UNIVERSITY OF CALIFORNIA, DAVIS
INTERNAL AUDIT SERVICES

University of California Davis Health System
Dean/ Vice Chancellor Transition Review
Internal Audit Services Project #13-62

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MANAGEMENT SUMMARY

BACKGROUND

The Office of Vice Chancellor for Human Health Sciences and Dean of the School of Medicine at UC Davis (UCD) is positioned to lead the Human Health Sciences campus of a premier public university system. The Vice Chancellor and Dean positions are combined to provide leadership and oversight for the entire UC Davis Health System (UCDHS), including a 619-bed academic medical center in Sacramento, one of the nation's leading medical schools, a new school of nursing, and a multispecialty physician group. The UCDHS had operating expenses of nearly $1.9[1] billion in FY2013, to operate its academic, research and clinical programs offered by the School of Medicine, the Betty Irene Moore School of Nursing, the UC Davis Medical Center, and the UC Davis Medical Group.

The UCD Medical Center (UCDMC) is the region's only academic health center focused on discovering and sharing knowledge and providing the highest quality of care. The Regents' Committee on Health Services provides medical center oversight, with direct management authority delegated to the UCDMC Chief Executive Officer by the UCD Chancellor. UCDHS employs 2,800 faculty and academic staff, over 700 residents and fellows, and approximately 9,500 staff[2]. UCDMC is a major contributor to the healthcare and economy of the Sacramento region with operating expenses in FY2013 of over $1.4 billion.

The UCD School of Medicine (SOM) is one of the nation's leading medical schools, recognized for its research and primary-care programs. The SOM offers fully accredited master's degree programs in public health and in informatics, and its combined M.D.-Ph.D. program is training the next generation of physician-scientists to conduct high-impact research and translate discoveries into better clinical care. Along with being a recognized leader in medical research, the SOM is committed to serving underserved communities and advancing rural health.

The UCD Medical Group (UCDMG) encompasses over 1,000 physician members offering primary and specialty care in over 150 areas. The UCDMG operates 17 outpatient primary care offices that provide same-day appointment service for acute care patients with an emphasis on wellness and prevention.

The Betty Irene Moore School of Nursing (SON) was established in March 2009 with a $100 million commitment from the Gordon and Betty Moore Foundation, the nation's largest grant for nursing education. The school will complete its launch in approximately 2020, when full enrollment is reached in all degree programs serving approximately 450 students.

PURPOSE AND SCOPE

The purpose of the review was to identify the highest strategic and operational risks facing the UCDHS from an administrative and financial perspective and assess the existing strategies to mitigate those risks. To perform the review we surveyed executive management opinions on UCDHS accomplishments and opportunities for growth and improvement, analyzed the financial results of UCDMC operations and cash flow monitoring from FY2007 through FY2013, evaluated SOM discretionary funds management, and reviewed UCDMC/UCDMG performance and patient satisfaction measures. An in depth review of hospital revenues and expenditures and process and procedures for collecting performance and patient satisfaction measures was beyond the scope of this audit.

[1] Source: DaFIS accounting records (FIS349) for SOM and SON, inclusive of recharges; & Audited Financial Statements for UCDMC

[2] Source: UCDHS Human Resources, February 2014

CONCLUSIONS

1. Executive Management Survey Summary

The following are recurring themes from the executive management survey of accomplishments, risks, challenges and opportunities.

A. Accomplishments

- Research growth and national recognition were identified in our survey as the most important accomplishments in the past 5 years
    - Research awards have grown 51% to $295M (at the same time UC campus-wide awards have grown 21% to $753M)
    - National Institutes of Health (NIH) funding increased 8% to $121M at a time when total NIH funding has remained relatively constant
    - Rankings have improved from 2009 to 2013 (U.S. News & World Report):
        - #42 (2013) from #48 (2009) in Research #19 from #35 in Primary Care
        - #1 Best Hospital in the Sacramento metro area and Northern Sierra's
        - #16 Best Hospital in California
    - Awarded a "comprehensive cancer center" designation (1% of U.S. cancer centers).
    - Listed by Leapfrog Group as a Top (10%) Hospital for 2013 based on safety, quality and efficiency
    - Magnet Hospital designation for the Nursing Program (6% of U.S. hospitals)
    - 2013 Enterprise HIMSS Davies Award of Excellence ("Level 7") - highest level of IT integration (one of 98 hospitals in the world)
    - In January 2014, the Liaison Committee on Medical Education (LCME) has completed site visits at the SOM as part of a rigorous academic evaluation process of leading medical education programs in the US and Canada. Preliminary results appear positive

- Other major accomplishments include:
    - Infrastructure expansion (Surgery and Emergency Services Pavilion opened 2010)
    - Increased diversity (44% of students from underrepresented minority)
    - Community outreach to underserved rural communities

B. Risks and Challenges

- Decreases in government funding and the uncertainty regarding the implementation of the Affordable Care Act were the primary concerns expressed by the UCDHS executive management

- Other challenges and risks as identified by UCDHS leadership included:
    - Ensuring funding for quality staff, necessary to sustain a high quality medical training program

- Lawsuit with the Sacramento County - over $160M owed (continuing to grow) for treating County patients. This dispute has impeded necessary infrastructure investment
- Establishing and maintaining transparency and openness in the decision-making process
- Allowing greater participation from all UCDHS stakeholders to emphasize collaboration and alignment of funding priorities
- Building a shared vision and stronger alliance between UCDMC and the SOM

C. Opportunities for Improvement, Executive Management Perspective

- Developing a broader donor base
- Building a stronger clinical enterprise through affiliations
- Better integration between research and clinical practice
- Better cost control including reducing length of stay, improving utilization management and improving efficiencies through shared services
- Increase emphasis on process improvement techniques including reducing patient wait times from referral to appointment
- Increase transparency in decision making and better communication between Dean/VC and Chairs
- Closer communication and collaboration among UCDHS and the campus leadership
- Develop a sustainable vision for further IT integration to continue excellence as a medical services provider

2. Summary Analysis of Financial Results:

A. SOM fund balances at the beginning of FY2014 were $282.6M, as summarized in the Appendix C of the report.

	Carryforward as of July 1, 2011	**Carryforward as of July 1, 2012**	**Carryforward as of July 1, 2013**
State Funds/ Tuition/ Fees	$17M	$12M	$10M
Total ICR/Other Unrestricted	$11M	$18M	$21M
Restricted & Designated Funds	$294M	$249M	$253M
All Funds Total	$322M	$279M	$284M

B. UCDMC net income over the last five years

Fiscal Year	Operating Income	Operating Margin
2008 - 09	$58M	5.1%
2009 - 10	$72M	5.4%
2010 - 11	$90M	6.4%
2011 - 12	$45M	3.4%
2012 - 13	$87M	5.9%

With the approaching reforms in the healthcare delivery and reimbursement, Management projects operating margins for UC Davis to decline to 2.9% in FY2014 and to 2.6% in FY2015.

C. Other Benchmark Comparisons

a. AHA (American Hospital Association) average for all hospitals in 2013 was 5.5%
b. UHC (University HealthSystem Consortium) average for all teaching hospitals in 2013 was 4.4%
c. The UCDMC operating margin lagged behind the other UC medical centers during four of the last five years

D. Explanations for Benchmark Variances

a. Significantly higher indigent care expense compared to other UC medical centers. In FY2012, for example, UCDMC provided $254M in charity care compared to UC San Diego at $108M and only $26M at UC San Francisco
a. UCDMC higher operating expense to revenue ratio including higher salaries & benefits, professional expenses and medical supplies expenses.
b. Considerably higher percentage of outpatient visits compared to other hospitals.
c. Unfavorable payer mix - higher patient volume from lower payers such as Medi-Cal reduces overall revenue
d. Increasing volatility in the healthcare payments resulting from the lag between services rendered and revenues collected, particularly in the case of state and federal reimbursements

E. Opportunities to Improve Financial Performance

UCDHS has been actively working to address the declining margins trends and implement initiatives to maximize revenues and decrease costs. In 2013, a benchmark study conducted by an external consultant identified further cost cutting opportunities in the areas of labor expense, medical expense and service mix. Initiatives to improve operational performance measures and decrease costs are underway. Refer to section 2, Financial Performance, of this report. In light of the many changes, establishing sound systems to manage sources and uses of funds becomes paramount to carrying on a viable operation. Inherent in the explanations for UCDMC results noted above are potential opportunities for improvement that should continue to be explored.

3. Cash Flow Monitoring

Days Cash on Hand is a critical financial performance indicator of the organization's ability to meet operating expenses. Days cash projections are performed as part of the financial forecasting process reported to the Chancellor and submitted to the Regents for approval on an annual basis.

Between FY2008 and FY2010, cash on hand indicators fell sharply to nearly 30 days due to management decision to fund capital construction through the UCDMC operational funds rather than public bonds. Since the completion of construction of the surgery and emergency services Pavilion in 2010, Days Cash on Hand has been steadily improving with a sharp re-bound in FY2013 due to curtailment and deferral of capital expenditures and additional funds applied at year end, including the receipt of reimbursements from Medicare and Medi-Cal. Over the last 24 months, cash on hand fluctuated between 48.0 days as of June 30, 2012 and 71.4 days as of June 30, 2013, and continues to present an area warranting attention to continue progress that has already been made in cash management. A target rate of 60 days has been established by the University policy. Although the UCDMC has developed a rigorous process to monitor cash and communicate this information to senior management, the procedures developed and assumptions adopted for monitoring and reporting have not been formalized.

4. SOM Discretionary Funds Management

As of July 1, 2013, UCD Budget and Institutional Analysis (BIA) identified $20.6 million in unrestricted and indirect cost recovery (ICR) funds for the SOM that are annually allocated at the Dean's level, in accordance with campus-wide policy. While only a portion of these balances represent Dean's discretionary funds, SOM has not yet segregated all Dean's commitments and obligations for reporting purposes as being suggested in the most recent 2013 BIA whitepaper on Carryforward balances. In partnership with BIA, the SOM has defined a process and appropriate project codes to identify and record the known commitments and obligations in the UC Davis general ledger system DaFIS.

Our audit also found several fund accounts in overdraft status at year end, which contradicts the campus policy PP330-65 requiring that all fund balances be closed in a solvent condition. While SOM has robust processes to provide management and oversight over the financial reporting and requires the Practice Management Board's approval on fund transfers from reserves, SOM resolved to implement additional controls to ensure that deficit accounts are promptly addressed and cleared timely on an annual basis.

5. UCDMC Performance and Patient Satisfaction Measures

Most performance measures for hospital and clinic based care adopted by the UCDMC are part of state or federal performance measure reporting systems, such as those established by the Joint Commission, UHC and Centers for Medicare and Medicaid Services (CMS). Key performance indicators are very complex. Examples include: timeliness and effectiveness (core measures), surgical care improvement, mortality, agency for healthcare research and quality patient safety indicators, readmission rates, adult and pediatric central line-associated blood stream infections, ventilator associated pneumonia, catheter-associated urinary tract infections and adverse events.

As of January 2014, UCDMC meets or exceeds national benchmarks in a number of quality measures reported on the Federal Hospital Compare website. UCDMC ranked same or better than national indicators on 22 of 40 "timely and effective care" measures, such as prevention and treatment of blood clots and timely use of antibiotics in surgical care. In 18 of the 40 categories, UCDMC scored lower than the national norms or only limited data was available. UCDMC also met 16 of the 17 "readmissions, complications & deaths" measures. The ratings are updated quarterly and UCDMC tracks clinical performance data on an ongoing basis.

UCDMC has robust programs aimed at improving patient experience and benchmarking transparency. Quality performance measures are reported to management on a regular basis.

UCDMC also participates in a statewide rating system operated by the California Healthcare Foundation, which reported that the UCDMC achieved ratings of average or better on 26 of 27 performance measures compared to state averages.

Patient satisfaction surveys that were independently conducted showed the patients ranking of the overall quality of inpatient care and outpatient surgery above the 80th percentile. Indicators such as doctor's communications with family and friends, staff courtesy and helpfulness improved to the 80th percentile in FY2013. However, the quality of outpatient clinic care fell to the 46th percentile. Cleanliness of the hospital, cleanliness of the room and food delivered to the room fell over the years to the 35th, 24th, and 31st percentiles, respectively, in FY2013.

While our scope did not include assessing process and procedures for collecting such data, the performance and patient satisfaction measures reported are an indication of the many strengths of UCDHS as well as a few opportunities for improvement. Our detailed observations, conclusions, recommendations and management corrective actions are presented below.

Observations, Recommendations, and Management Corrective Actions

1. Survey of Executive Management

As part of our review, we surveyed executive management opinions on UCDHS accomplishments and opportunities for growth and improvement. We focused on identifying management strategies to mitigate risks and challenges related to operating a successful enterprise going forward. While the quantitative analyses performed as part of this review appear to support the statements made by management, where applicable, the opinions gathered through the interview process add the necessary qualitative dimension to better understanding methods for successfully managing and implementing strategies in the new VC/Dean administration. The results of the survey are summarized by the recurring themes that emerged during the interviews.

Accomplishments

All of the respondents listed research growth as the most important accomplishment for the UCDHS in the last five years. Total research funding increased over 51%, from $196M in FY2009 to $295.4M in FY2013. NIH funding increased from $112.3M in FY2009 to $120.9M in FY2013. Increased funding resulted in increased visibility for UCDHS research programs and the organization as a whole. All of the respondents also commented on the reputational growth and national recognition for major research programs, such as the Institute for Regenerative Cures Program, the Clinical and Translational Science Center, and the Integrated Research Track program developed by the SOM.

Most of the respondents noted infrastructure expansion among the major accomplishments at the UCDHS, including the state-of-the-art Surgery and Emergency Services Pavilion that opened in 2010. Investment in information technology was identified as another significant accomplishment, with the electronic medical record project achieving Stage 7 of the HIMSS Analytics EMR Adoption Model in 2012, as well as "Most Wired" and "Most Connected" designations, and receiving the 2013 Enterprise HIMSS Davies Award of Excellence for improving patient care and outcomes.

The UCDMC and the SOM are also rated favorably in national healthcare performance rankings reported by external entities, including the Leapfrog Hospital Group national consortium, U.S. News and World Report and externally conducted patient satisfaction surveys. UCDMC ranks among the top 90 hospitals nationwide according to the Leapfrog

Hospital Survey, the only national, public comparison of hospitals on key variables such as mortality rates for certain common procedures, infection rates, safety practices and measures of efficiency. In 2013, U.S. News ranked UCDMC #1 in the Sacramento metro area and Northern Sierras regional area, and #16 for hospitals in California. However, specialty specific national rankings dropped due to fluctuations in scoring for UCDMC. Nevertheless, 97% of UCDHS patients rated the quality of care they received as "good", "very good" or "excellent" in 2013. In addition, overall quality of care ratings have improved, as well as the critical operational indicators such as sepsis mortality.

UCDMC was designated as a Magnet Hospital in January, 2014. During the site visit in November 2013, the appraisers met with a total of 1,298 patients and families, community members, hospital leaders, physicians, staff and nurses. The appraisers noted a strong collaborative practice among all disciplines. Remarks made during the award of Magnet Designation emphasized that clinical excellence was the norm for the organization.

In January 2014, the Liaison Committee on Medical Education (LCME) has completed site visits at UCD SOM, as part of the routine evaluation process that occurs every 8 years. LCME review is aimed at benchmarking and assessing medical education programs leading to the MD degree in the United States and Canada. While the results of the LCME review have not been finalized, the preliminary results appeared positive.

Finally, several of the respondents identified increased diversity as one of the top achievements, with 44% of school population representing the underrepresented minority. In addition, much progress has been made in the area of community outreach. The Rural-PRIME education program for facilitating medical professionals' involvement in underserved rural communities is currently underway with funding support from the state.

Risks & Challenges

Decreases in government funding and the uncertainty regarding the implementation of the Patient Protection and Affordable Care Act were the primary concerns expressed by the UCDHS executive management. Changes in the funding source mix along with the projected decreased revenues from the clinical practice could have a negative impact on graduate medical education. Ensuring an appropriate level of funding to pay for quality staff necessary to sustain a high quality medical training program is an ongoing concern. UCDHS also runs the risk of not maintaining sufficient infrastructure to continue to deliver high quality training and clinical care without the appropriate resources for investment. One of the pervasive issues noted by the respondents was the unresolved payment settlement with the county reflecting payments in arrears totaling $160 million. This dispute has resulted in deferred capital projects and impeded progress on infrastructure investment. As of October, 2013, the UCDHS continues to provide services to the county with nearly zero reimbursement due to an ongoing law suit with the county.

Most of the respondents recognized the need to continue to provide mission-based care (UCDHS is a safety net hospital) within the revised financial model constraints.

Opportunities for Improvement

Possible solutions discussed by management included developing a broader donor base, building a stronger clinical enterprise through affiliations, allowing more effective and efficient integration between research and clinical practice, establishing better cost control measures, and building a stronger practice through continuous management and input from the department chairs. On the operational side, several performance indicators were discussed as opportunities for improvement (e.g., decreasing lengths of stay, decreasing time in the ER, improving patient wait times from referral to appointment, and improving cost control measures).

The recurrent theme in discussing near-term and long-term opportunities for improvement generally revolved around bringing the UCDMC and the SOM closer together and building better relationships across the different lines of business. The need for more transparency and openness in the decision-making process was identified frequently by the respondents throughout the interview process. The respondents also reiterated the need for a closer collaboration among the UCDHS and campus leadership to ensure better alignment of the financial goals. The respondents emphasized stakeholder participation and continuing collaboration between academia and clinical practice, the need for better communication between the Chancellor and Dean/VC, the department chairs and Dean/VC, and the financial managers at UCDHS and campus. Other near-term and long-term changes discussed included the need to build congruent financial strategies with the campus, improving efficiencies through shared services, and improving performance measurement tools (e.g., utilization management). In addition in order to continue excellence as a medical services provider a sustainable vision for further IT integration needs to be developed.

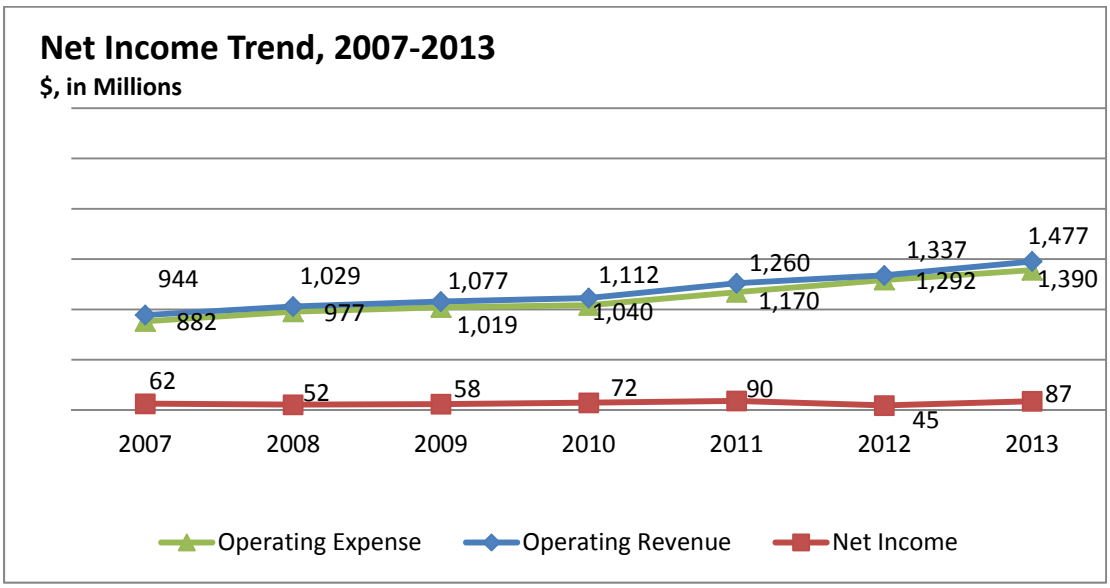
The current administrative structure establishes dual responsibility for overseeing both the academic and medical center operations, with UCDMC CEO and CFO both reporting directly to the VC/Dean. Several of the respondents commented on the complexity and the broad scope of responsibilities encompassed in this position. The new VC/Dean faces a challenge of effectively managing an integrated group of teaching physicians, nurses and the regional physician practice group and balancing their respective and competing priorities. The VC/Dean has the ultimate authority over the funds allocation process for the SOM and the UCDMC, which creates a unique dynamic when revenues from hospital operations are transferred to the SOM to support the academic programs. Building a shared vision and stronger alliance between the two organizations becomes a critical element of success under this scenario.

2. Financial Performance

We reviewed the financial results of UCDMC operations and the SOM from FY2007 through FY2013. The SOM FY2013 fund balances are summarized in the Appendix D of the report. At the beginning of FY2014, the total SOM carryforward balances were $282.6 million, described in section 4 on page 19 below.

UCDMC operating revenues demonstrated an overall upward trend, reflecting a steady increase of $532.8 million (56%) from FY2007 through FY2013 (refer to Table1) Operating expenses also rose by nearly $508.5 million (58%) over the same time period. In the last few years, operating margins fluctuated from 7.1% to 3.4% in FY2012. In 2013, the operating margin increased to 5.9%, compared to the budgeted 2%, mostly due to volatility in recognizing income from certain third party reimbursements, i.e. reporting of the additional prior year revenues from various government block grant reimbursements for services rendered during prior periods, including payments received from Medi-Cal, Medicare and other commercial transactions. The high variance between the budget and actual margin demonstrates an increasing volatility in the healthcare payment models resulting from the lag between services rendered and revenues recognized, particularly in the case of state and federal reimbursements.

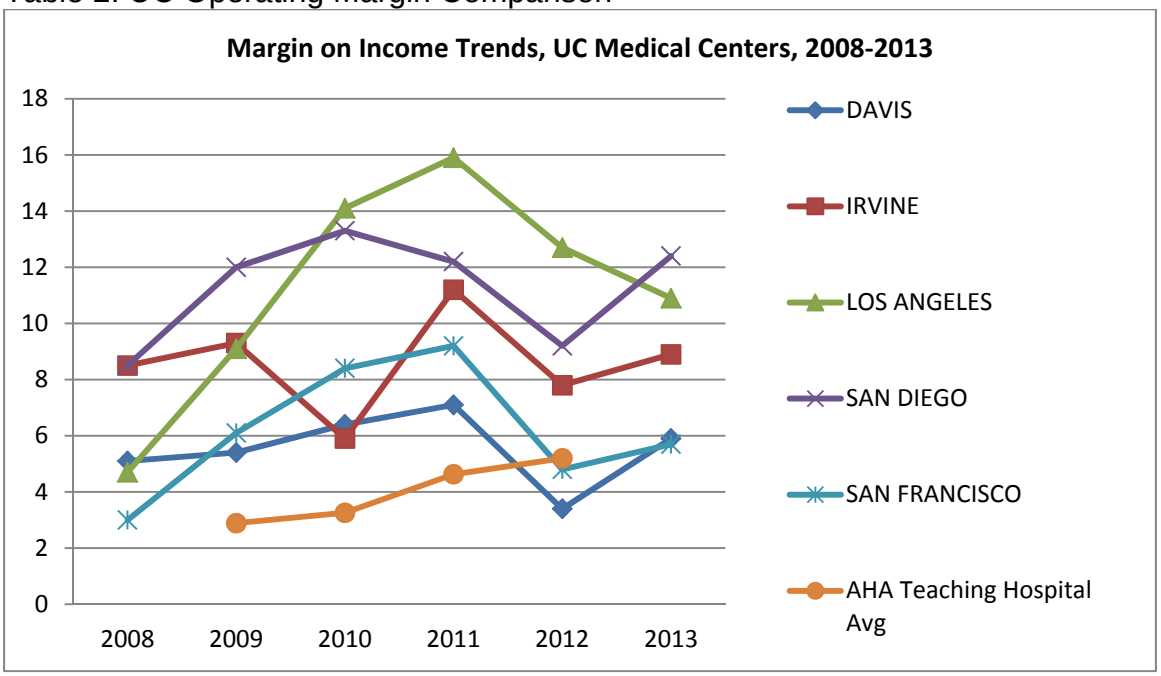
Table 1: Net Income Trend



Source: UC Financial Statements, 2007-2013

Table 2 compares the UCDMC operating margin with the other UC medical centers for FY2008 through FY2013. UCDMC lagged behind the medical centers at San Francisco, Irvine, San Diego and Los Angeles during four of the last five years. The exception occurred during FY2009 when the operating margins for Los Angeles and San Francisco fell below the UCDMC. For comparative purposes, the American Hospital Association reported an average operating margin of 5.5% for all U.S. hospitals in FY2013, and UHC key performance indicators reflect a median operating margin of 4.36%.

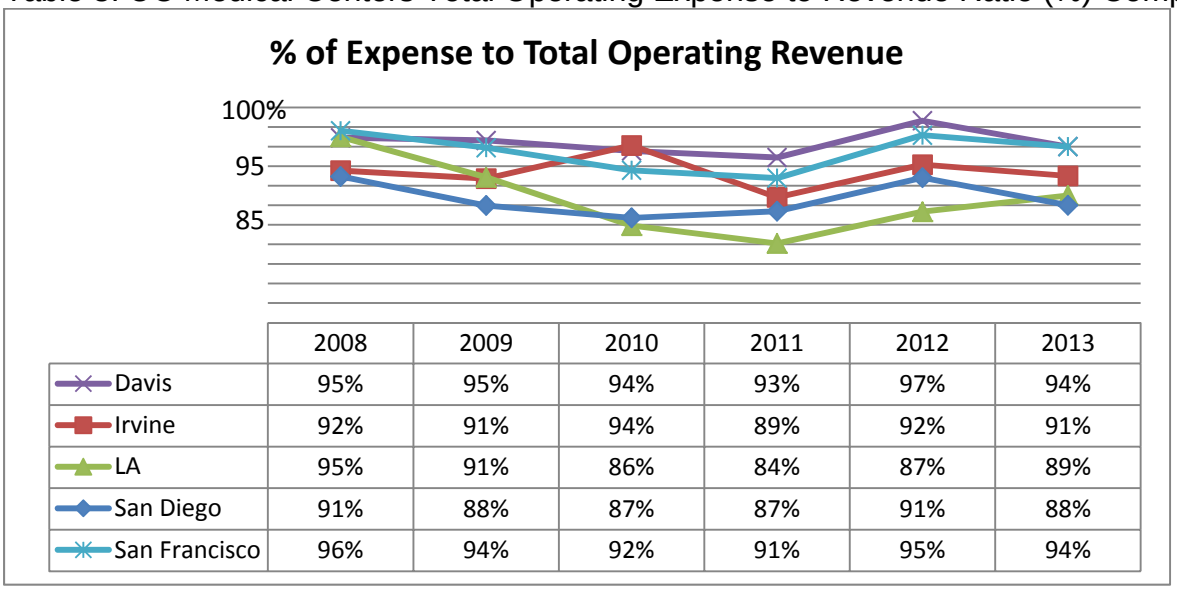
Table 2: UC Operating Margin Comparison



Source: UC Financial Statements, 2008-2013

To determine the reasons behind the low margin trend, we reviewed expense to revenue ratio trends across all the medical centers (Table 3). Overall, the UCDMC expense to operating revenue ratios were about 5 to 7 percentage points higher than the other medical centers. In FY2012, for example, UCDMC expenses were at 97% of the operating revenues; whereas, Los Angeles reported expenses at 87%.

Table 3: UC Medical Centers Total Operating Expense to Revenue Ratio (%) Comparison

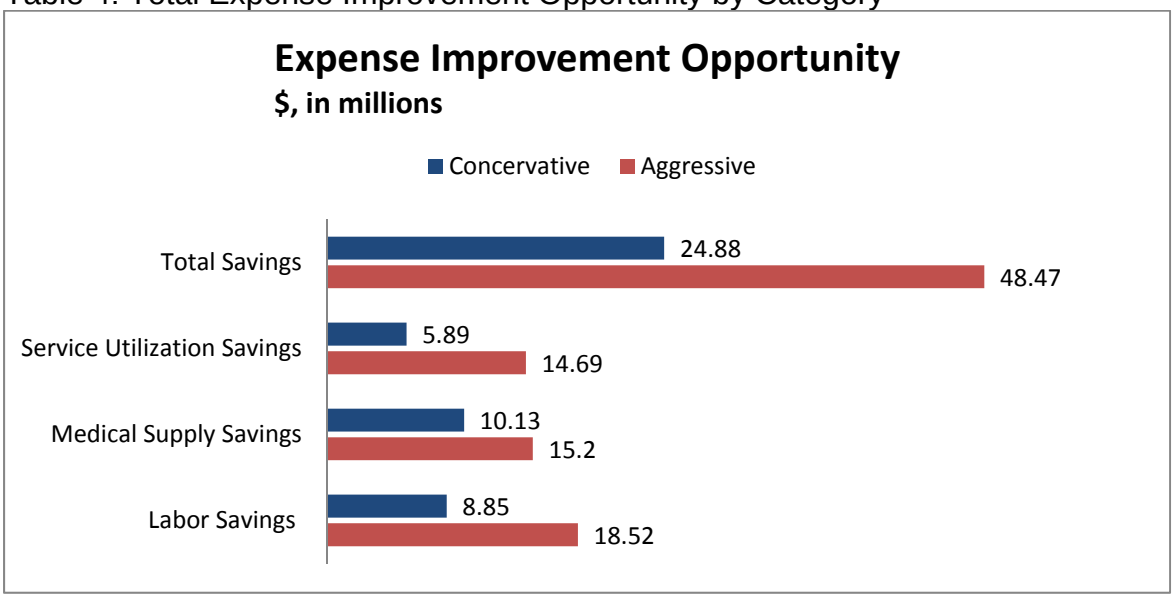


	2008	2009	2010	2011	2012	2013
Davis	95%	95%	94%	93%	97%	94%
Irvine	92%	91%	94%	89%	92%	91%
LA	95%	91%	86%	84%	87%	89%
San Diego	91%	88%	87%	87%	91%	88%
San Francisco	96%	94%	92%	91%	95%	94%

Source: UC Financial Statements, 2007-2013

Table 4 below demonstrates total savings opportunity by expense category, as identified in a benchmark study conducted by an external consultant, Truven Analytics in 2013. Savings are identified by major expense category based on UCDMC quarterly data. Cost cutting opportunities exist in the areas of labor expense, medical expense and service mix.

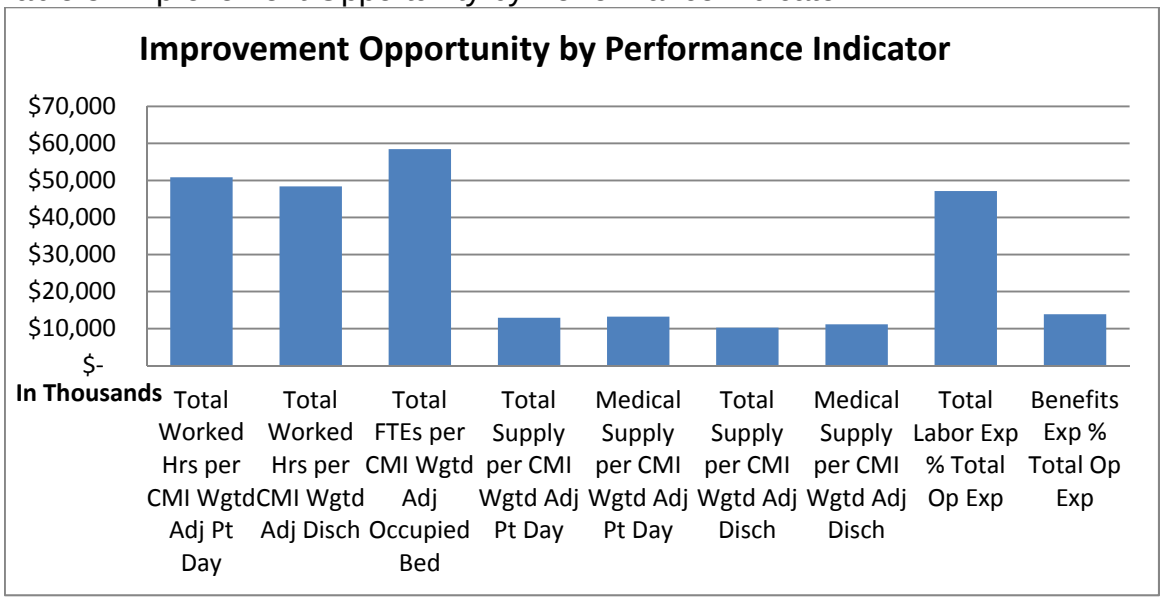
Table 4: Total Expense Improvement Opportunity by Category



Source: Truven Analytics, KPI Analysis, Q1 2013

Table 5 outlines dollar savings opportunities by specific performance indicator, as identified by Truven Health Analytics.

Table 5: Improvement Opportunity by Performance Indicator



Source: KPI Report, ActionOI, Q1 2013

We also reviewed operating trends and percentage of spending by category for UC medical centers. Generally, UCDMC had a higher ratio of salaries & benefits expense (44%) and professional services expenses (8%) as a percentage of total operating expense. Increasing health information technology costs due to healthcare regulatory changes may contribute to decreasing margins. UCDMC also had a considerably higher percentage of outpatient visits compared to other hospitals. For example, the inpatient/outpatient visit statistics demonstrate that the UCDMC had almost 50% more outpatient visits compared to UC San Diego. A higher percentage of outpatient visits may reduce the operating margin because the associated reimbursement rates are lower relative to the cost of providing that care.

Another factor contributing to lower operating margins is the UCDMC commitment to providing patient care to the underserved population. The UCDMC portion of indigent care is significantly higher compared to other UC medical centers. In FY2012, for example, charity care at UCDMC was reported at $254 million. For comparative purposes, charity care at UC San Diego was $108 million and only $26 million at UC San Francisco. Low operating margins were also attributed to an unfavorable payor mix wherein patient volume from payers with lower reimbursement rates results in lower revenue for the same cost of care. Appendix A reflects our analysis of the UCDMC payor mix for the last 5 years. The analysis demonstrates a disproportionate share of revenues derived from the Medicare, Medi-Cal and County sources compared to the volume of patients being reimbursed from these sources. Medi-Cal/Medicare patients make up 52% of total patients but contribute only 33% of revenues, and County patients make up 7% of the total patients, but yield only 1% of revenues. Private insurance and contract reimbursements accounted for 66% of total revenues, representing 42% of patient volume.

With the approaching reforms in the healthcare delivery and reimbursement, further changes to the payor mix are anticipated. As part of a near term and long term financial modeling process at the UCDMC, Financial Services Administration prepares five and ten year projections for Chancellor and the Regental approval. As reflected in the summary of key operational and financial statistics forecasts in Appendix B, operating margins are projected to decline to 2.94% in FY2014 and to 2.63% in FY2015. In addition, the claims processing error rate is projected to increase following adoption of the ICD-10 International Statistical Classification of Diseases and Health Problems, which will likely result in delayed billing and reimbursement for services provided.

UCDHS has been actively working to address the declining margins trends and implement initiatives to maximize revenues and decrease costs. Changes that have been implemented include the following:

- Analysis of cost savings opportunities and performance improvement studies, including employment of an external consultant to carry out labor optimization studies.
- Reviewing expense controls over medical supplies and materials, including blood conservation, spinal implant, orthopedic implant, and pharmaceutical 340B purchasing initiatives.

In light of the many changes, establishing sound systems to identify sources and uses of revenues becomes paramount to carrying on a viable operation. UCD must continue to develop strategies to maximize and diversify revenue streams and develop cost savings and cost cutting solutions to ensure sustainable financial results in the future.

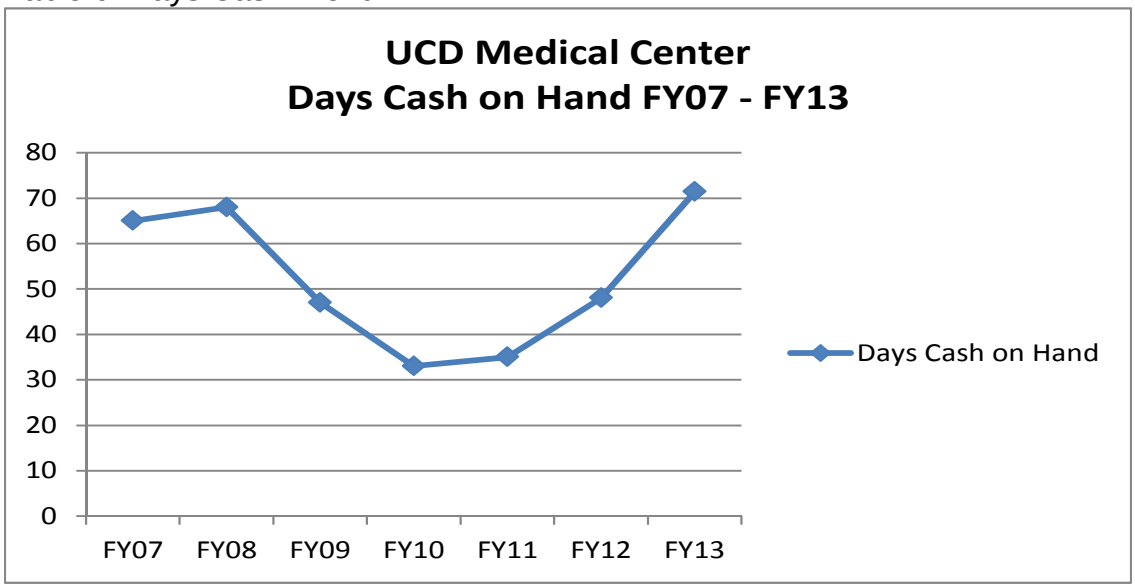
An in depth review of hospital revenues and expenditures was beyond the scope of this audit. Moreover, no corrective actions were considered necessary because UCDHS has been actively engaged in addressing current issues and concerns regarding fiscal viability.

3. Cash Flow Monitoring

Days Cash on Hand is a critical financial performance indicator of the organization's ability to meet operating expenses. Days cash projections are performed as part of the financial forecasting process reported to the Chancellor and submitted to the Regents for approval on an annual basis.

University policy establishes a target rate of 60 days Cash on Hand. As reflected in Table 6, Days Cash on Hand has been steadily improving after a precipitous decline from FY2008 through FY2010, with a sharp re-bound in FY2013 due to the year-end receipt of reimbursements from Medicare and Medi-Cal end for services rendered in prior years (prior year settlements). The decrease in cash on hand indicators during FY2008 to FY2010 was mainly due to the increasing need for capital financing to complete major construction, the surgery and emergency services Pavilion.

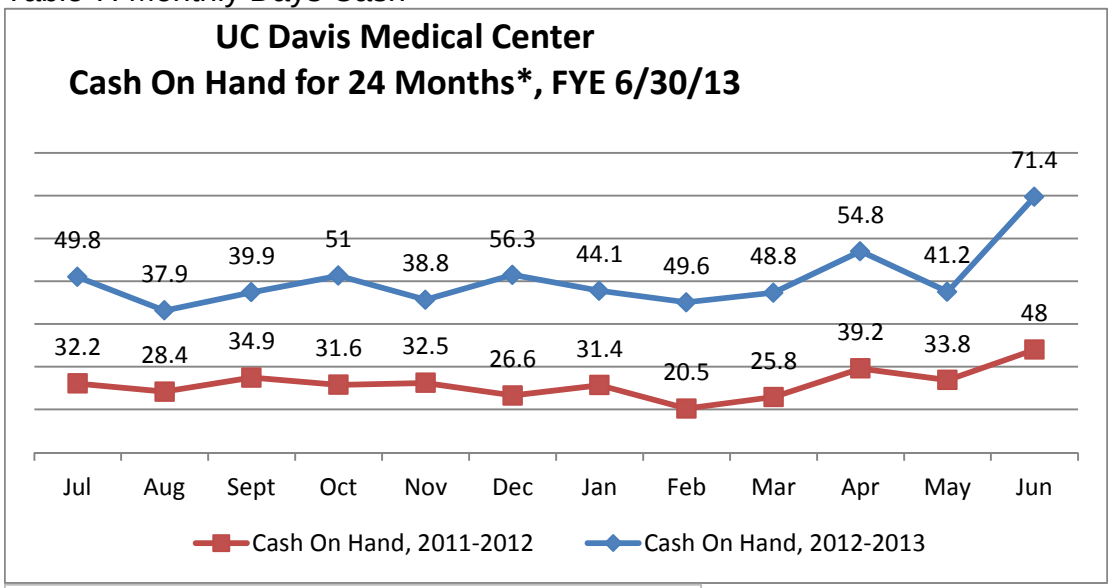
Table 6: Days Cash Trend



Source: UC Financial Statements, 2007-2013

Table 7, which reflects our analysis of Days Cash on Hand for the 24-month period ending June 30, 2013, demonstrated an overall improvement in Days Cash on Hand of approximately 23 days, or 49% improvement in FY2013 compared to the previous year. Over the last 24 months, cash on hand fluctuated between 48.0 days as of June 30, 2012 and 71.4 days as of June 30, 2013, and continues to present an area warranting attention with the monthly rate consistently below the target rate of 60 days established by the University policy.

Table 7: Monthly Days Cash



* days on hand reported as of last day of the month

Source: UCDMC Financial Records, 2012-2013

UCDMC existing cash monitoring practice involves a rigorous analysis of patient cash and accounts receivables. UCDHS Financial Services Administration tracks payments and confirms the actual and projected cash on a monthly basis. A month-to-month change analysis is performed by payor, with a focus on larger dollar accounts. When an anticipated receivable shows a lag of more than 60 days, the accounts receivable collections team takes additional measures to expedite the collections process.

Although the UCDMC has developed a rigorous process to monitor cash and communicate this information to senior management, the procedures developed and assumptions adopted for monitoring and reporting have not been formalized. Without written procedures, the organization cannot hold its employees accountable to ensure the accuracy of the cash projection and monitoring process.

Recommendation
UCDHS Financial Services Administration should document existing cash monitoring procedures and report the assumptions used to update and maintain the financial projections model.

Management Corrective Action

UCDHS Financial Services Administration anticipates completing the documentation and reporting process by December 31, 2014.

4. SOM Discretionary Funds Management

As of July 1, 2013, the BIA identified $20.6 million in total unrestricted and ICR funds for the SOM that are annually allocated at the Dean's level, in accordance with campus-wide policy. While only a portion of these balances represent Dean's discretionary funds, SOM has not yet segregated all Dean's commitments and obligations for reporting purposes as being suggested in the most recent 2013 BIA whitepaper on carryforward balances. According to the BIA guidelines, all committed and obligated fund balances, such as the Dean's planned spending on specific initiatives and projects, should be reported in DaFIS using certain object codes. In addition, carryfoward balances should be reviewed for the BIA margin guideline to aid management decisions regarding each unit's carryforward balances and intended uses of all funds. At the time of the review, SOM was working with the BIA to identify and properly record all encumbrances in DaFIS. The SOM Management committed to completing this process.

Our review of budget to actual detail for the Dean's Office accounts at June 30, 2013 also revealed several fund balances in overdraft status. Further research and discussions with the SOM Management revealed that the fund deficits often resulted from a year-to-year funding lag, or timing differences between the ICR allocation appropriation, settlement of large agreements between the hospital and SOM, and the actual posting of these transactions in DaFIS.

Overall, the SOM has robust processes to ensure management and oversight over the departments' operations, including the monthly, quarterly and annual reviews with the UCDHS CFO, and the Practice Management Board's review process of any transfers between funds from the reserves. While the UCD Policy & Procedure 330-65, *Fiscal Closing*, requires departmental administrators to analyze account/fund activities, and to manage and close out all funds in a solvent condition, the SOM Management committed to a more timely review process of the deficit accounts/funds. Further, the SOM agreed to address and resolve any fund deficits at year-end by July 29 of the fiscal accounting cycle.

Recommendations

During the review, the SOM was in the process of implementing the recommendations noted below.

1. Record all SOM obligations and commitments in DaFIS in accordance with the BIA guideline on carryfoward funds.

2. Ensure that account deficit issues are promptly addressed and clear the overdraft accounts timely at year-end.

Management Corrective Actions

1. By June 15, 2014, SOM will identify and record all encumbrances, i.e. the known commitments and obligations in DaFIS, in accordance with the BIA guidelines.

2. SOM will establish a process to ensure prompt review of deficit fund balances and clear negative balances at the year-end closing by no later than July 29 each year. In addition, SOM has a monthly process in place to review all accounts, discuss deficits and cover temporary overdrafts that may result from timing differences between inflow and uses of funds.

5. UCDMC Performance and Patient Satisfaction Measures

Most performance measures for the hospital and clinic based care adopted by the UCDMC are part of state or federal performance measures reporting systems, such as those established by the Joint Commission, UHC and Centers for Medicare and Medicaid Services (CMS). UCDMC participates in federal grants such as the Delivery System Reform Incentive Pool (DSRIP), which is part of the Medicaid California Section 1115(a) program aimed at improving infrastructure development, innovation and redesign, population-focused improvement, and urgent care. UCDMC also participates in the CMS Hospital Inpatient Quality Reporting Program, CMS clinical data abstraction center validation program, and the Joint Commission National Quality Core Measure Program, which satisfies hospital accreditation requirements.

UCDMC key performance measures are available for public view on the federal website *Hospital Compare*. As of January 2014, UCDMC meets or exceeds national benchmarks in a number of quality measures reported on the federal Hospital Compare website. UCDMC ranked same or better than national indicators on 22 of 40 "timely and effective care" measures, such as prevention and treatment of blood clots and timely use of antibiotics in surgical care. In 18 of the 40 categories, UCDMC scored lower than the national norms or only limited data was available. UCDMC also met 16 of the 17 “readmissions, complications & deaths” measures. The ratings are updated quarterly and UCDMC tracks clinical performance data on an ongoing basis.

Statewide ranking are also reported by the California Healthcare Foundation at *CalQualityCare* website which compares performance of all hospitals in the state of California. Based on the statewide rating system reported by *CalQualityCare*, UCDMC achieved ratings of average or better on 26 of 27 performance measures compared to California state averages.

In addition, the UCDMC participates in the *Hospital Consumer Assessment of Healthcare Providers and Systems* initiative, developed by the Department of Health and Human Services to measure patients' perspectives on hospital care. Results as of October 2013 showed UCDMC meeting or exceeding both state and federal averages in one of ten categories. Seventy percent of the UCDMC patients said they would definitely recommend the hospital to family or friends.

In July 2013, UCDMC changed its methodology for reporting patient satisfaction measures. Specifically, there was a change in external party conducting the surveys and the reporting format changed from phone surveys to written surveys. As such, any comparison between past year survey results with the 2013 results going forward should be evaluated with caution in the context of change of methodology that took place.

Appendix E presents several patient experience scores for FY2009 – FY2013 based on patient satisfaction surveys independently conducted by Professional Research Consultants on behalf of the UCDMC. Over the last 5 years, key areas of patient satisfaction were as follows:

- Percentage of patients that rated the quality of inpatient care as excellent reached a 5-year high mark of 66.2%, placing the UCDMC in the 81st percentile nationwide.
- Percentage of patients that rated the quality of outpatient clinic care as excellent reached a 5-year high of 69.0%, placing the UCDMC in the 46th percentile nationwide.
- Percentage of patients that rated the quality of care for outpatient surgery as excellent reached a 5-year high of 79.9%, placing the UCDMC in the 86th percentile nationwide.
- Percentage of patients that rated the quality of care in the Emergency Room as excellent improved from 55.9% to 56.4%, placing the UCDMC in the 77th percentile nationwide.

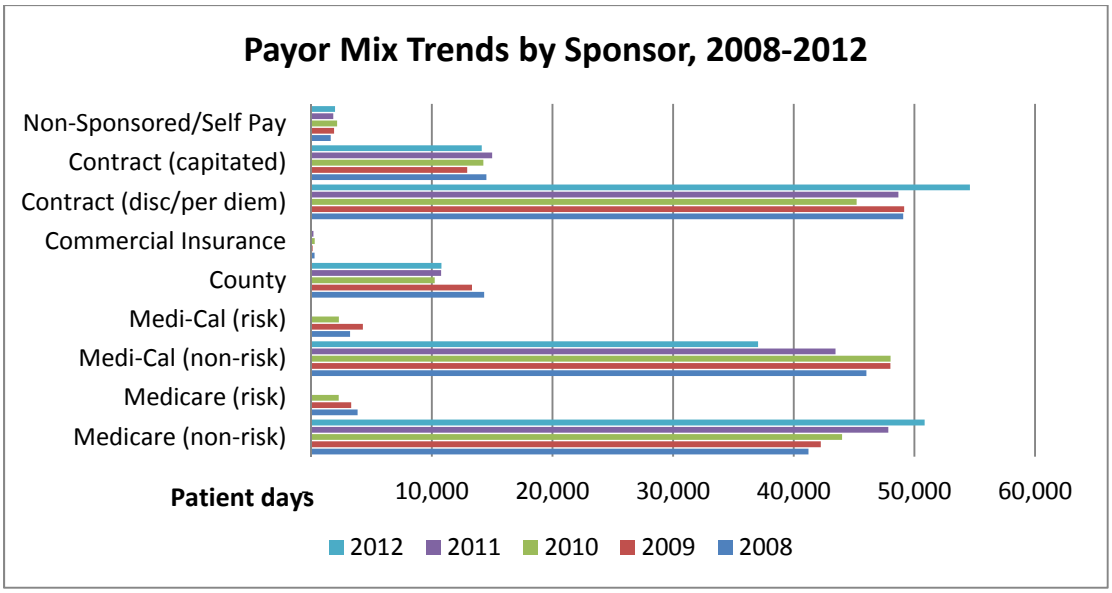
Various other patient satisfaction indicators showed mixed results. For example, doctor's communications with family and friends, staff courtesy and helpfulness improved to the 80th percentile in FY2013. However, cleanliness of the hospital, cleanliness of the room and food delivered to the room fell over the years to the 35th, 24th, and 31st percentiles, respectively, in FY2013.

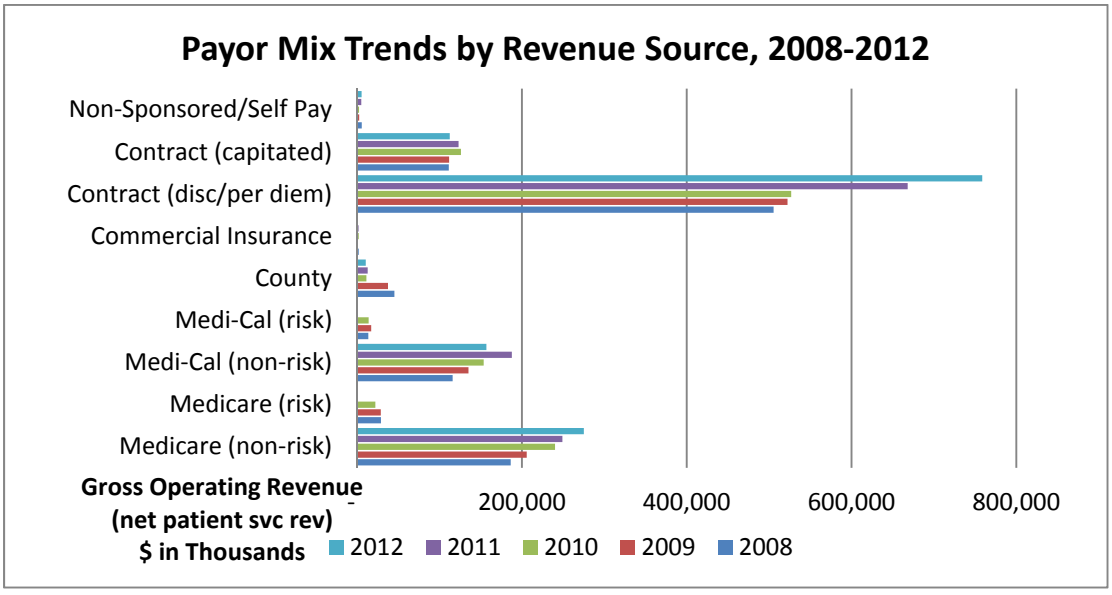
UCDMC has a designated Quality and Safety Program that is developed to align with the Mission, Vision and Guiding Principles of the UCDMC 5-year strategic plan (2011-2016), to pursue excellence, compassion, leadership, teamwork/collaboration, social responsibility, and diversity. As part of the program's initiatives to improve patient experience and benchmarking transparency, the program compiles results of patient surveys and various reports of quality measures. The program is a shared responsibility between the clinical departments, medical staff committees, and clinical services who submit quality and safety data to the Quality and Safety Operations Committee, Medical Staff Executive Committee and Governance Advisory Council. The Quality and Safety Operations Committee has designated staff that track performance measures and report quality and safety results as well as patient satisfaction to various management groups.

An in depth review of the process and procedures for collecting performance and patient satisfaction measures was beyond the scope of this audit. Moreover, no corrective actions were considered necessary because UCDMC has been actively engaged in capturing and reporting these measures.

APPENDICES

APPENDIX A: Payor Mix Trends





APPENDIX B: Forecast of Key Operational and Financial Statistics, 2013-2017

	Actual 2013	Forecast 2014	Forecast 2015	Forecast 2016	Forecast 2017
Volume					
Average Daily Census (incl. Short Stay)	446	454	461	469	477.16
ALOS (incl Short Stay)	5.4	5.4	5.4	5.4	5.39
Patient Days (inc Short Stay)	162,809	165,576	168,391	171,254	174,165
Discharge Totals (incl Short Stay)	32,055	32,568	33,091	33,622	34,162
Discharge % of Total					
Medicare %	33.1%	33.1%	33.1%	33.1%	33.1%
Medical %	28.6%	28.6%	28.6%	28.6%	28.6%
Counties%	6.6%	6.6%	6.6%	6.6%	6.6%
Contracts %	31.7%	31.7%	31.7%	31.7%	31.7%
Capitated %	14.3%	14.3%	14.3%	14.3%	14.3%
Private %	0.1%	0.1%	0.1%	0.1%	0.1%
Non-Sponsored %	0.9%	0.9%	0.9%	0.9%	0.9%
O/P & ER Visits	917,835	938,387	959,451	981,041	1,003,170
Revenue					
Net Patient Revenue	1,448,358	1,510,467	1,559,507	1,588,187	1,639,859
Other Operating Revenue	28,089	22,413	19,276	19,001	18,730
Total Operating Revenue	1,476,447	1,532,880	1,578,783	1,607,188	1,658,589
Expense					
Other Expenses	1,301,772	1,397,246	1,446,199	1,489,056	1,536,964
Depreciation	88,238	90,537	91,059	92,880	91,970
Total Operating Expenses	1,390,010	1,487,783	1,537,258	1,581,936	1,628,933
Capital Expenditures	66,264	75,986	84,322	81,831	103,882
Income					
Operating Income	86,437	45,097	41,525	25,252	29,656
Interest Expense	18,289	17,961	19,124	19,827	20,016
Other Non-Operating Rev	7,174	7,475	7,500	7,496	7,497
Net Gain/(Loss) before Transfers	75,322	34,611	29,901	12,922	17,137
Cash					
Cash Balance	254,609	238,781	271,117	251,217	249,633
Days Cash On Hand	71	62	68	62	59.3
Health System Transfers	(24,230)	(24,000)	(24,000)	(24,000)	(24,000)
Ratios					
Debt Service Coverage	3.37	2.88	2.58	2.32	2.83
Debt Service/Revenue	3.65%	3.24%	3.43%	3.37%	2.75%
Debt to Capitalization	24.5%	22.2%	21.3%	20.7%	21.0%
Excess Margin	5.14%	2.27%	1.91%	0.81%	1.04%
Operating Margin	5.85%	2.94%	2.63%	1.57%	1.79%

Source: UCDMC financial records, FY13.

Note: As of the report issue date, UCDMC was in the process of updating this forecast.

APPENDIX C: SOM Carryforward Fund Balances and Reserves

	Carryforward as of July 1, 2011	Carryforward as of July 1, 2012	Carryforward as of July 1, 2013
State Funds/ Tuition/ Fees			
General Funds & Tuition	$ 10,684	$ 7,272	$ 7,460
Summer Session Fees	$ 32	$ 33	$ 43
Professional Degree Fees	$ 4,188	$ 2,382	$ 1,001
Student Service Fee			$ -
Course Material Fees	$ 40	$ (15)	$ (20)
Campus-Based and Other Student Fees	$ 1,773	$ 2,122	$ 1,019
Subtotal, State Funds	**$ 16,717**	**$ 11,794**	**$ 9,503**
Indirect Cost Recovery (ICR)	$ 10,431	$ 16,390	$ 19,046
Subtotal, ICR	**$ 10,431**	**$ 16,390**	**$ 19,046**
Other Unrestricted Funds			
Private Unrestricted Gifts	$ 7	$ 5	$ 12
Other Funds	$ 113	$ 155	$ 683
Unrestricted Endowment/FFE Earnings	$ 507	$ 409	$ 440
UNEX Reserves	$ 75	$ 68	$ 71
Self-Supporting Degree Fees		$ 263	$ 354
Application Fees	$ 196	$ 251	$ 25
Subtotal, Other Unrestricted Funds	$ 899	$ 1,151	$ 1,585
Total ICR/Other Unrestricted	**$ 11,330**	**$ 17,541**	**$ 20,631**
Restricted & Designated Funds (all remaining)	$ 293,830	$ 248,732	$ 252,501
All Funds Total	**$ 321,878**	**$ 278,067**	**$ 282,633**
Select Fund Types - State Funds/Tuition/Fees			
Prior Year Expenditures	$ 46,814	$ 58,144	$ 56,339
% of PY Exp	**36%**	**20%**	**17%**
Select Fund Types - ICR/Other Unrestricted			
Prior Year Expenditures	$ 6,632	$ 7,020	$ 18,618
% of PY Exp	**171%**	**250%**	**111%**
Restricted & Designated (all remaining funds)			
PY Expenditures	$ 445,387	$ 468,063	$ 504,137
% of PY Exp	**66%**	**53%**	**50%**
All Fund Types			
PY Exp	$ 498,833	$ 533,226	$ 579,143
% of PY Exp	**65%**	**52%**	**49%**

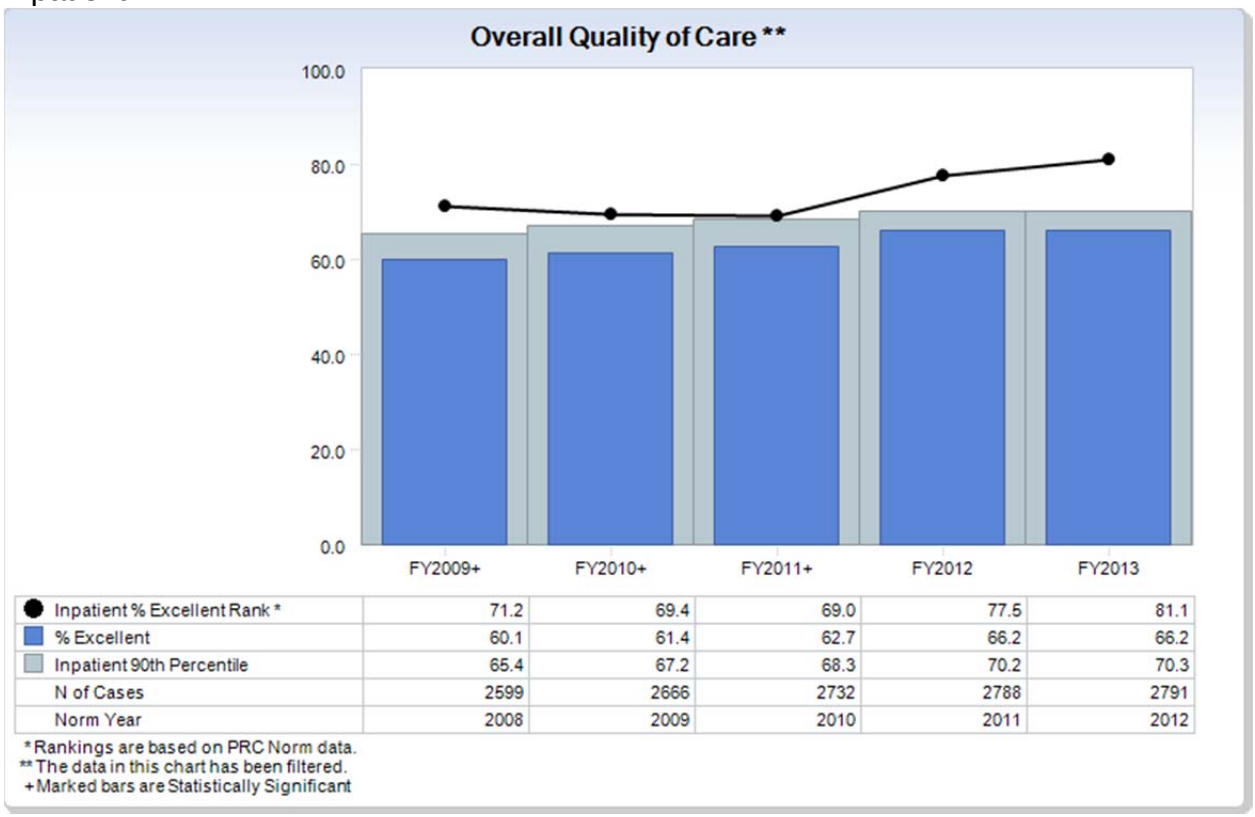
Source: BIA, 2014

APPENDIX D, SOM Fund Balances, FYE 6/30/13

Fund Type	Fund Description	Balance
Contract and Grant	Contract and Grant	$ 132,006,711.16
Contract and Grant Total		**$ 132,006,711.16**
General Fund	CIRM ICR (19941)	$ 4,309,582.43
	Faculty Start-up (ICR) (19933)	$ 4,785,583.81
	Indirect Cost Return (19920; 19980)	$ 815,363.33
	Non Op General Fund	$ 2,581,993.45
General Fund Total		**$ 12,492,523.02**
Operating	General Funds (19900)	$ 2,183,079.99
	Operating (60103)	$ 20,771,192.18
	Student Fees/Other (20226, 60021)	$ 533,469.99
Operating Total		**$ 23,487,742.16**
Other	CME (20301)	$ 853,871.52
	Endowments	$ 15,277,547.67
	Gifts	$ 17,086,975.96
	Indirect Cost Return (07427)	$ 9,395,314.91
	Other (miscellaneous balances by department)	$ 8,603,238.01
	Other Reserves, Campus Partners Reserve, CME (unallocated)	$ 1,788,379.34
	Other Student Fees	$ 1,179,910.38
	Recharge Units	$ 1,299,627.92
	Training and Development (75030)	$ 93,271.42
	UC Sponsored Events (60102)	$ 453,792.58
Other Total		**$ 56,031,929.71**
Reserves	Reserve/Development (60105; 60109)	$ 62,914,029.47
	Seed Funds (60108)	$ 38,190,699.31
Grand Total		**$ 325,123,634.83**

Source: SOM Financial Records per DaFIS at June 30, 2013.

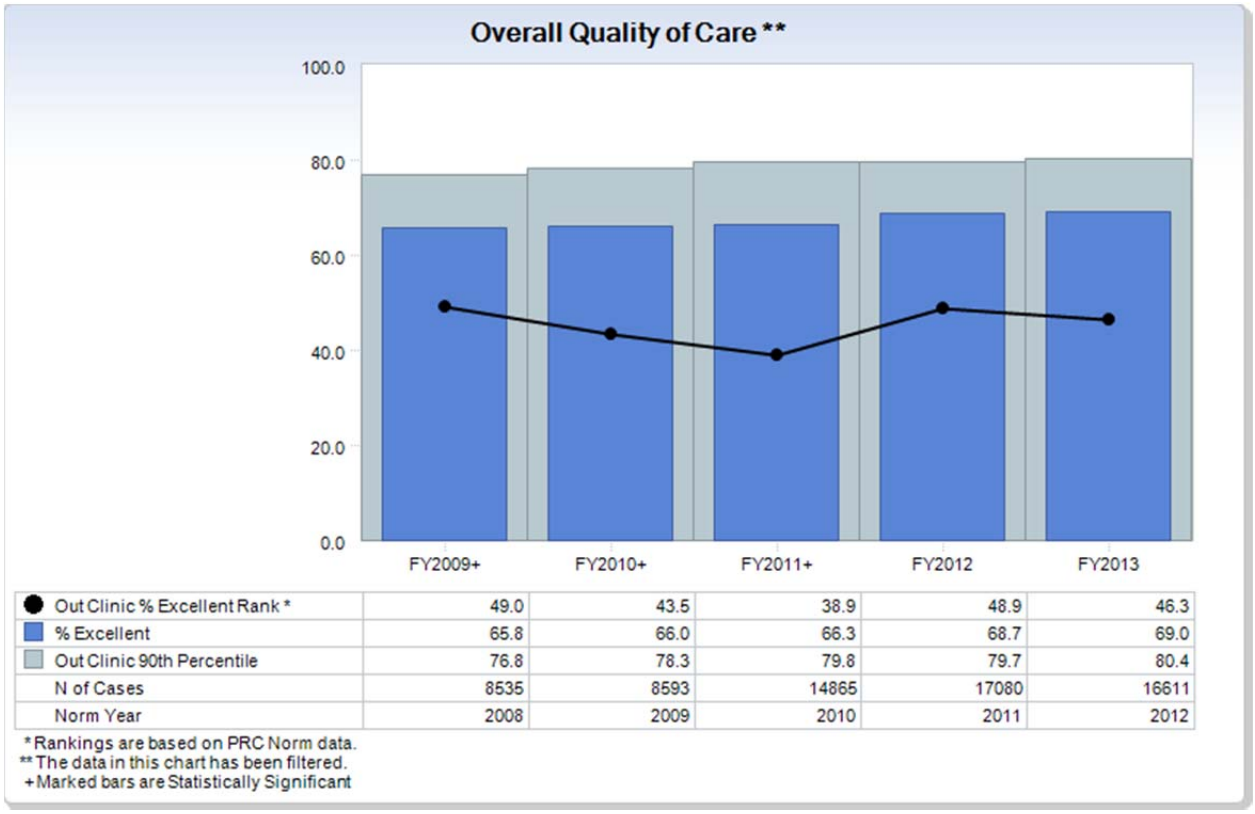
Appendix E, Patient Satisfaction Surveys
Inpatient



	FY2009+	FY2010+	FY2011+	FY2012	FY2013
Inpatient % Excellent Rank *	71.2	69.4	69.0	77.5	81.1
% Excellent	60.1	61.4	62.7	66.2	66.2
Inpatient 90th Percentile	65.4	67.2	68.3	70.2	70.3
N of Cases	2599	2666	2732	2788	2791
Norm Year	2008	2009	2010	2011	2012

*Rankings are based on PRC Norm data.
**The data in this chart has been filtered.
+Marked bars are Statistically Significant

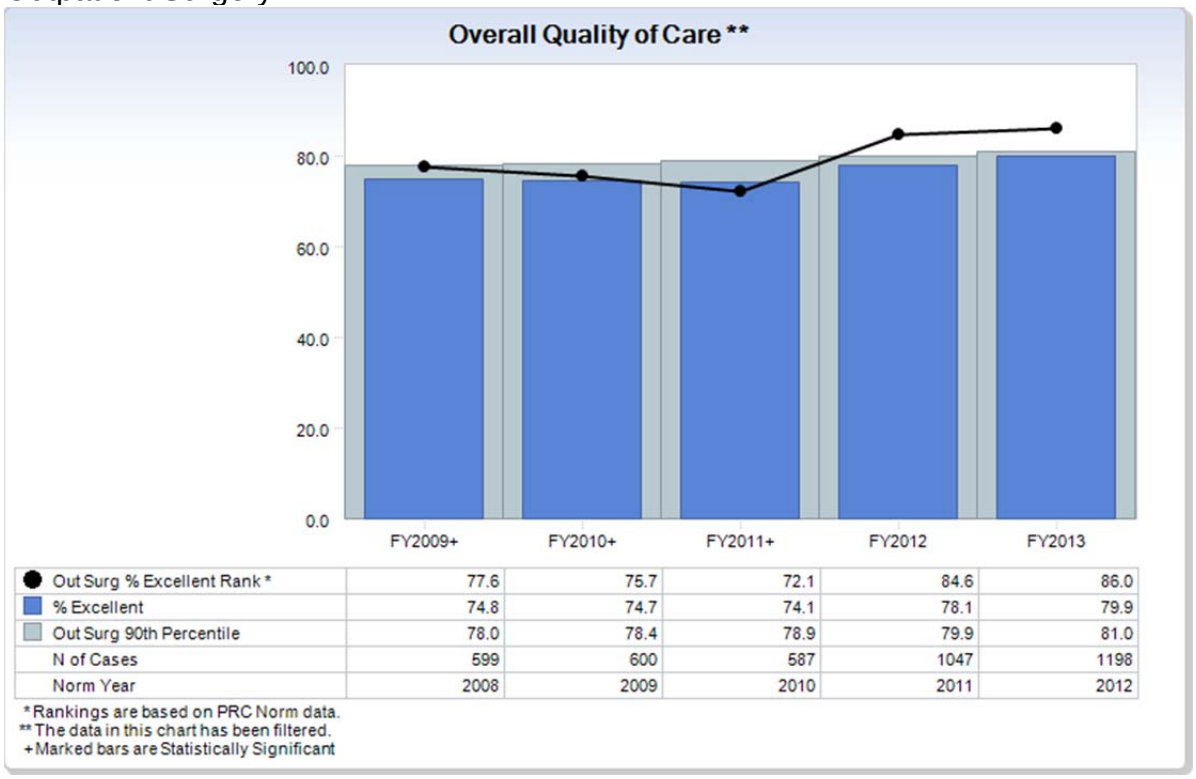
Outpatient Clinics



	FY2009+	FY2010+	FY2011+	FY2012	FY2013
Out Clinic % Excellent Rank *	49.0	43.5	38.9	48.9	46.3
% Excellent	65.8	66.0	66.3	68.7	69.0
Out Clinic 90th Percentile	76.8	78.3	79.8	79.7	80.4
N of Cases	8535	8593	14865	17080	16611
Norm Year	2008	2009	2010	2011	2012

*Rankings are based on PRC Norm data.
**The data in this chart has been filtered.
+Marked bars are Statistically Significant

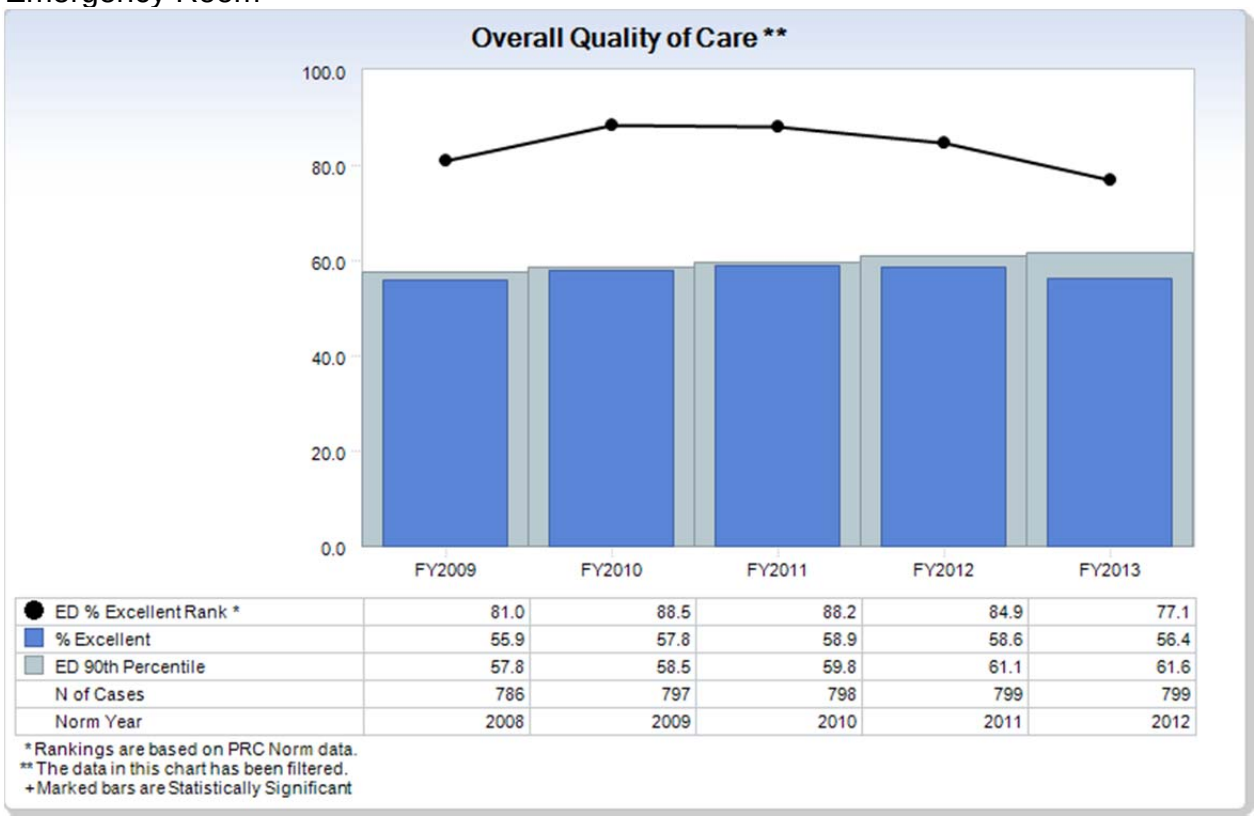
Outpatient Surgery



	FY2009+	FY2010+	FY2011+	FY2012	FY2013
Out Surg % Excellent Rank *	77.6	75.7	72.1	84.6	86.0
% Excellent	74.8	74.7	74.1	78.1	79.9
Out Surg 90th Percentile	78.0	78.4	78.9	79.9	81.0
N of Cases	599	600	587	1047	1198
Norm Year	2008	2009	2010	2011	2012

*Rankings are based on PRC Norm data.
**The data in this chart has been filtered.
+Marked bars are Statistically Significant

Emergency Room



	FY2009	FY2010	FY2011	FY2012	FY2013
ED % Excellent Rank *	81.0	88.5	88.2	84.9	77.1
% Excellent	55.9	57.8	58.9	58.6	56.4
ED 90th Percentile	57.8	58.5	59.8	61.1	61.6
N of Cases	786	797	798	799	799
Norm Year	2008	2009	2010	2011	2012

*Rankings are based on PRC Norm data.
**The data in this chart has been filtered.
+Marked bars are Statistically Significant