A Chief and an Assistant Chief, "as appropriate," to manage and administer each NGH Medical Staff Department and Division.
  - Physician Coverage for certain clinics.
  - Full physician coverage for all hospital departments and divisions.
  - Professional supervision of all residents (physicians and dentists) and medical students.
  - Chairmanship and staffing of various committees of the NGH Medical Staff.
  - House staff (as set forth in the staffing plan).
  - All personnel needed for the NGH undergraduate teaching program.
  - Medical and dental services for "Metro Patients." (Section 1.3.8 of the PSA).

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Meharry Relationship

Professional Services Agreement – Overview

Ø Financial and Staffing Arrangements

- The PSA details the agreed-upon full time equivalents (FTEs) to be provided by Meharry and the level of funding provided by NGH.
- The amount paid Meharry for FY 2003-04 is approximately $8 million which is net of $1.9 million in state graduate medical education (GME) payments paid directly to Meharry by the State.
- NGH will receive Federal payments related to the PSA costs which reduces the cost of the PSA to approximately $6.6 million.
- Please see additional cost details on following page.
- Subject to NGH receiving $4 million or more in TennCare safety net payments, the PSA has an annual inflationary adjustment of 4% per year.
- Meharry may bill directly for professional services (but not technical services) provided to non-Metro Patients (management assumes this provision only applies to NGH facility settings).
- Meharry is obligated to provide NGH a detailed, semi-annual accounting of Meharry's billing and collection activity.
- Meharry is obligated to provide an annual summary report of all faculty, resident and physician services provided for "reconciliation" with the PSA Staffing Plan.

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Nashville General Hospital (NGH) and Meharry Medical College (Meharry)
Amount Paid by NGH to Meharry under the Professional Service Agreement
Fiscal Year June 30, 2004

DEPARTMENT	FTEs	Paid to Meharry FYE 6/30/2004
Internal Medicine	10.48	1,760,628
Family Practice	1.33	224,076
Neurology/Psychiatry	1.02	301,721
Obstetrics/Gynecology	4.55	971,346
Pediatrics	2.94	743,583
General Surgery	2.95	754,734
Surgical Specialties	7.85	2,001,974
Total Faculty & Attending Physicians	**31.12**	**6,758,062**
Total House Staff (includes malpractice)	**39.5**	**1,986,296**
Hospital-based Physicians		
Radiology	3.14	810,006
Anesthesiology	1.17	253,376
Pathology	0.76	152,934
Total Hospital-based Physicians	**5.07**	**1,201,380**
TOTAL Meharry Staff	**75.69**	**9,945,738**
-less-		
Direct State Medical Education Payment to Meharry		**(1,986,296)**
GRAND TOTAL TO BE PAID UNDER PSA		**7,959,442**
Amount Received From Medicare Medical Education (FYE 6/30/03)		(1,333,151)
Net Cost of PSA		**6,626,291**

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Meharry Relationship

Professional Services Agreement - Findings

- Reconciliation of PSA contractual obligation versus what was actually provided
  - Current documentation of faculty and resident FTEs and activities is insufficient to reconcile actual versus the obligations set forth in the PSA.
    - Service schedules do not provide sufficient detail to calculate FTEs.
    - Meharry did not provide NGH with actual activity and staffing reports required contractually under the PSA
    - Activities and expectations related to the medical-administrative roles of Meharry's chiefs at NGH have not been sufficiently detailed to establish overall needs or to document fulfillment of obligations paid.
  - There is no definition of "FTE" in the PSA to determine, if documentation did exist, what level of effort constitutes an FTE.
    - Physician contracts are under increasing regulatory scrutiny.
    - Uses of public funds are under increased scrutiny by the public.
    - Good business practice suggests documentation of services received before payment is made.
    - Relationships between parties to a contract can become strained when expectations are unclear, subject to interpretation, or not measured using a clear, straightforward method agreeable to both.
- According to NGH management, Meharry is billing and retaining some "technical services" payments from certain non-Metro patients treated in Metro facilities which is in violation of PSA paragraph 11.3.
  - Reimbursement for evaluation and management (E&M) services billed to non-Metro patients are "global service" claims and include an allowance for "practice expenses" which is retained by Meharry although NGH incurs the technical component expenses for these services (supplies, space, overhead, etc.) when Metro patients are treated in NGH facilities. Unlike Medicare, most third party payers do not accept separate technical service claims from hospitals for E&M services, therefore Meharry should remit a portion of their E&M service fees to Metro based on the Resource Based Relative Value System (RBRVS) practice expense for each claim or a negotiated average fee.
  - Please see the next section titled "Negotiation Items – Findings, Physician Billing Technical Components" for quantification of this issue.

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Meharry Relationship

Professional Services Agreement - Findings

- Determination that the cost per FTE is within market
  - The PSA does not appear to address individual compensation levels for Meharry physicians other than the aggregate amounts budgeted for each service, though Management states levels are based on the 25th percentile of surveys published by the American Association of Medical Colleges. Benchmarking commercial reasonability of compensation is appropriate, though limiting compensation to the 25th percentile may have an adverse effect on physician recruitment. Compensation limits, incentive compensation (if applicable), and/or benchmarking standards should be addressed in the PSA.
  - Management states position requirements and expectations for chiefs of service are delineated in NGH's Medical Staff Bylaws. Agreement to conform to this standard should be added to the PSA, or the PSA itself should reflect specific requirements and expectations.
- There appear to be communication barriers between executive management at NGH and Meharry related to the exploration and development of action plans to respond to strategic issues.

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Meharry Relationship

Professional Services Agreement - Recommendations

- NGH should define “FTE” and “indigent” for the purposes of contract performance measurement and require Meharry to document services rendered per the terms of the PSA beginning with a detailed physician/house staff activity report for a current “typical” two-week period (to establish “comfort level”).
  - NGH teaching activities.
  - NGH administrative activities (including medical staff committee activity).
  - NGH clinical activities related to Metro and non-Metro patients.
  - NGH call activities (hours of call coverage, call volume).
- Meharry should provide the required annual summary report of all faculty, resident and physician services in a format that would enable “reconciliation” with the PSA Staffing Plan.
- Meharry should provide the detailed, semi-annual accounting of Meharry’s billing and collection activity as required by the PSA. This report should include services provided to, but not billed to Metro patients in order to understand the volume of services to Metro patients compared to Meharry’s other clinical activities.
- Requirements should be delineated which define specific Meharry obligations related to:
  - Hospital/clinic coverage requirements (direct services).
  - “Call” coverage requirements.
  - Payer mix and volume issues.
    - Are PSA resources being deployed to meet the needs of non-Metro patients?
    - Do activity levels match FTE requirements and staffing levels (are budget adjustments, based on actual volume levels, appropriate and are such circumstances addressed)?

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Meharry Relationship

Professional Services Agreement – Recommendations

- Ø NGH should consider alternative methods to establish the resource requirements and appropriate funding levels for Meharry services which would improve documentation and accountability:
  - Establish medical-administrative needs based on detailed position requirements, goals and objectives, time requirements, and market-based compensation analysis.
  - Purchase clinical services for Metro patients from Meharry on a fee-for-service basis (negotiated rates).
  - Purchase on-call services based on a competitive market analysis and needs assessment.
  - Consider employing "full-time" physicians directly in administrative and/or clinical roles.
  - Consider contracting with community physicians on a fee-for-service or hourly rate basis for direct services or on-call coverage as appropriate.
- Ø NGH should establish a periodic documentation testing protocol to support Meharry payments for clinical, teaching and administrative activities (an internal audit approach) regardless of the established payment methodology.

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Negotiation Items – Approach

NGH and Meharry were in dispute regarding a number of issues. The majority of the issues were recently resolved by way of the April 30, 2004 Reconciliation Agreement. However, certain issues of dispute remain unsettled.

We obtained and analyzed the following related to the negotiation items:

- Reconciliation Agreement dated April 30, 2004.
- Financial analysis related to physician technical component.
- Financial analysis related to parking garage lease.
- Financial analysis related to State GME calculation.
- Financial analysis related to the cost of living increase.

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Meharry Relationship

Negotiation Items - Findings

Below is a table that summarizes the quantifiable items in dispute and settled between NGH and Meharry.

Claims in Dispute - Quantifiable (by management)	Asserted Total	Settlement Amount	Comments
NGH Claims			
NGH Leased OB/GYN Employees to Meharry	$267,270	$0	Approved by NGH CEO
NGH built-out the Medical Surgical Clinic	193,787	0	Approved by NGH Board
NGH provided the Meharry radiology dept. financial assistance	85,224	0	Approved by NGH CEO
Reconciliation agreement, unspecified	0	76,781	
Total	**$546,281**	**$76,781**	
Meharry Claims			
Parking Garage Lease	$354,512	$0	
Medical Education Allowance under PSA	1,692,917	0	
Cost of Living Increase under PSA	615,213	0	
Revised staffing plan (New Exhibit 1.3 of PSA)	0	1,118,196	
Total	**$2,662,642**	**$1,118,196**	

The April 30, 2004 Reconciliation Agreement (RA) contains the following:

- Meharry paid NGH $6,300 per month from April 2004 through July 2004 for the provision of a nurse practitioner.
- NGH paid Meharry the $1,118,196 in three installments; $931,830 at RA execution date and $93,183 in May and $93,183 in June 2004. The RA states that if Meharry has not paid their providers in full according to their contracts, this amount will be allocated to the Meharry providers for payment.
- NGH will withhold $6,398.45 monthly in PSA payments beginning on July 1, 2004 and continuing paid in full.

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Meharry Relationship

Negotiation Items – Findings

There are several management concerns related to the relationship that have not been addressed in the RA.

- Physicians Billing Technical Components
  - NGH believes it is due $220,564 from Meharry in facility charges for provider-based clinics. This amount was calculated by NGH management applying the Medicare technical fee to the activity of non-governmental payors who pay Meharry physicians a global fee.
- Physician Billers in Radiology
  - Currently, a billing staff is occupying space in Radiology in order to bill physician's professional component.
  - NGH contends that if they are not going to be billing for the hospital and they are not going to make rental payments to NGH, then they should be relocated so that NGH may utilize the space for clinical services.
- Meharry Physician Payments and Faculty Resignations
  - Several physicians have expressed concern over the Meharry Foundation's inability to pay them regularly and on agreed upon dates. The NGH CEO wrote a letter to the president of Meharry dated May 4, 2004 expressing concern.
  - Meharry has acknowledged to E&Y that they have had trouble paying the physicians on the agreed upon dates.
  - In a letter dated May 4, 2004 from NGH to Meharry, NGH expressed concern regarding recent faculty resignations.

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Meharry Relationship

Negotiation Items – Findings

There are several management concerns related to the relationship that have not been addressed in the RA.

- Meharry's utilization of NGH space (I.e. resident rooms)
  - There does not seem to be a clear distinction between what belongs to NGH and what belongs to Meharry. For example, there are resident rooms that currently appear to be used for permanent housing instead of as on-call only services.
- Contract services/transfer agreements
  - Several services are contracted out or the patient is transferred due to lack of Meharry physician accessibility. It is possible that some of these services are being paid twice; the services are covered (and paid for) under the PSA yet NGH must reimburse other providers for these services. A quantification of the potential for "double payment" should be performed and, if significant, the PSA payments could be reduced in consideration of this amount.

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Section 11: Attachments

A. Interviews Completed
B. NGH Table of Organization
C. Profile of Nashville Market
D. Census Data
E. Glossary – Terms Defined
F. Community Outreach Initiatives

Attachment A: Interviews Completed

NGH

- Dr. Roxanne Spitzer, CEO
- Marilyn Monk, COO/CNO
- Randy Pirtle, CFO
- Reginald Coopwood, MD, CMO
- Ramona Pulce, Director of HR
- Byrd Crowder, Compliance Officer
- Martha Lampley, Director of Health Information Management
- Kenny Warren, Director of Facilities Management
- Sandra Hunter, Director of Community Outreach
- Rick Watters, RN, Director of Nursing
- Wava Huddleston, RN, ER Nurse Manager
- Gene Greer, CIO
- Michelle Devasher, IT Manager
- Charlene Wells, IT Manager
- Nancy Scrugham, Pharmacy Manager
- Mary Hanshaw, Diagnostic Services Manager
- Don Ignatz, Director – Patient Financial Services
- Jane Latter, RN – OR Manager
- Bill Latham, Finance
- Gail Upchurch, Payroll
- Cheryl Scutt, PR & Communications Director

Meharry Medical College

- Dr. John Maupin, President - Meharry
- Dr. PonJola Coney – Dean
- Donnetta Butler, CFO – Meharry
- Dr. Theodore Addai – Chief, Department of Internal Medicine
- Dr. Steven Stain – Chief, Department of Surgery
- Dr. Robert Burnette – Chief, Department of Pathology
- Dr. Harold Thompson – Chief, Department of Radiology
- Dr. Montgomery-Rice, Chief, OB/Gyn
- Dr. Moore – Chief, ER
- Chuck Woeple, Exec. Dir. – Meharry Foundation
- Dennis Kucerin, CFO – Meharry Foundation

Metropolitan Nashville Health Services Department

- Bob Eadie, Public Health Department

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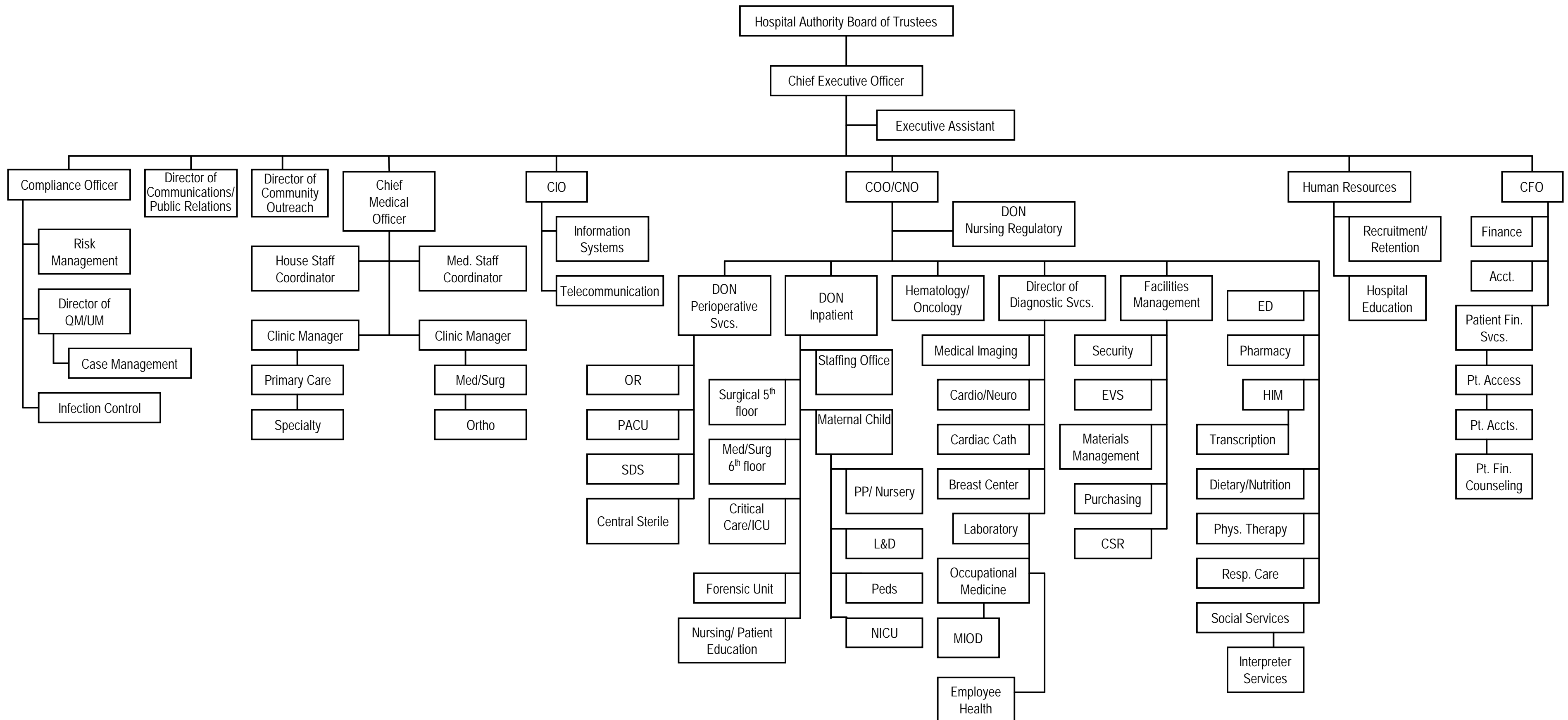
Attachment B: NGH Table of Organization



September 2003

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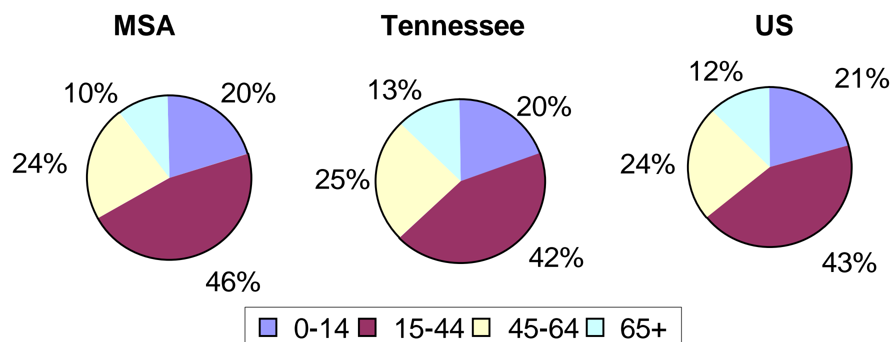
Attachment C: Profile of Nashville Market
On Average, the MSA Is Younger, with Higher Median Income than the Overall State and the US



Population by Age

- The MSA's largest population segment (46%) is age 15–44, of child-bearing age, and most in need of preventive care. Although this is the largest group for the state and US too, it is much more predominant in Nashville.
- The MSA's estimated median age is 35.2 and is expected to increase to 36.7 in 2008. This is and remains younger than the median age in the state and in the US.
- The MSA's fastest growing age segment is 45-64.
- Although the MSA's 65+ population (10%) is smaller than the state and national averages, it is growing much faster than the US' 12% rate.

Median Age	2000	2003	2008
Nashville, TN MSA	34.5	35.2	36.7
Tennessee	35.9	36.8	38.5
US	35.3	36.0	37.2

Population by Race

- Nashville's white and black populations are the largest, but slowest growing groups. The minority populations are gaining share each year. In the state, the black population group is larger, but otherwise the MSA is slightly more diverse. Both are much less ethnically diverse than the US overall.
- In the MSA, 3.3% of the population is of Hispanic origin as of 2003. This compares to 2.2% in Tennessee overall, but is much lower than 15.5% for the US overall.

Population by Race/Ethnicity, 2003 (%)

	MSA 2003	TN 2003	US 2003
White	78.8%	79.6%	74.0%
Black	15.5%	16.5%	12.4%
Am. Indian or Alaska Native	0.3%	0.3%	0.9%
Asian/Pacific Islander	1.9%	1.2%	4.1%
Some Other Race	1.9%	1.2%	6.0%
Two or More Races	1.5%	1.2%	2.6%

Household Income

- The MSA's median household income is higher than the state and US medians.
- According to ACORN, the largest neighborhood group in the US and in the MSA is prosperous baby boomers, but to a much greater extent in the MSA (12% of the population) than in the US (6%).

Median Household Income	2000	2003	2008
Nashville MSA	$44,311	$47,858	$53,945
Tennessee	$36,447	$39,459	$43,779
US	$42,257	$46,695	$54,604

Source: *The Ernst & Young Center for Business Knowledge (CBK) Knowledge Services group.*

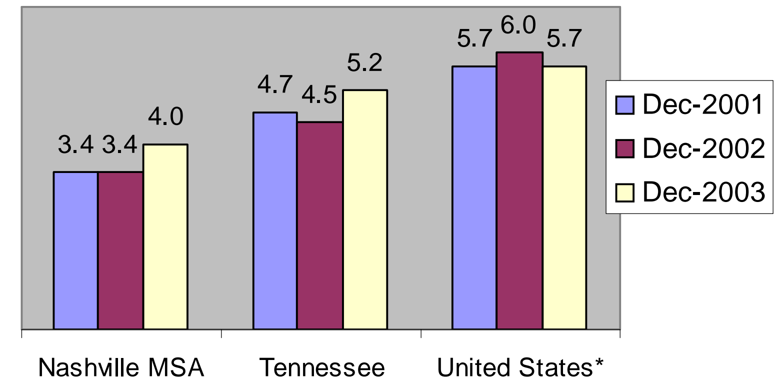
Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Attachment C: Profile of Nashville Market
Health Services Are a Key Part of MSA Employment

Employment Trends

- Nashville's unemployment rate remains much lower than the US' and Tennessee's, although it rose faster (18%) in December 2002–2003, vs. 16% in the state and the US' slight decline.
- Trade, manufacturing, transportation and utilities employment are significant in the MSA. Services contribute more to the state's employment than they do to the MSA.
- The MSA's number of jobs in the trade, transportation and utilities and manufacturing sectors dropped. Unemployment contributes to the uninsured rate in health care regional markets, which increases costs of indigent care for health care providers.
- VUMC is the largest employer in the MSA and the second largest private employer in the state. HCA is second in the MSA.

Unemployment Rate Trend, 2001–2003



Source: *Department of Labor Website*, www.bls.gov, accessed 25 February 2004

Nashville MSA's Major Private Employers

	Company/Institution	Major Industry	Employees
1	Vanderbilt University & Medical Center	Health Care	13,601
2	HCA (including Tri-Star Health System)	Health Care	10,525
3	Saturn Corporation	Manufacturing	7,609
4	Nissan Motor Manufacturing Corporation	Manufacturing	6,500
5	Gaylord Entertainment (Opryland Hotel & Attractions)	Leisure & Hosp	4,950
6	Shoney's Incorporated	Leisure & Hosp	3,670
7	The Kroger Company	Retail Trade	3,350
8	CBRL Group Inc. (Cracker Barrel and Logan's)	Leisure & Hosp	3,275
9	Dell Computer Corporation	Information	3,000
10	BellSouth	Information	3,000
11	Bridgestone/Firestone	Manufacturing	2,900
12	Ingram Industries Incorporated	Manufacturing	2,880
13	Wal-Mart Stores	Retail Trade	2,645
14	Trane Company	Manufacturing	2,550
15	United Parcel Service	Transportation	2,445

Labor Force Distribution, December 2003

	State of Tennessee		Nashville MSA	
Industry Sector	No. of Jobs	Ann % Chg	No. of Jobs	Ann % Chg
Total (000s)*	239.5	0.2	68.7	0.3
Trade, Transportation & Utilities	21.2%	-0.1	19.2%	-2.9
Manufacturing	15.5%	-1.6	11.3%	-1.0
Government	15.5%	0.8	13.4%	1.5
Other Services	14.7%	0.0	17.7%	0.0
Professional & Business Services	11.9%	1.3	14.0%	1.4
Education & Health Services	11.7%	2.9	13.6%	3.6
Financial Activities	5.2%	0.4	6.2%	-1.2
Construction & Mining	4.2%	2.6	4.6%	0.0

Source: December 2003 data from "State at a Glance" and "Metropolitan Statistical Area at a Glance," www.bls.gov, accessed 25 February 2004
due to rounding.

Source: *The Ernst & Young Center for Business Knowledge (CBK) Knowledge Services group.*

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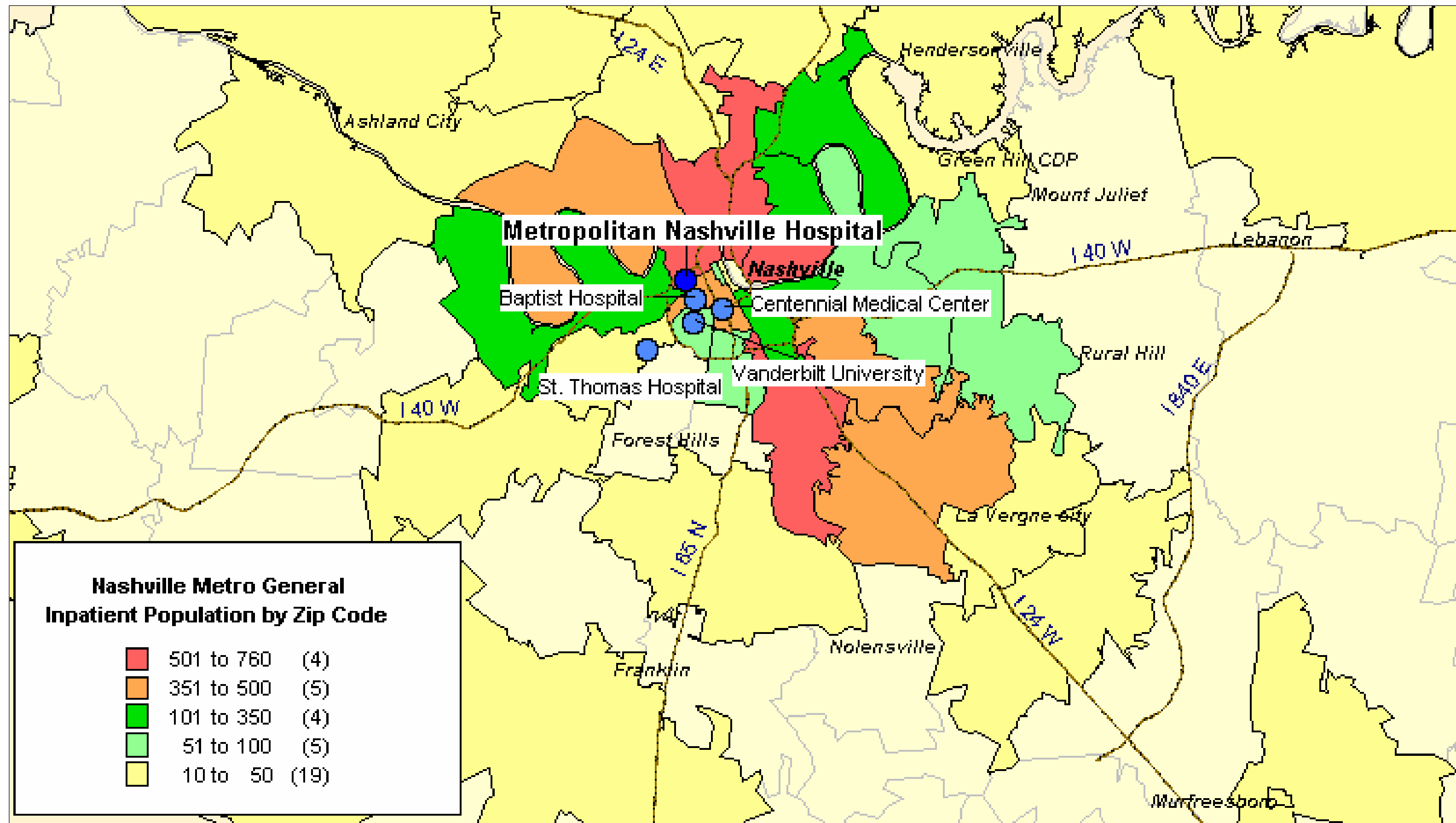
Attachment C: Profile of Nashville Market
NGH's Inpatient Population Is Strongest in North and Southeast Nashville



Map created with MapInfo Professional v7.0

Source: *The Ernst & Young Center for Business Knowledge (CBK) Knowledge Services group.*

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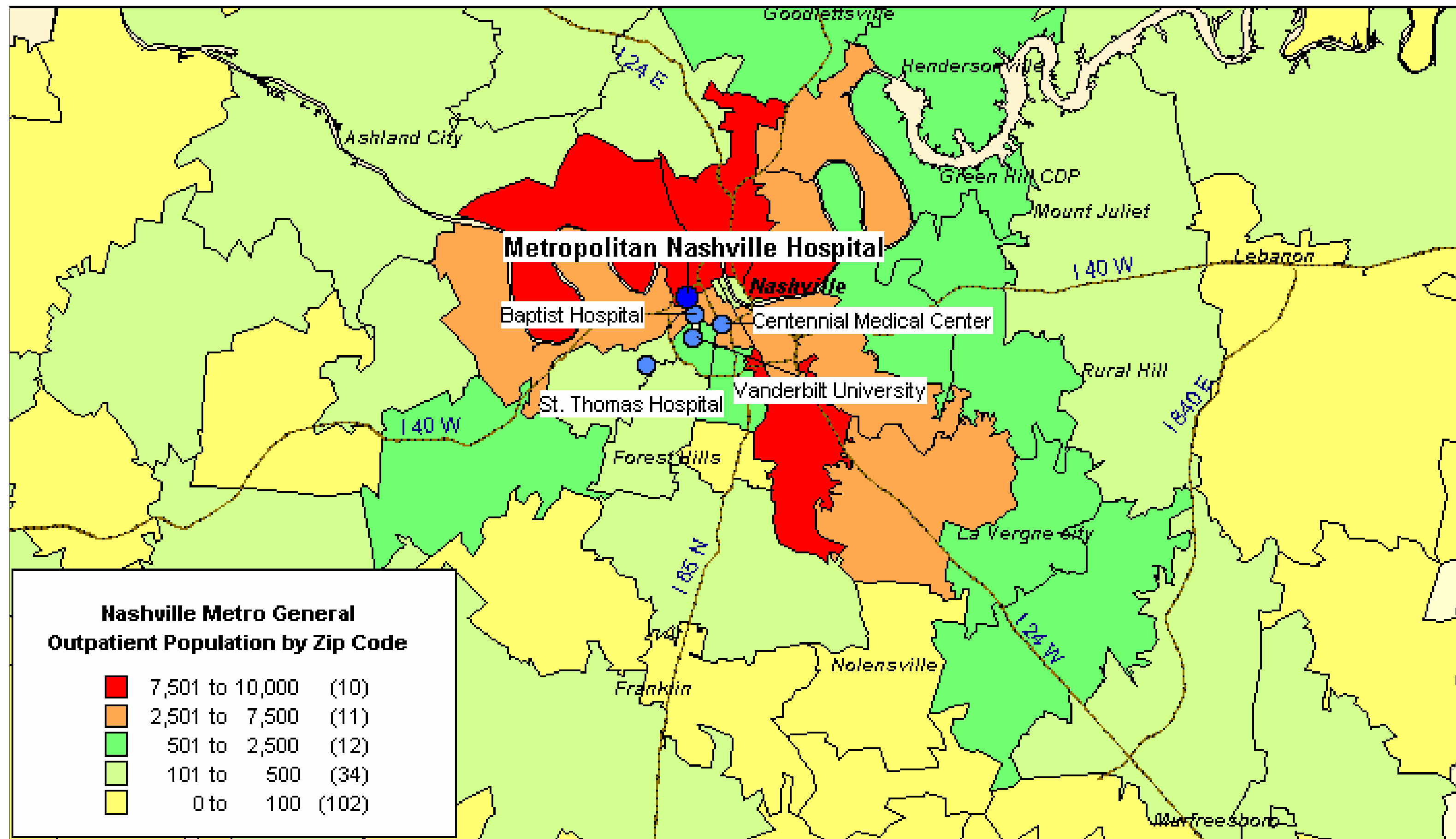
Attachment C: Profile of Nashville Market

The Core Outpatient Population Is Similar, but Has a Wider Distribution Overall



Map created with MapInfo Professional v7.0

Source: *The Ernst & Young Center for Business Knowledge (CBK) Knowledge Services group.*

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Attachment D: Census Data

The census data below was provided by NGH management and represents data from July 2003 through December 2003.

VOLUMES	July	August	September	October	November	December	Total
2nd floor	78	80	68	65	62	77	430
CCU Pod B	193	189	178	111	174	212	1,057
ICU Pod C	80	13	38	7	-	13	151
ICU Pod A	192	191	190	183	184	166	1,106
Med/Surg 6th Fl NS	566	638	651	635	588	657	3,735
Med/surg 7th Fl NS	319	332	310	276	303	304	1,844
Med/Surg Overflow	-	2	-	-	-	3	5
NICU 4th Floor	113	115	156	132	100	134	750
Post Partum 4th Fl	330	280	252	311	257	295	1,725
Nursery Newborn	240	236	198	266	199	251	1,390
Labor & Delivery	90	94	70	87	52	70	463
Surg 5th Fl	524	587	609	604	528	601	3,453
ER Hold	2	-	1	-	1	3	7
TOTAL	2,727	2,757	2,721	2,677	2,448	2,786	16,116

OCCUPANCY %	July	August	September	October	November	December	Average
2nd floor	31.5%	32.3%	28.3%	26.2%	25.8%	31.0%	29.2%
CCU Pod B	77.8%	76.2%	74.2%	44.8%	72.5%	85.5%	71.8%
ICU Pod C	43.0%	7.0%	21.1%	3.8%	0.0%	7.0%	13.7%
ICU Pod A	77.4%	77.0%	79.2%	73.8%	76.7%	66.9%	75.1%
Med/Surg 6th Fl NS	76.1%	85.8%	90.4%	85.3%	81.7%	88.3%	84.6%
Med/surg 7th Fl NS	51.5%	53.5%	51.7%	44.5%	50.5%	49.0%	50.1%
Med/Surg Overflow	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICU 4th Floor	36.5%	37.1%	52.0%	42.6%	33.3%	43.2%	40.8%
Post Partum 4th Fl	71.0%	60.2%	56.0%	66.9%	57.1%	63.4%	62.5%
Nursery Newborn	48.4%	47.6%	41.3%	53.6%	41.5%	50.6%	47.2%
Labor & Delivery	48.4%	50.5%	38.9%	46.8%	28.9%	37.6%	41.9%
Surg 5th Fl	70.4%	78.9%	84.6%	81.2%	73.3%	80.8%	78.2%
ER Hold	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AVERAGE	60.7%	61.3%	62.6%	59.6%	56.3%	62.0%	60.4%

BEDS	July	August	September	October	November	December	Total
2nd floor	8	8	8	8	8	8	8
CCU Pod B	8	8	8	8	8	8	8
ICU Pod C	6	6	6	6	6	6	6
ICU Pod A	8	8	8	8	8	8	8
Med/Surg 6th Fl NS	24	24	24	24	24	24	24
Med/surg 7th Fl NS	20	20	20	20	20	20	20
Med/Surg Overflow	-	-	-	-	-	-	-
NICU 4th Floor	10	10	10	10	10	10	10
Post Partum 4th Fl	15	15	15	15	15	15	15
Nursery Newborn	16	16	16	16	16	16	16
Labor & Delivery	6	6	6	6	6	6	6
Surg 5th Fl	24	24	24	24	24	24	24
ER Hold	-	-	-	-	-	-	-
TOTAL	145	145	145	145	145	145	145

Average Length of Stay	July	August	September	October	November	December	Average
2nd floor	2.52	2.58	2.27	2.10	2.07	2.48	2.34
CCU Pod B	6.23	6.10	5.93	3.58	5.80	6.84	5.74
ICU Pod C	2.58	0.42	1.27	0.23	-	0.42	0.82
ICU Pod A	6.19	6.16	6.33	5.90	6.13	5.35	6.01
Med/Surg 6th Fl NS	18.26	20.58	21.70	20.48	19.60	21.19	20.30
Med/surg 7th Fl NS	10.29	10.71	10.33	8.90	10.10	9.81	10.02
Med/Surg Overflow	-	0.06	-	-	-	0.10	0.03
NICU 4th Floor	3.65	3.71	5.20	4.26	3.33	4.32	4.08
Post Partum 4th Fl	10.65	9.03	8.40	10.03	8.57	9.52	9.38
Nursery Newborn	7.74	7.61	6.60	8.58	6.63	8.10	7.55
Labor & Delivery	2.90	3.03	2.33	2.81	1.73	2.26	2.52
Surg 5th Fl	16.90	18.94	20.30	19.48	17.60	19.39	18.77
ER Hold	0.06	-	0.03	-	0.03	0.10	0.04
TOTAL	87.97	88.94	90.70	86.35	81.60	89.87	87.59

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Attachment E: Glossary – Terms Defined

GENERAL

- **Adjustment Factor:** Calculated as the ratio of gross patient revenue to gross inpatient acute care revenue. The adjustment factor is used to transform all of a hospital's revenue-generating activities, including inpatient acute care services, inpatient non-acute care services, and outpatient services, into units expressed in terms of inpatient acute care services. The transformation is applied by multiplying the adjustment factor times a measure of inpatient acute care output, e.g., discharges or inpatient days of care.

  FORMULA: Gross Patient Revenue / Gross Inpatient Acute Care Revenue = Adjustment Factor

- **Case Mix Adjustment:** Calculated by dividing, on an individual-hospital basis, certain hospital performance measures by the hospital's Medicare case mix index (CMI). The Medicare CMI is used as a measure of the complexity of the Medicare cases treated by an individual hospital relative to the complexity of the average Medicare patient nationwide, the Medicare case mix index is calculated using the Medicare diagnosis-related group (DRG) patient classification system. Although it is specifically relevant to the Medicare patients at a given hospital, it is a reasonable approximation of the complexity and costliness of all of the hospital's patients. Case mix adjusting transforms the performance measure for a given hospital from a raw measure into one that is adjusted to control for the effect of the relative complexity of care provided in that hospital. A case mix-adjusted performance measure allows for more meaningful comparisons among hospitals, because the effect of case mix complexity on the performance measure has been removed. Note: Although a hospital's Medicare case mix index is based only on the complexity of illness of Medicare patients discharged from the hospital, prior research has found a high correlation between Medicare case mix indices and indices computed on the basis of all patients.

  FORMULA: Hospital Performance Measure / Medicare Case Mix Index = Case Mix Adjustment

- **Wage Adjustment:** Calculated by dividing, on an individual hospital basis, a certain portion of a hospital's revenues and expenses by the wage index as computed by the Health Care Financing Administration (CMS), for the area in which the hospital is located. Wage indices are assigned by CMS to every Metropolitan Statistical Area, as well as to the remaining non-urban (or rural) portion of each state. The portion of a hospital's revenue or expenses that is adjusted by the CMS wage index is 71 percent, which represents the approximate proportion of total hospital expenses that is associated by labor costs. The wage adjustment transforms the performance measure for a given hospital from a raw measure to one that is adjusted to control for the effect of the relative level of wages prevailing in that hospital's market area. A wage-adjusted performance measure allows for more meaningful comparisons among hospitals in different markets, because the effect of prevailing wage rates on a given revenue or expense performance measure has been removed.

  FORMULA: [(Hospital Performance Measure $\times$ 0.71) / CMS Wage Index] + (Hospital Performance Measure $\times$ 0.29) = Wage Index Adjustment

Source: HCIA Inc. - Comparative Performance Of U.s. Hospitals: The Sourcebook.

Each page of this report is subject to the caveats and limitations identified on pages 3 and 4.

Attachment E: Glossary – Terms Defined

UTILIZATION

- **Beds in Service, Total Acute Care:** The total number of beds in service in the inpatient acute care units of a hospital at the end of its fiscal year. Beds in service are those beds set up and staffed for use in the hospital on a daily census basis. Beds in service is a measure of the capacity or size of the hospital.

  FORMULA: Beds in Service, General Service Units + Beds in Service, Intensive Care Units + Beds in Service, Coronary Care Units + Beds in Service, Other Special Care Units = Beds in Service, Total Acute Care

- **Total Discharges, Acute Care:** The total number of patients discharged from a hospital's acute care beds in a given year. "Total discharges" is a measure of the utilization of acute care inpatient services at a hospital.

  FORMULA: Total Discharges, Acute Care = Total Discharges, Acute Care

- **Adjusted Discharges, Acute Care:** Calculated by multiplying a hospital's number of acute care discharges by its adjustment factor. "Adjustment factor" is defined in the "Adjustments" section of this appendix. "Adjusted discharges" expresses all of a hospital's patient services, inpatient and outpatient, as acute care discharge equivalents.

  FORMULA: Total Discharges, Acute Care = Total Discharges, Acute Care × Adjustment Factor

- **Average Daily Census, Acute Care:** Calculated by dividing the total number of acute care inpatient days in a hospital by 365. The average daily census is a measure of the average number of inpatients occupying acute care beds in a hospital on any given day.

  FORMULA: Total Inpatient Days, Acute Care / 365 = Average Daily Census, Acute Care

- **Occupancy Rate, Acute Care:** The ratio of a hospital's average daily census of inpatients in acute care beds to the average number of acute care beds in service, expressed as a percentage. Occupancy rate is a measure of the utilization of the capacity of a hospital. Favorable values are above the median.

  FORMULA: [(Total Inpatient Days, Acute Care / 365) / Beds in Service, Total Acute Care] × 100 = Occupancy Rate, Acute Care

- **Average Length of Stay, Acute Care, Case Mix- Adjusted:** The total number of acute care inpatient days in a hospital divided by the total number of acute care discharges from the hospital. In an attempt to adjust the average length of stay for the severity of cases treated, the ratio is further divided by the Medicare case mix index of the hospital. While the case mix-adjusted average length of stay does not consider quality, it allows for a high-level comparison between groupings related to the hospitals' efficiencies. Favorable values are below the median.

  FORMULA: (Total Inpatient Days, Acute Care / Total Discharges, Acute Care) / Medicare Case Mix Index = Average Length of Stay,Acute Care, Case Mix-Adjusted

Source: HCIA Inc. - Comparative Performance Of U.s. Hospitals: The Sourcebook.

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Attachment E: Glossary – Terms Defined

CAPITAL STRUCTURE

- **Return on Assets:** A measure of how effective a hospital has been at putting its assets to work. The ROA is a test of capital utilization - how much profit (before interest and income tax) a business earned on the total capital used to make that profit.

  FORMULA: Net Income / Total Assets x 100

- **Average Age of Plant, Total Facility:** Calculated as total accumulated depreciation on all of a hospital's property, plant, and equipment divided by total current depreciation. "Average age of plant" measures the average accounting age of a hospital's capital assets, such as buildings, fixtures, and major movable equipment. Favorable values are below the median.

  FORMULA: Accumulated Depreciation / Current Depreciation Expense = Average Age of Plant

- **Long-Term Debt to Total Assets:** The ratio of long-term liabilities at a hospital to the hospital's total assets. "Long-term debt to total assets" is a frequently used measure of the degree of financial leverage employed by a hospital. Favorable values are below the median.

  FORMULA: Total Long-Term Liabilities / Total Assets = Long-Term Debt to Total Assets

- **Long-Term Debt to Net Fixed Assets:** The ratio of long term liabilities at a hospital to total property, plant, and equipment (net of accumulated depreciation). "Long term debt to net fixed assets" measures the proportion of a hospital's net fixed assets that has been financed through the use of long-term debt. As such, it is a measure of the financial leverage used by a hospital. Favorable values are below the median.

  FORMULA: Total Long-Term Liabilities / (Total Property, Plant, and Equipment – Accumulated Depreciation) = Long-Term Debt to Net Fixed Assets

- **Total Asset Turnover Ratio:** A hospital's net patient revenue divided by its total assets. "Total asset turnover ratio" measures the amount of productivity a hospital achieves in relation to the assets that it controls. Favorable values are above the median.

  FORMULA: Net Patient Revenue / Total Assets = Total Asset Turnover Ratio

Source: HCIA Inc. - Comparative Performance Of U.s. Hospitals: The Sourcebook.

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LIQUIDITY

- **Days in Net Accounts Receivable:** A hospital's net patient accounts receivable divided by its net patient revenue times 365. "Days in net accounts receivable" is the number of days of net patient revenue that a hospital has due from its patient billings after all deductions. Favorable values are below the median.

  FORMULA: (Net Accounts Receivable × 365) / Net Patient Revenue = Days in Net Accounts Receivable

- **Average Payment Period:** A hospital's total current liabilities times 365, divided by its total operating expenses less depreciation. "Average payment period" measures the average amount of time that elapses before current liabilities are met. Favorable values are below the median.

  FORMULA: (Total Current Liabilities × 365) / (Operating Expense, Total – Current Depreciation Expense) = Average Payment Period

Source: HCIA Inc. - Comparative Performance Of U.s. Hospitals: The Sourcebook.

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Attachment E: Glossary – Terms Defined

REVENUES, EXPENSES, AND PROFITABILITY

- **Operating Margin:** The operating margin is a measurement of management's efficiency. It compares the quality of a hospital's operations to its competitors. A hospital that has a higher operating margin than its industry's average tends to have lower fixed costs and a better gross margin, which gives management more flexibility in determining prices. This pricing flexibility provides an added measure of safety during tough economic times.

  FORMULA: (Total Operating Revenue – Total Operating Expense)/ Total Operating Revenue x 100

- **Excess Margin:**Total margin available that includes investment income and non-operating items. The higher the level, the better for the organization.

  FORMULA: (Total Operating Revenue – Total Operating Expense + Non-Operating Revenue)/ (Total Operating Revenue +Non-Operating Revenue) x 100

- **Gross Patient Revenue per Adjusted Discharge, Case Mix and Wage-Adjusted:** Gross patient revenue per adjusted discharge, adjusted for the complexity of case mix of the particular hospital and the prevailing wage rates in the hospital's market area. Case mix and wage adjustments are described in the "Adjustments" section of this appendix. The adjustments remove the effects of case mix complexity and prevailing wage rates, thereby facilitating comparisons among hospitals on the basis of charges or pricing policies.

  FORMULA: {[(Gross Patient Revenue, Total × 0.71 / CMS Wage Index) + (Gross Patient Revenue, Total × 0.29)] / Adjusted Discharges} / Medicare Case Mix Index = Gross Patient Revenue per Adjusted Discharge, Case Mix- and Wage-Adjusted

- **Net Patient Revenue per Adjusted Discharge, Case Mix and Wage-Adjusted: Net** patient revenue per adjusted discharge, adjusted for the complexity of case mix of the particular hospital and the prevailing wage rates in the hospital's market area. Case mix and wage adjustments are described in the "Adjustments" section of this appendix. The adjustments remove the effects of case mix complexity and prevailing wage rates, thereby facilitating comparisons among hospitals on the basis of charges or pricing policies.

  FORMULA: {[(Net Patient Revenue, Total × 0.71 / CMS Wage Index) + (Net Patient Revenue, Total × 0.29)] / Adjusted Discharges} / Medicare Case Mix Index = Net Patient Revenue per Adjusted Discharge, Case Mix- and Wage-Adjusted

- **Operating Expense per Adjusted Discharge, Case Mix and Wage-Adjusted:** Operating expense per adjusted discharge, adjusted for the complexity of the case mix of the particular hospital and the prevailing wage rate in the hospital's market area. Adjustments are described in detail in the "Adjustments" section of this appendix. The adjustments remove the effects of case mix complexity and prevailing wage rates and attempt to transform all of a hospital's revenue-generating activities, including outpatient services, into units expressed in terms of inpatient acute care services, thereby facilitating comparisons among hospitals on the basis of cost per equivalent inpatient day. Favorable values are below the median.

  FORMULA: {[(Operating Expense, Total × 0.71 / CMS Wage Index) + (Operating Expense, Total × 0.29)] / Adjusted Discharges} / Medicare Case Mix Index = Operating Expense per Adjusted Discharge, Case Mix- and Wage-Adjusted

- **Supply Cost per Discharge, Case Mix Adjusted:** Cost of supplies per adjusted discharge, adjusted for the complexity of the case mix of the particular hospital. Adjustments are described in detail in the "Adjustments" section of this appendix. The adjustments remove the effects of case mix complexity and attempt to transform all of a hospital's revenue-generating activities, including outpatient services, into units expressed in terms of inpatient acute care services, thereby facilitating comparisons among hospitals on the basis of cost per equivalent inpatient day. Favorable values are below the median.

  FORMULA: Supply Cost / Discharges} / Medicare Case Mix Index = Supply Cost per Discharge, Case Mix Adjusted = Supply Cost per Discharge, Case Mix Adjusted

Source: HCIA Inc. - Comparative Performance Of U.s. Hospitals: The Sourcebook.

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- **Inventory Turnover:** comparisons among hospitals on the basis of cost per equivalent inpatient day. Favorable values are below the median.

  FORMULA: (Total Operating Revenue + Non-operating Revenue) / inventory = Inventory Turnover

- **Ratio of Cost to Charges:** comparisons among hospitals on the basis of cost per equivalent inpatient day. Favorable values are below the median.

  FORMULA: Total Cost / Total Charges = Ratio of Costs to Charges (RCC)

PRODUCTIVITY AND EFFICIENCY

- **Full Time Equivalents (FTEs):** Is a measurement equal to one staff person working a full-time work schedule for 1 year. Note: Many hospitals consider an FTE, as less than 2,080 hours per year, for example, Baylor or Weekend Alternative employees are paid 40 hours of the employee's basic hourly rate of pay for working two twelve-hour shifts (24 hours) within the period commencing at midnight on Friday and ending at midnight on Sunday. Many of the clinical staff at NGH are paid 40 hours of the employee's basic hourly rate of pay for working 36 hours per week.

  FORMULA: Total employee hours / 2,080 = FTE.

- **Full Time Equivalents (FTEs) per Adjusted Occupied Beds (CMI adjusted):** Is a measurement of the number of staff per occupied bed, adjusting for outpatient activity.

  FORMULA: Total FTEs / [((Total Inpatient Days, Acute Care / 365) / (Beds in Service, Total Acute Care)) x Adjustment Factor] × 100

- **Salary and Benefits Expense per Full-Time Equivalent Personnel:** The sum of salaries and employee benefits expense at a hospital divided by the total number of full-time equivalent personnel in the hospital. “Salary and benefits expense per full-time equivalent personnel” measures the average direct labor expense per hospital employee. Favorable values are below the median.

  FORMULA: (Salary Expense, Total + Employee Benefits Expense) / Number of Full-Time Equivalent Personnel = Salary and Benefits Expense per Full-Time Equivalent Personnel

- **Salary and Benefits Expense, as a Percentage of Total Operating Expense:** The sum of a hospital’s salaries and employee benefits expense divided by the hospital’s total operating expense, expressed as a percentage. “Salary and benefits expense as a percentage of operating expense” measures the proportion of a hospital’s costs that is attributable to employee labor costs. Values below the median are favorable.

  FORMULA: [(Salary Expense, Total + Employee Benefits Expense) / Operating Expense, Total] × 100 = Salary and Benefits Expense, as a Percentage of Operating Expense

- **Benefits Costs as a Percent of Salaries and Wages:** A measurement of benefits as compared to other personnel costs.

  FORMULA: Benefits / Salaries and Wages (without benefits included)

- **Contract Labor as a Percent of Salaries and Wages:** A measurement of (hands-on patient care) contract labor as compared to other personnel costs.

  FORMULA: Contract Labor Outsource Cost / Salaries and Wages without benefits included).

Source: HCIA Inc. - Comparative Performance Of U.s. Hospitals: The Sourcebook.

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Attachment F - Community Outreach Initiatives

The following NGH programs were provided by NGH management

- The **Community Outreach Department** is primarily responsible for coordinating and executing projects, including development and implementation of community project plans, problem resolution and developing and maintaining relationships with community members, organizations and churches. Projects are designed, implemented and evaluated with extensive and broad-based local input, including consultation with representatives from the community served. Identify community assets and needs to build long-term community partnerships. Oversees, manages, and directs the volunteer program, senior's program, and community wide Health In General education series. The department is also responsible for establishing and chairing the Community Advisory Board and being instrumental in conducting on-going Focus Group Sessions with internal and external groups to better serve the Davidson County community.
- **Volunteer Program**: Currently at NGH, there are a total of 127 volunteers registered for the 2003-2004 calendar year, which runs from April 1st until March 31st. Each year, the hospital averages nearly 150 volunteers from the Davidson County community. On average for the past 4 years, volunteers have contributed over 32,000 hours of services to NGH.
- **Super Sixty Plus Program**: Since the inception of the seniors program at NGH, the hospital has seen a growth in the number of participants. Each month, the hospital hosts an average of 75-85 seniors at its monthly two-hour program which includes: a health care professional discussing health related topics that seniors have requested; health-related activities, blood pressure checks, and a nutritional lunch at the end of the meeting. Seniors have been extremely pleased with the program and it has grown over the past three years. To date, nearly 300 seniors have participated in the program.
- **Health In General**: NGH offers its community education series entitled Health In General. This program allows health care professionals to share timely information that not only touches the participants lives, but their loved ones as well. The Health In General community education series started 4 years ago and has expanded from evening sessions in the hospital, to sessions at local churches, community centers, senior centers and many Davidson County low income housing areas. Throughout the 4 years, NGH has provided community education classes to nearly 1,200 community members throughout Davidson County.
- **Community Advisory Board**: Four years ago, the Community Advisory Board was established at NGH. This group consisted of 18 community leaders, members, retired physicians and local city officials. The purpose of the meetings was to inform the community of new programs and services at NGH and to find ways the hospital could better serve the community. The Board members are considered NGH's eyes and ears and also help deliver messages throughout to the community.
- **Community Involvement**: As NGH continues to market the hospital throughout the community, It is essential to network with churches, organizations, schools, etc. NGH has established partnerships with several community organizations to include Pencil Project, Mathew Walker Health Centers, Metro Housing Authority, Vanderbilt Community Outreach Partner Center, Fortitude Foundation, National Advancement Association of Colored People (NAACP), and Bridges to Care.
- **Community Health Fairs**: Over the past 3 years, NGH has participated in numerous health fairs throughout the city. NGH feels a strong need to provide services as well as share with the community the quality of services and programs NGH has to offer. NGH has participated in various health fairs that reach individuals, small groups, and mass audiences.

Source: HCIA Inc. - Comparative Performance Of U.S. Hospitals: The Sourcebook.

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