

Each year, I report to the Beth Israel Deaconess Medical Center Board of Directors on our progress against operational goals. I was pleased to be able to deliver very positive news in my most recent report. Shared below with the BIDMC community is summary and in-depth information on how we performed based on our FY'06 clinical operating goals.

**Michael F. Epstein, M.D.**

*Executive Vice President and  
Chief Operating Officer*

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November 15, 2006

Dear Colleagues:

I am pleased to provide you with this summary of our performance in carrying out the Annual Operating Plan for FY 2006.

An Annual Operating Plan has three important functions. First, it provides a road map or ‘punch list’ which clearly identifies and prioritizes the key work elements that we have committed to getting accomplished during the year. Second, it provides a communication vehicle which enables management, medical staff, and governing board to have a single detailed set of goals and objectives that have been agreed upon and a matching set of metrics by which performance will be judged. Third, it provides the framework for a report card for each of us to ensure an objective performance evaluation and accountability. When we are all working off the same ‘blueprints’ and performance metrics, and when we are reviewing our progress on a regular basis, it makes it possible to stay focused in a complex and rapidly changing environment as well as keep our aim steady on the agreed upon performance measures by which we judge our success.

This year’s summary highlights major accomplishments in all three of our goals-quality and safety of patient care, satisfaction and loyalty of patients, employees, and physicians, and patient care volume and operating margin. Whether it is the achievement of top 10% ranking nationally in two-thirds of the quality/safety measures identified by CMS/JCAHO or being named to the “best in the country hospital” list by groups as varied as Leapfrog and Solucient, whether it is achievement of our goal of top 5% of hospitals on the PRC patient satisfaction survey of inpatients, ambulatory patients, or ambulatory surgery patients, or whether it is our achievement of the highest volumes for inpatient, outpatient, and emergency department care in our history and a correspondingly record Medical Center operating margin, FY 2006 has been a terrific year.

I hope you will take the time to review the material that follows this letter. The first section is an ‘annotated’ summary of the FY06AOP where each objective is addressed in brief summary form. The second section provides more detail and supporting data for our performance in each of the three major goals. I also hope that you will use this material in your departmental meetings and in working with your individual employees and staff members. While we are already well into FY 2007, there remains much that we can learn from our past performance.

It is my pleasure to thank each of you for your hard work and dedication that resulted in these accomplishments. While our metrics are objective, they reflect the impact on real people of your success in providing the best quality and most compassionate care to our patients, in providing an exciting and productive environment for generating new knowledge in our research laboratories and at the bedside in clinical trials, and in creating a supportive and stimulating setting for training the next generation of physicians, nurses, and other health professionals. Congratulations on a job well done and thank you for all that you do everyday.

Sincerely yours,  
Michael F. Epstein, MD

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## **Annual Operating Plan/ Fiscal Year 2006**

### **Summary of Performance**

Beth Israel Deaconess Medical Center is committed to enhancing its ability to deliver the following: excellent clinical results, outcomes, and experiences to our patients and their families, a cost-effective and high quality product to our payors, important contributions in basic science and clinical knowledge to our research sponsors and collaborators in the scientific community, an outstanding educational and training experience to medical students, residents, and fellows, as well as a positive partnership with our community and the City of Boston. Our mission, our vision, our values and our traditions drive these goals, but they are increasingly difficult to achieve in the current challenging reimbursement, regulatory, and competitive setting.

Having established a solid foundation with successful completion of our fourth consecutive Annual Operating Plan in FY05, the specific goals and objectives for FY06 are designed to integrate our four missions and, by establishing quantitative measures of performance for each of them, enable us to stay focused, measure our performance, and hold each other accountable for achieving them. This AOP is meant to be a usable document, providing each of us with a “roadmap” of how to allocate our time and energy so we focus on the most important tasks during the year.

Utilizing this method from FY02 through FY05, we have successfully re-established BIDMC as a financially stable and successful academic medical center that continues to achieve its goals and fulfills its responsibilities to its constituencies. We can do so again, in FY 06 by focusing on this plan and continuously measuring our progress against its targets.

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**Goal 1: Achieve the highest level of health care quality and patient safety.**

*Objective 1: Show measurable improvement in our “culture of safety” by emphasizing patient safety issues in multiple Medical Center fora, via Executive Walk Rounds, by enhancing trainee supervision, by increased use of simulation in the education of students, residents and fellows, and through other creative methods.*

*Achieved: Walk Rounds were conducted by the COO and SVP’s twice monthly throughout the year. Town Meetings were held by the CEO and SVP’s in many patient care and support areas. The Simulation Center opened in the fourth quarter and has been heavily used for teaching and training purposes. A Culture of Safety survey focusing on Teamwork and Safety Climate was completed by more than 1730 employees and physicians. Results indicated that staff have a favorable view of the supportive environment for safe delivery of quality patient care and also indicate opportunities to improve communication, staffing, and management responsiveness to safety concerns.*

*Objective 2: Achieve ranking in the highest tier for every measure of quality care that is publicly posted by a government or private agency and is approved by the MEC.*

*Partially Achieved: CMS/JCAHO posts performance data for 18 different measures of quality/safety in four different disease entities: myocardial infarction, heart failure, pneumonia, and surgical wound infections. For the final quarter of FY06, BIDMC had achieved the top 10% ranking in 13 of these 18 measures and steady progress was being made on the remaining five measures.*

*Objective 3: Reduce healthcare associated infection by improving compliance with hand hygiene and pursuing initiatives to reduce ventilator associated pneumonia, blood stream infection, and surgical wound infection.*

*Partially Achieved: A measure of the overall performance around hospital associated infections was agreed to as a pay for performance goal with BCBS, and we were successful in achieving this benchmark. Major progress was made around blood stream infections associated with central venous lines in the ICU which remained better than the national benchmark throughout the year. The outcome of these efforts are estimated to be 6-10 lives saved, 400-600 days of hospitalization avoided, and \$600,000-\$1,000,000 in hospital costs saved. Hand hygiene compliance remains a challenging area for the institution to achieve its goals despite the launch of the Go Ahead and Ask Program.*

*Objective 4: Improve our understanding of and response to adverse events by integrating and analyzing data from across the Medical Center, closing the loop on all systems/personnel issues identified at PCAC and QI Directors, and implementing creative strategies to address system issues (including the Triggers Program, team training, hand-off/transition improvements, expanded use of WebOMR and POE, and accountable physician identification.)*

*Achieved: The Adverse Event Reporting System was successfully implemented during the year. Data collection is beginning to reach a point where trends can be analyzed, reported to Medical and Nursing Directors, and to PCAC. Innovative initiatives such as the Trigger Program, team training, simulation and skills lab programs were launched or expanded.*

*Objective 5:* Develop a strategy and methodology for public reporting of our health quality and patient safety results either via our Web site or other publicly accessible media.

*Achieved:* A prototype of the Web site for public posting of quality and safety data has been completed and will be presented to the medical staff and management leadership with a goal of 'go live' in the first quarter of FY07.

*Objective 6:* Complete the implementation of the registration system for Clinical Trials in the Department of Medicine to ensure safety and regulatory compliance in our clinical trial program.

*Partially Achieved:* The registration of all patients participating in clinical trials has been accomplished in the Department of Medicine's largest division, Hematology-Oncology and will be expanded to the rest of the Department in FY07.

*Objective 7:* Complete the preparation for submission of the application for accreditation of our clinical research program to the Association for the Accreditation of Human Research Protection Programs (AAHRPP).

*Achieved:* The AAHRPP evaluation process has been completed and several areas which needed attention have been addressed. Accreditation will be sought in FY07.

*Objective 8:* Complete construction of the Simulation Center, and develop and implement curricula for training students, residents, and attending physicians in important clinical techniques and exercises

*Achieved:* The Simulation and Skills Center was completed on time and on budget and dedicated in July, 2006.

*It is already heavily utilized in training programs for students, residents, attending physicians and other health professionals in settings as diverse as a simulated ICU and Operating Room .*

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### **Goal 2: Ensure outstanding patient, physician, and employee satisfaction and loyalty**

*Objective 1:* Achieve "best in class" status for patient satisfaction in the inpatient, Emergency Department and ambulatory settings.

*Partially Achieved:* The goal of "top 5%" among the 200+ hospitals using the PRC survey was achieved for inpatients, ambulatory clinic patients, and ambulatory surgery patients. The Emergency Department showed a marked improvement in satisfaction scores but fell short of the 90<sup>th</sup> percentile target.

*Objective 2:* Centralize our patient complaint program so we quantify, analyze and address those patient experiences that fall below our standards.

*Achieved:* The Patient Complaint system went live in December, 2005 and provides a central repository for tracking trends and assuring follow up to patient issues throughout the Medical Center. Quarterly reports on volume and trends will be made to Operations Council, MEC, and PCAC.

*Objective 3:* Create and implement programs to recruit and retain an outstanding and diverse workforce through expansion of our career development programs for allied

health professions beyond surgical techs and nurses and through leadership development programs to enhance the strength and capabilities of our managers.

*Achieved: Pipeline programs to develop in-house talent have enrolled 30 individuals in nursing, surgical tech, and research administrator programs. Training in hiring/interviewing techniques was provided for more than 400 managers. Following this intervention, 90 day retention rates have increased, and voluntary turnover rates have fallen. The Sloane Fellow Program was launched with 18 Directors and Supervisors participating in a program of self evaluation, lectures, and projects designed to enhance leadership development and retention of top management.*

*Objective 4: Complete the survey of our research community's principal investigators to determine their level of satisfaction and to identify interventions and changes that will lead to improvement in their environment.*

*Not achieved: This survey was not conducted due to budgetary constraints but is planned for FY07 as part of a broader employee survey.*

*Objective 5: Analyze and act upon the results of the Referring Physician Survey, identify actionable items, implement the action plans, and prepare Phase 2 of the survey for FY 07 to measure improvement.*

*Achieved: Focused efforts to improve communication issues identified by the Referring Physician survey included conducting a physician reception, providing a 'thank you letter' follow up for 500 'first time referring doctors' and a contact plan for 65 physician practices. In addition, 84 CME sessions were conducted at community hospital settings by BIDMC faculty.*

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### **Goal 3: Sustain financial strength through achieving volume and productivity targets.**

*Objective 1: Achieve a 3% operating margin and identify and implement specific strategies to achieve a 4% margin in FY 07.*

*Partially Achieved: The year end operations bottom line for the Medical Center was \$27.5M, a 2.4% operating margin. Shortfalls in net patient service revenue (due to a shift from inpatient discharges to observation status, slower growth in Surgery than in Medicine and resultant lower CMI, and an increase in free care), in indirect research revenue, and in unrestricted philanthropic donations plus higher than budgeted costs in medical/surgical supplies and in energy rates were partially offset by reduced labor costs and other cost savings. The result was a strong financial performance on operations at the Medical Center, though short of our budgeted target of 3%.*

*Objective 2: Improve productivity as measured by a reduction in the rate of rise of Cost/Case Mix Adjusted Discharge, FTE's/Occupied Bed, and other measures. Apply LEAN methodology to two pilot projects and more broadly if successful and reduce clinical resource costs by \$1M through Chief-sponsored management efforts.*

*Achieved: By year's end the 12 month rolling average of \$/Case mix adjusted discharge was approximately \$5700. This cost/case was below the \$6000/case which would have resulted from a 4% annual inflation in costs from the starting point in September, 2002 had there been no cost reduction/productivity improvement efforts. Similarly, the 12 month rolling average for FTE/Occupied bed declined through the year approaching the*

level seen two years ago. *LEAN methodology produced improved throughput and improved 'case mix' in radiation oncology, the Cyberknife, and in MRI resulting in more than \$500,000 of unbudgeted revenue. Clinical resource management efforts resulted in a redefinition of guidelines for administration of blood products resulting in a \$600,000 savings. Clinical pathways were developed and implemented for liver transplantation and joint replacement patients. Projects to achieve standardization of supplies in the OR were launched for a number of areas in orthopaedic surgery.*

*Objective 3: Continue to expand our inpatient bed capacity, smooth clinical demand, improve throughput, and achieve East/West campus rebalancing to enable more efficient utilization of our physical facilities.*

*Achieved: Bed capacity was increased with the opening of Farr11, WCC 7ICU, and Stoneman 7 to achieve a total of 389 licensed medical/surgical beds and 77 critical care beds. Improvements in communicating information from the ED to the inpatient units and other operations improvements led to a 50% reduction in the time from bed assignment to leaving the ED for admitted patients. Enhancements to the surgical coverage and staffing of the East Campus enabled the movement of additional surgical services from West to East, creating additional capacity on West Campus for inpatient care.*

*Objective 4: Continue to build our referral network through the development and implementation of innovative clinical and business relationships with physician groups and institutions.*

*Achieved: The relationships with community hospitals were expanded with the addition of HMFP physicians at Milton Hospital (hand surgery, gyn), Beverly Hospital (gyn oncology, Medical Director of oncology, pathology second opinion), and Nashoba Valley Hospital (Cardiac EP services). Physicians from our Emergency Department began to staff Landmark Hospital in Rhode Island and St. Vincent's Hospital in Worcester. A new physician group, Emerald Physicians, joined BIDPO while relationships with BID-Needham and Bridgewater Goddard Park Medical Associates continued to strengthen. The overall result was an 11% increase in tertiary referrals from those sources.*

*Objective 5: Develop and implement three joint venture models with HMFP physician groups to align incentives and improve financial results.*

*Partially Achieved: Major progress was made in developing an 'institute' model with three HMFP physician groups---cardiac surgery, cardiology, and vascular surgery. The model will be presented to the Board of Directors in November for implementation in FY07.*

*Objective 6: Improve overall dollar density of our research space by increasing the expansion of grant revenue more than expansion of space in Cambridge, HIM, and other areas.*

*Achieved: In a year when NIH funding was reduced in real dollar terms and at a time when additional research space was added in Cambridge, the actual dollar density remained steady at \$187/sq ft, reflecting a more efficient use of space. This was accomplished through greater funding of several current key scientists as well as recruitment of additional established investigators and reassignment of space to accommodate these programs.*

*Objective 7: Recruit physicians (e.g. neurosurgery and colorectal surgery) and investigators in critical areas to meet patient care demands and to achieve growth in our research programs.*

*Achieved: Two new neurosurgeons including the Chief of the Division and the new Chief of the Section of Colon-Rectal surgery arrived at the end of FY06 and began to rebuild these important programs.*

*Objective 8: Launch multi-year Capital Campaign to support the capital needs of a growing clinical, research, and educational enterprise.*

*Achieved: The Campaign goal of \$300 million was adopted by the Board of Directors and a Campaign Committee was established.*

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## **Goal #1: Achieve the highest level of health care quality and patient safety**

FY 2006 was another noteworthy year for our efforts to improve health care quality and patient safety, with major progress in many areas including improved performance in the quality measures posted on the JCAHO/CMS Web site ([www.hospitalcompare.hhs.gov](http://www.hospitalcompare.hhs.gov)), continued refinement and progress on our Quality Dashboard, continued development of hospital-wide reporting and data base systems for adverse events, incident reports, and patient complaints, improvement in our analysis and learning from adverse events, and continued emphasis on innovation with the first full year of experience with our rapid response Trigger program.

Major improvement was seen in our performance on the measures reported by CMS/JCAHO in four disease entities. By year's end, BIDMC was in the top 10% of US hospitals in 13 of the 18 measures, including all of those for acute myocardial infection (Table 1), achieving 100% performance levels in many. The overall quality dashboard continued to be refined and was reorganized to recognize the major service lines around which care is organized. Quality measures for peri-operative care, maternal/infant care, critical care, emergency/ambulatory care, and inpatient care were developed, approved by the PCAC, and presented at the bimonthly PCAC meetings. Of the 20 measures in the dashboard with quarterly benchmark goals and available data for the third quarter in FY06, 15 were better than benchmark and of the remaining five, three were better than the prior year, though not quite at the target level. (Table 2)

Two new data Web based systems were introduced during the year to enhance both reporting and analysis of adverse events/incidents and patient complaints. The ease of reporting and the ability to analyze data across patient care units and service lines has already provided insights into opportunities for improvement.

The adverse event analysis process was bolstered by the addition of a step which involves review by the Medical Executive Committee of all major incidents referred by the Quality Improvement Directors to the PCAC. This provides the PCAC with a concise consensus developed and approved by medical leadership concerning the etiology of the adverse event as well as an approved plan for addressing the system issues that had been identified. It also provides a forum where all departments can learn from the incidents that occur.

FY 06 was the first full year of experience with the Trigger Program, an innovative rapid response plan which is designed for early identification and resuscitation of patients whose condition deteriorates while on a medical/surgical unit. The preliminary results from this first year indicate a marked decrease in the number of deaths on these units. National data would indicate that the non-DNR, non-ICU mortality rate in hospitals is in the range of 2-6.6/1000 discharges, a range consistent with that seen at BIDMC prior to Triggers. For the most recent two quarters, the rate has been <1.0/1000 discharges, indicating that rapid identification and response to the unstable patient enables timely resuscitation or transfer to the ICU. (Figure 1)

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Table 1

**Publicly Reported Measures**

[www.hospitalcompare.hhs.gov](http://www.hospitalcompare.hhs.gov)

| <b>Heart Attack Quality Measures</b>  | <b>Top 10% Reporting</b> | <b>BIDMC</b> |
|---|--------------------------|--------------|
| Percent of Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD) | <b>100%</b>              | <b>100%</b>  |
| Percent of Patients Given Aspirin at Arrival  | <b>100%</b>              | <b>100%</b>  |
| Percent of Patients Given Aspirin at Discharge  | <b>100%</b>              | <b>100%</b>  |
| Percent of Patients Given Beta Blocker at Arrival   | <b>100%</b>              | <b>100%</b>  |
| Percent of Patients Given Beta Blocker at Discharge   | <b>100%</b>              | <b>100%</b>  |
| Percent of Patients Given PCI Within 120 Minutes Of Arrival                                     | <b>88%</b>               | <b>88%</b>   |
| Percent of Patients Given Smoking Cessation Advice/Counseling                                   | <b>100%</b>              | <b>100%</b>  |

| <b>Heart Failure Quality Measures</b>   | <b>Top 10% Reporting</b> | <b>BIDMC (3Q06)</b> |
|---|--------------------------|---------------------|
| Percent of Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD) | <b>100%</b>              | <b>98%</b>          |
| Percent of Patients Given Assessment of Left Ventricular Function (LVF)                         | <b>98%</b>               | <b>99%</b>          |
| Percent of Patients Given Discharge Instructions  | <b>89%</b>               | <b>78%</b>          |
| Percent of Patients Given Smoking Cessation Advice/Counseling                                   | <b>100%</b>              | <b>100%</b>         |

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Table 1( cont.)

**Publicly Reported Measures (cont.)**

| <b>Pneumonia Quality Measures</b>   | <b>Top 10% Reporting</b> | <b>BIDMC (3Q06)</b> |
|---|--------------------------|---------------------|
| Percent of Patients Assessed and Given Pneumococcal Vaccination   | <b>89%</b>               | <b>100%</b>         |
| Percent of Patients Given Initial Antibiotic(s) within 4 Hours After Arrival                            | <b>92%</b>               | <b>91%</b>          |
| Percent of Patients Given Oxygenation Assessment  | <b>100%</b>              | <b>100%</b>         |
| Percent of Patients Given Smoking Cessation Advice/Counseling   | <b>100%</b>              | <b>100%</b>         |
| Percent of Patients Given the Most Appropriate Initial Antibiotic(s) – Immunocompetent Non-ICU Patients | <b>91%</b>               | <b>88%</b>          |

| <b>Surgical Infection Prevention Quality Measures</b>  | <b>Top 10% Reporting</b> | <b>BIDMC (3Q06)</b> |
|--|--------------------------|---------------------|
| Percent of Surgery Patients Who Received Preventative Antibiotic(s) One Hour Before Incision           | <b>94%</b>               | <b>98%</b>          |
| Percent of Surgery Patients Whose Preventative Antibiotic(s) are Stopped Within 24 hours After Surgery | <b>95%</b>               | <b>86%</b>          |

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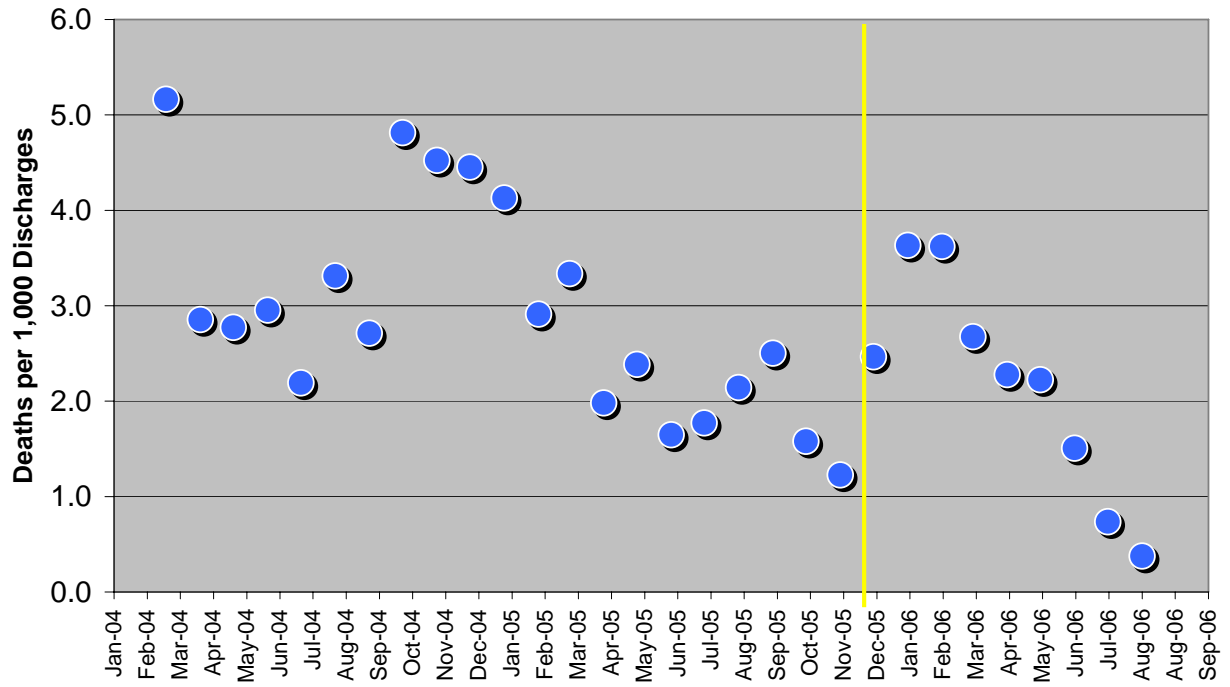
Table 2

| Fiscal 2006                      |     |    |    | CONFIDENTIAL PEER REVIEW  |                                   |   |       | Favorable Comparison: |                    |            |  |
|----------------------------------|-----|----|----|---|-----------------------------------|---|-------|-----------------------|--------------------|------------|--|
| Q1                               | Q2  | Q3 | Q4 | Process   | Partial Quarter                   | Unfavorable Comparison - Statistically Significant:                                   |       |                       |                    |            |  |
|                                  |     |    |    | Quality/Safety  | Incentivized or Publicly Reported |   |       |                       |                    |            |  |
|                                  |     |    |    | Clinical Operations   | Data Not Available                |   |       |                       |                    |            |  |
|                                  |     |    |    | Goal  | FY 2005                           | FY 2006   |       |                       | --- Comparison --- |            |  |
|                                  |     |    |    |   |                                   | Q1  | Q2    | Q3                    | Goal               | Prev. Qtr. |  |
| <b>BIDMC - WIDE</b>              |     |    |    |   |                                   |   |       |                       |                    |            |  |
|                                  |     |    |    | ▶ Filed Reports to the Massachusetts Department of Public Health                          |                                   | 8   | 4     | 2                     | 3                  |            |  |
|                                  |     |    |    | ▶ Malpractice Claim Asserts   |                                   | 23  | 8     | 18                    | 14                 |            |  |
| <b>EMERGENCY/AMBULATORY CARE</b> |     |    |    |   |                                   |   |       |                       |                    |            |  |
|                                  | Q   |    |    | Patient Satisfaction: % Excellent Likelihood to Recommend (ED Discharges)                 | 59%                               | 50%   | 46%   | 41%                   | 46%                |            |  |
|                                  | ✓ Q |    |    | Pneumonia Care: Patients receive blood cultures, antibiotics appropriately                | 80%                               | 71%   | 90%   | 93%                   | 96%                |            |  |
|                                  | ✓ Q |    |    | AMI Care: patients receive appropriate initial therapy                                    | 100%                              | 97%   | 100%  | 100%                  | 100%               |            |  |
|                                  | ▶ C |    |    | Patient Satisfaction: Likelihood to Recommend- Ambulatory Clinics                         | 69%                               |   | 68%   | 66%                   | 69%                |            |  |
|                                  | ✓ Q |    |    | Diabetes Related Process Measures (bundled) - BIDPO Local                                 | 91%                               |   | 89%   |                       |                    |            |  |
|                                  | ✓ Q |    |    | Generic Prescription Conversion - BIDPO Local   | 59%                               |   | 58%   | 61%                   |                    |            |  |
|                                  | ✓ Q |    |    | Stroke Care: Time to Completed Diagnostcs - Ischemic Stroke                               | 60%                               |   | 66%   | 100%                  | 75%                |            |  |
| <b>INPATIENT CARE</b>            |     |    |    |   |                                   |   |       |                       |                    |            |  |
|                                  | ▶ C |    |    | Patient Satisfaction: Likelihood to Recommend among all inpatients                        | 69%                               | 68%   | 69%   | 69%                   | 71%                |            |  |
|                                  | ▶ Q |    |    | Hospital - Critical Care Central Venous Catheter Line                                     | 0                                 | 2.9   | 1.8   | 1.8                   | 0.59               |            |  |
|                                  | ▶ Q |    |    | Decubitus Ulcers  | < 2.2%                            | 2.2%  | 2.3%  | 2.4%                  | 1.6%               |            |  |
|                                  | ▶ Q |    |    | Patient Falls   | TBD                               | 3.00  | 3.62  | 3.25                  | 2.77               |            |  |
|                                  | ▶ C |    |    | Delays in inpatient care  | <4.5%                             | 3.4%  | 3.2%  | 3.4%                  | 2.8%               |            |  |
|                                  | ✓ Q |    |    | Pneumococcal Vaccination in patients with pneumonia                                       | 90%                               | 64%   | 95%   | 94%                   | 100%               |            |  |
|                                  | ✓ Q |    |    | AMI Care: patients receive appropriate therapy  | 100%                              | 95%   | 100%  | 100%                  | 100%               |            |  |
|                                  | ✓ Q |    |    | AMI Care: time to angioplasty in patients with acute MI is < 120 minutes.                 | 86%                               | 72%   | 77%   |                       | 88%                |            |  |
|                                  | ✓ Q |    |    | HF Care: patients receive appropriate therapy   | 87%                               | 83%   | 79%   | 87%                   | 78%                |            |  |
|                                  | ✓ Q |    |    | Seclusion and Restraint - # of Patients /Episodes/Hours (inpatient psychiatry population) | <40.0                             | 48.4  | 46.6  | 30.1                  | 4.2                |            |  |
| <b>PERIOPERATIVE CARE</b>        |     |    |    |   |                                   |   |       |                       |                    |            |  |
|                                  | ▶ C |    |    | Patient Satisfaction: % excellent likelihood to recommend (ambulatory surgery)            | >72%                              | 74%   | 70%   | 75%                   | 73%                |            |  |
|                                  | ▶ Q |    |    | Unplanned Return to the OR in all surgical inpatients                                     | TBD                               | 2.6%  | 2.6%  | 2.1%                  | 2.3%               |            |  |
|                                  | ▶ Q |    |    | Perioperative Mortality in patients with high surgical risk                               | <1.1%                             | 1.1%  | 1.4%  | 1.8%                  | 1.0%               |            |  |
|                                  | ▶ Q |    |    | In hospital mortality in patients undergoing coronary artery bypass graft                 | <1.0%                             | 1.3%  | 1.3%  |                       |                    |            |  |
|                                  | ✓ Q |    |    | Vascular Surgery: appropriate infection prophylaxis antibiotic therapy                    | 98%                               |   | 83%   | 86%                   | 92%                |            |  |
|                                  | ✓ Q |    |    | Orthopaedic Surgery: appropriate infection prophylaxis antibiotic therapy                 | 98%                               |   | 65%   | 74%                   | 78%                |            |  |
| <b>WOMEN / NEWBORN CARE</b>      |     |    |    |   |                                   |   |       |                       |                    |            |  |
|                                  | ▶ Q |    |    | Adverse Outcome Index (< 37 weeks) OB   | TBD                               | 2.3%  | 2.45% |                       |                    |            |  |
|                                  | ▶ Q |    |    | Adverse Outcome Index (> 37 weeks) OB   | TBD                               | 4.8%  | 5.72% |                       |                    |            |  |
|                                  | ▶ Q |    |    | Neonatal Mortality: Actual vs. Predicted  | <1.0                              |   | 0.99  | 0.88                  |                    |            |  |
|                                  |     |    |    | Goal  | *                                 | When available, Goal is ≥ Top 10% Performance Level of Nationally Recognized Database |       |                       |                    |            |  |

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Figure 1

### Non-DNR, Non-ICU Deaths IHI's "Quadrant Four Deaths"



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## **Goal #2: Ensure outstanding patient, physician, and employee satisfaction and loyalty**

FY06 was a breakthrough year where scores on our surveys of inpatients, ambulatory patients, and ambulatory surgery patients all exceeded the 90<sup>th</sup> percentile among the 200+ hospitals using the PRC survey. We worked to align efforts by having annual performance goals for patient satisfaction held jointly by the Vice Presidents and Chiefs. The percent of patients who described their 'willingness to recommend the BIDMC' rose to >70%, a level that seemed unattainable as recently as three years ago when patient satisfaction scores were in the mid-60's. The 10% improvement in these scores over 3 years is an achievement that we can all be proud of.

While the overall performance was outstanding, there remains heterogeneity among units and the goal for FY07 is to have every unit perform at the 'best of class' level. One example of this is the Emergency Department which showed a remarkable improvement in patient satisfaction due to efforts directed at the physical environment as well as customer service skills.

Physician satisfaction efforts were stimulated by the results of the FY05 Referring Physician Survey. A series of innovations around outreach to first time referring physicians as well as communicating discharge information to all referring doctors were launched. The survey will be repeated next year to measure the impact of these interventions.

Employee satisfaction remained a high priority for the Medical Center. Resources were committed to raise our minimum wage to \$10.00 across the Medical Center. In addition, a new health insurance option providing for a lower monthly premium was introduced. A major emphasis was placed on training and workforce development. The Pipeline Program enrolled 20 individuals in training programs for nursing, surgical technicians, and research administrators. Training in interviewing techniques for individuals who hire was provided to more than 400 managers and appeared to have an immediate impact as the rates of voluntary separation both in the short term (first 90 days) and longer term decreased from prior year levels. Finally, a major investment was made in developing senior management talent with the launch of the Sloane Fellowship Program. Named for former Board of Directors Chairman, Carl Sloane, 18 Directors and Supervisors began a one year program of self-evaluation, lectures, and projects designed to enhance senior managerial talent and retention.

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### **Goal #3: Sustain financial strength through achieving volume and productivity targets**

While falling short of the budgeted 3% operating margin, FY06 concluded with a \$27.5 million positive margin from consolidated operations, our third consecutive year of positive results. The \$4.5M shortfall from our budgeted goal was the result of shifts in inpatient activity (more observation patients and fewer discharges than planned; greater growth in Medicine than Surgery with resultant lower case mix; larger volume of free care patients), the absence of the year-to-year planned increase in research indirect costs largely due to NIH funding changes, and an even larger than budgeted increase in high tech operating room supplies and energy costs. (Table 3)

Results were supported by important initiatives to manage escalating health care costs. The LEAN initiative to improve processes and eliminate wasteful or non-contributory work resulted in enhanced revenue, reduced costs, or both in areas as diverse as case carts in the OR to the volume of radiation treatments for cancer utilizing the Cyberknife. Clinical resource management initiatives reduced unnecessary expense by standardizing practices related to procedures, tests and length of stay. Development of clinical pathways for patients undergoing surgery for organ transplant, joint replacement or pancreatic cancer has improved care while managing costs.

A new initiative to develop a joint venture with physicians involved in cardiovascular care resulted in a new model for these efforts. The cardiovascular institute's structure, governance, and financial framework were developed over several months of discussion and as the FY drew to a close, the proposal was going to the Board of Directors for review.

Recruitment efforts successfully brought new leadership to neurosurgery and colo-rectal surgery, to medical cardiology research, and to our trauma program. The result was an increase in medical/surgical discharges/observation of 4% over the prior year and the largest number of inpatients ever cared for at BIDMC. Similar record results in volume were recorded for ambulatory visits and Emergency Room visits. (Tables 4 and 5)

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Table 3

**BETH ISRAEL DEACONESS MEDICAL CENTER AND AFFILIATES**  
**SUMMARY OF OPERATING RESULTS**  
**FISCAL YEAR 2006 THROUGH SEPTEMBER 2006**  
(In Millions)

|   | <u>YEAR TO DATE</u> |                |                 | PRIOR YR       |
|---|---------------------|----------------|-----------------|----------------|
|   | <u>ACTUAL</u>       | <u>BUDGET</u>  | <u>VARIANCE</u> | <u>Y-T-D</u>   |
| <b>REVENUE</b>                                      |                     |                |                 | <u>ACTUAL</u>  |
| Net Patient Service Revenue                         | \$ 803.3            | \$ 826.6       | \$ (23.3)       | \$ 731.9       |
| Direct Research                                     | 128.4               | 126.2          | 2.2             | 120.4          |
| Indirect Research                                   | 52.2                | 57.6           | (5.4)           | 52.2           |
| Contributions                                       | 5.5                 | 7.5            | (2.0)           | 4.2            |
| Investment Income                                   | 8.7                 | 7.1            | 1.6             | 7.5            |
| Other Operating                                     | 44.0                | 44.8           | (0.8)           | 44.6           |
| Total Operating Revenue                             | <u>1,042.1</u>      | <u>1,069.8</u> | <u>(27.7)</u>   | <u>960.8</u>   |
| <b>EXPENSES</b>                                     |                     |                |                 |                |
| Salaries  | 364.8               | 372.1          | 7.3             | 334.1          |
| Fringe Benefits                                     | 63.8                | 63.7           | (0.1)           | 52.6           |
| Supplies and Expenses                               | 292.9               | 286.4          | (6.5)           | 275.2          |
| MD Fees   | 67.7                | 67.2           | (0.5)           | 57.5           |
| Direct Research                                     | 129.6               | 127.4          | (2.2)           | 122.0          |
| Depreciation  | 60.1                | 62.3           | 2.2             | 57.4           |
| Interest  | 21.5                | 22.2           | 0.7             | 20.8           |
| Uncompensated Care                                  | 29.7                | 38.4           | 8.7             | 22.5           |
| Total Expenses                                      | <u>1,030.1</u>      | <u>1,039.7</u> | <u>9.6</u>      | <u>942.1</u>   |
| <b>GAIN (LOSS) FROM CURRENT HOSPITAL OPERATIONS</b> | 12.0                | 30.1           | (18.1)          | 18.7           |
| Hospital Prior Year Adjustments                     | 18.1                | 5.0            | 13.1            | 19.5           |
| Transfer of Insurance Liability                     | 12.1                | -              | 12.1            | -              |
| <b>GAIN (LOSS) FROM HOSPITAL OPERATIONS</b>         | <u>42.2</u>         | <u>35.1</u>    | <u>7.1</u>      | <u>38.2</u>    |
| BID - Needham Gain (Loss)                           | 0.2                 | 1.2            | (1.0)           | (0.8)          |
| APG Gain (Loss)                                     | (3.3)               | (4.3)          | 1.0             | (3.7)          |
| <b>CONSOLIDATED GAIN (LOSS) FROM OPERATIONS</b>     | <u>39.1</u>         | <u>32.0</u>    | <u>7.1</u>      | <u>33.7</u>    |
| Net Realized Gains (Losses) on Investments          | 11.2                | -              | 11.2            | 6.7            |
| Change in Equity Interests in Limited Partnerships  | 11.1                | -              | 11.1            | 6.9            |
| <b>EXCESS OF REVENUE OVER EXPENSES</b>              | <u>\$ 61.4</u>      | <u>\$ 32.0</u> | <u>\$ 29.4</u>  | <u>\$ 47.3</u> |
| Change in Unrealized Gains on Investments           | (3.6)               | -              | (3.6)           | 6.6            |
| Net Assets Released from Restrictions for Capital   | 1.8                 | -              | 1.8             | 0.9            |
| Change in Fair Value of Interest Rate Swaps         | 3.8                 | -              | 3.8             | 2.3            |
| Asset Retirement Provision                          | (0.9)               | -              | (0.9)           | -              |
| <b>CHANGE IN UNRESTRICTED NET ASSETS</b>            | <u>\$ 62.5</u>      | <u>\$ 32.0</u> | <u>\$ 30.5</u>  | <u>\$ 57.1</u> |

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Table 4

**Beth Israel Deaconess Medical Center  
Statistics Report - Inpatient  
For Period Ending October 2006**

| INPATIENT                    | Year-To-Date   |                |                |                 |               |                  |
|------------------------------|----------------|----------------|----------------|-----------------|---------------|------------------|
|                              | Actual<br>FY07 | Budget<br>FY07 | Act-Bud<br>Var | Act-Bud<br>Var% | Prior<br>Year | Cur-Prior<br>Var |
| <b><u>Discharges:</u></b>    |                |                |                |                 |               |                  |
| Medicine                     | 1,315          | 1,305          | 10             | 0.8%            | 1,223         | 7.5%             |
| Surgery                      | 677            | 709            | (32)           | -4.5%           | 641           | 5.6%             |
| OB/GYN                       | 491            | 519            | (28)           | -5.4%           | 518           | -5.2%            |
| Neonatology                  | 421            | 415            | 6              | 1.4%            | 412           | 2.2%             |
| Psychiatry                   | 57             | 55             | 2              | 3.6%            | 50            | 14.0%            |
| Orthopedics                  | 131            | 108            | 23             | 21.3%           | 105           | 24.8%            |
| Neurology                    | 92             | 92             | -              | 0.0%            | 89            | 3.4%             |
| Other/Radiology              | 6              | 4              | 2              | 50.0%           | 4             | 50.0%            |
| CRC                          | 44             | 29             | 15             | 51.7%           | 26            | 69.2%            |
| Hospital Total               | 3,234          | 3,236          | (2)            | -0.1%           | 3,068         | 5.4%             |
| <b><u>Patient Days:</u></b>  |                |                |                |                 |               |                  |
| Medicine                     | 6,873          | 6,526          | 347            | 5.3%            | 6,140         | 11.9%            |
| Surgery                      | 3,719          | 3,876          | (157)          | -4.1%           | 3,384         | 9.9%             |
| OB/GYN                       | 1,963          | 1,878          | 85             | 4.5%            | 1,814         | 8.2%             |
| Neonatology                  | 2,071          | 2,293          | (222)          | -9.7%           | 2,037         | 1.7%             |
| Psychiatry                   | 680            | 552            | 128            | 23.2%           | 562           | 21.0%            |
| Orthopedics                  | 616            | 514            | 102            | 19.8%           | 493           | 24.9%            |
| Neurology                    | 462            | 483            | (21)           | -4.3%           | 579           | -20.2%           |
| Other/Radiology              | 19             | 13             | 6              | 46.2%           | 13            | 46.2%            |
| CRC                          | 65             | 29             | 36             | 124.1%          | 69            | -5.8%            |
| Hospital Total               | 16,468         | 16,164         | 304            | 1.9%            | 15,091        | 9.1%             |
| <b><u>ALOS:</u></b>          |                |                |                |                 |               |                  |
| Medicine                     | 5.2            | 5.0            | 0.2            | 4.5%            | 5.0           | 4.1%             |
| Surgery                      | 5.5            | 5.5            | 0.0            | 0.5%            | 5.3           | 4.1%             |
| OB/GYN                       | 4.0            | 3.6            | 0.4            | 10.5%           | 3.5           | 14.2%            |
| Neonatology                  | 4.9            | 5.5            | (0.6)          | -11.0%          | 4.9           | -0.5%            |
| Psychiatry                   | 11.9           | 10.0           | 1.9            | 18.9%           | 11.2          | 6.1%             |
| Orthopedics                  | 4.7            | 4.8            | (0.1)          | -1.2%           | 4.7           | 0.2%             |
| Neurology                    | 5.0            | 5.3            | (0.2)          | -4.3%           | 6.5           | -22.8%           |
| Other/Radiology              | 3.2            | 3.3            | (0.1)          | -2.6%           | 3.3           | -2.6%            |
| CRC                          | 1.5            | 1.0            | 0.5            | 47.7%           | 2.7           | -44.3%           |
| Hospital Total               | 5.1            | 5.0            | 0.1            | 1.9%            | 4.9           | 3.5%             |
| <b>CMI-All Payors</b>        | #DIV/0!        | 1.47           | #DIV/0!        | #DIV/0!         | 1.40          | #DIV/0!          |
| <b>Medicare Acuity</b>       | -              | 1.78           | (1.78)         | -100.0%         | 1.72          | -100.0%          |
| <b>Blue Cross Acuity</b>     | -              | 1.29           | (1.29)         | -100.0%         | 1.29          | -100.0%          |
| <b><u>Surgery Cases</u></b>  |                |                |                |                 |               |                  |
| Inpatient                    | 864            | 947            | (83)           | -8.8%           | 853           | 1.3%             |
| <b>Hospital FTE's</b>        | 5,734          | 5,869          | 136            | 2.3%            | 5,521         | 3.9%             |
| <b>Temporary Help FTE's</b>  | 84             | 44             | (40)           | -90.9%          | 100           | -16.2%           |
| <b>FTEs/Adj Occupied Bed</b> | 5.04           | 5.57           | 0.53           | 9.5%            | 5.91          | 14.7%            |

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Table 5

**Beth Israel Deaconess Medical Center  
Statistics Report - Outpatient  
For Period Ending October 2006**

| OUTPATIENT                                | Year-To-Date   |                |              |               |               |                 |               |
|---|----------------|----------------|--------------|---------------|---------------|-----------------|---------------|
|   | Actual<br>FY07 | Budget<br>FY07 | Act-Bud<br># | Variance<br>% | Prior<br>Year | Prior Year<br># | Variance<br>% |
| <b><u>Emergency Department Visits</u></b> | 4,272          | 4,230          | 42           | 1.0%          | 4,180         | 92              | 2.2%          |
| <b><u>Clinic Encounters</u></b>           |                |                |              |               |               |                 |               |
| HCA                                       | 7,298          | 8,023          | (725)        | -9.0%         | 9,335         | (2,037)         | -21.8%        |
| HemOnc                                    | 3,625          | 4,120          | (495)        | -12.0%        | 3,500         | 125             | 3.6%          |
| Other Clinics                             | 10,751         | 11,214         | (463)        | -4.1%         | 9,404         | 1,347           | 14.3%         |
| Split Bill Clinics                        | 15,852         | 16,609         | (757)        | -4.6%         | 12,516        | 3,336           | 26.7%         |
| Total Hospital Clinic Encounters          | 37,526         | 39,965         | (2,439)      | -6.1%         | 34,755        | 2,771           | 8.0%          |
| Total Private & HMFP Encounters           | 8,741          | -              | 8,741        | 0.0%          | 6,529         | 2,212           | 33.9%         |
| <b>Total Hosp &amp; HMFP Encounters</b>   | <b>46,267</b>  | <b>39,965</b>  | <b>6,302</b> | <b>15.8%</b>  | <b>41,284</b> | <b>4,983</b>    | <b>12.1%</b>  |
| <br>                                      |                |                |              |               |               |                 |               |
| <b>Surgery Cases</b>                      | 1,252          | 1,190          | 62           | 5.2%          | 1,099         | 153             | 13.9%         |
| <br>                                      |                |                |              |               |               |                 |               |
| <b>Cath Lab</b>                           | 80             | 76             | 4            | 5.3%          | 71            | 9               | 12.7%         |
| <br>                                      |                |                |              |               |               |                 |               |
| <b>GI/Endoscopy</b>                       | 1,467          | 1,497          | (30)         | -2.0%         | 1,394         | 73              | 5.2%          |
| <br>                                      |                |                |              |               |               |                 |               |
| <b>Observation</b>                        | 454            | 445            | 9            | 2.0%          | 422           | 32              | 7.6%          |
| <br>                                      |                |                |              |               |               |                 |               |
| <b>Radiology OP Exams</b>                 | 17,295         | 15,691         | 1,604        | 10.2%         | 15,248        | 2,047           | 13.4%         |
| <br>                                      |                |                |              |               |               |                 |               |
| <b>RadOnc/Cyberknife Treatments</b>       | 2,316          | 3,144          | (828)        | -26.3%        | 2,093         | 223             | 10.7%         |

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