

ABSTRACT: 2015 ELAM Institutional Action Project Poster Symposium

Project Title: Developing Leaders, Process Improvement, and Facility Expansion in an Obstetrics and Gynecology Ambulatory Unit

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Collaborators: Kevin Tabb, MD - CEO, Mary Herlihy, MD - Ambulatory OBGYN Physician Director, Aisling Lydeard, NP - Ambulatory OBGYN Nurse Manager

Background Opportunity:

In March 2014, Hope Ricciotti was appointed Chair of Obstetrics and Gynecology at Beth Israel Deaconess Medical Center. An OBGYN ambulatory practice improvement and expansion was determined to be a department priority. A new ambulatory leadership team was recruited – an Ambulatory Physician Director and Ambulatory Nurse Manager, which were both new roles. OBGYN ambulatory unit volume is the busiest of all specialties at the medical center, and ambulatory volume in OBGYN is steadily increasing year over year: 3% in 2012, 4% in 2013, and 5% (projected) in 2014. New physicians recruits are joining in summer 2015: 2.0 FTE GYN oncologists, and 0.5 FTE OBGYN generalists. Future recruits planned to serve network include 1.0 FTE GYN surgical specialties GYN, and 2.3 FTE OBGYN generalists. Ambulatory schedules must complement operating room block schedules, thus schedule smoothing is not a solution. The unit has not been renovated since opening in 1990, and is five years past useful life, with an inefficient layout.

Purpose/Objectives:

The leadership development goal is to make the new ambulatory leadership roles visible, and to develop a participatory process to engage front line staff. The space re-design outcome goal is re-designed space that allows a larger number of providers, as well as more patients per provider, without increasing the footprint of the unit, along with an improved process for staff, in a patient-friendly environment.

Methods/Approach:

An architectural and lean process consulting firm was engaged and assessment of processes for opportunities to find standardization. These included: Gemba walks, throughput analysis, and creation of current state volume and floor map. Inputs for improvement suggestions from staff were compiled and simple suggestions were immediately implemented, along with a major pilot improvement of standardized check out process. Volume, space, and process analysis were reviewed for workflow in current and future space to inform re-design, and finally, a new architectural plan was designed.

Outcomes/Evaluation Strategy:

The current capacity with the addition of the new physicians will result in a shortfall of examination rooms. Analysis shows that we cannot recruit further without an increase in examination room capacity, and we are over capacity 120 days in the year in current state.

The unit has a contribution to margin of \$121 dollars per visit, and technical fees on incremental business expected will result in an incremental margin of \$397, 848 in FY16, \$651,948 in FY18, \$797,148 in FY18, and \$906,048 in FY19. The time to payback for the renovation, estimated at \$3M, is 3.42 years.

Developing Leaders, Process Improvement and Facility Expansion in an Obstetrics and Gynecology Hospital-based Ambulatory Unit

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 Department of Obstetrics and Gynecology
 Beth Israel Deaconess Medical Center
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 (Kevin Tabb, MD, CEO)

Background Opportunity

- In March, 2014, Hope Ricciotti appointed Chair of Obstetrics and Gynecology at Beth Israel Deaconess Medical Center.
- Ambulatory practice improvement and expansion determined to be priority, as the space limited ability to recruit, physicians had little flexibility in scheduling
- New ambulatory leadership team recruited – Ambulatory Physician Director, Ambulatory Nurse Manager (both new roles in department)
- OBGYN ambulatory unit volume is busiest of all specialties at Beth Israel Deaconess Medical Center
- OBGYN ambulatory volume steadily increasing year over year:
 - 3% in 2012
 - 4% in 2013
 - 5% projected in 2014
- New recruits joining in summer 2015
 - 2.0 FTE GYN oncologists
 - 0.5 FTE OBGYN generalist
- Future recruits planned to serve network
 - 1.0 FTE GYN surgical specialties GYN
 - 2.3 FTE OBGYN generalists
- No examination rooms available for additional physicians in current space, limiting ability to recruit additional faculty to meet network affiliate needs
- Ambulatory schedule must complement OR block schedule for OBGYN specialists, thus schedule smoothing is not solution
- Unit has not been renovated since opening in 1990, is five years past useful life
- Unit has inefficient layout, large waiting rooms, private offices, and an insufficient number of examination rooms
- Nurses have no space to see patients, and utilize examination rooms to give injections and counsel patients, using time from physician and NP schedules, decreasing number of patients seen and causing delays in throughput

Objectives of Project

- Leadership development goal:
 - Help new ambulatory leadership roles become visible
 - Develop a participatory process to determine needs and engage front line staff in change
- Re-design outcome goal:
 - Design ambulatory space that allows a larger number of providers to see more patients per square foot without increasing footprint of unit
 - Improved process for staff that fosters team-based care and better ergonomics
 - Patient- friendly environment that encourages partnership with providers and education

Methods

- Architectural and lean process consulting firm engaged
- Assessment of processes for opportunities to find standardization performed
- Gemba walks with consulting team and leadership team performed
- Throughput analysis diagramed to show problem/bottleneck areas
- Current state volume and floor map created
- Inputs for improvement suggestions from staff compiled
- Simple suggestions immediately implemented - additional workstations, printers, equipment stocking routine
- Major pilot improvement of standardized check out process implemented
- Volume and space analysis conducted to demonstrate shortfalls
- Goals set for space expansion within allotted square footage
- Process analysis reviewed for workflow in current space to inform re-design
- Architectural plan designed to match workflow and volume

Outcomes/Evaluation Strategy

Table 1: OBGYN ambulatory volume and projected growth

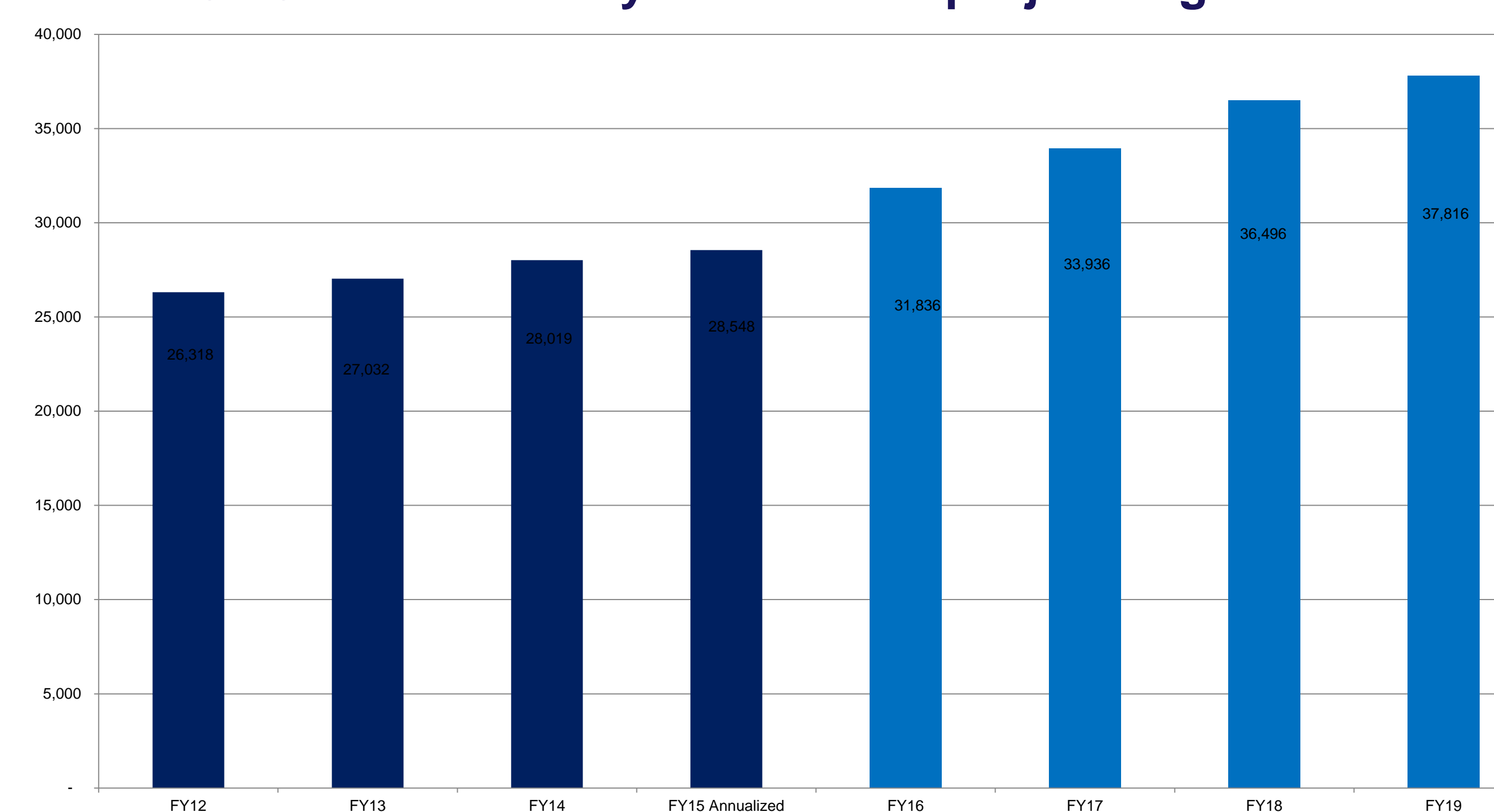
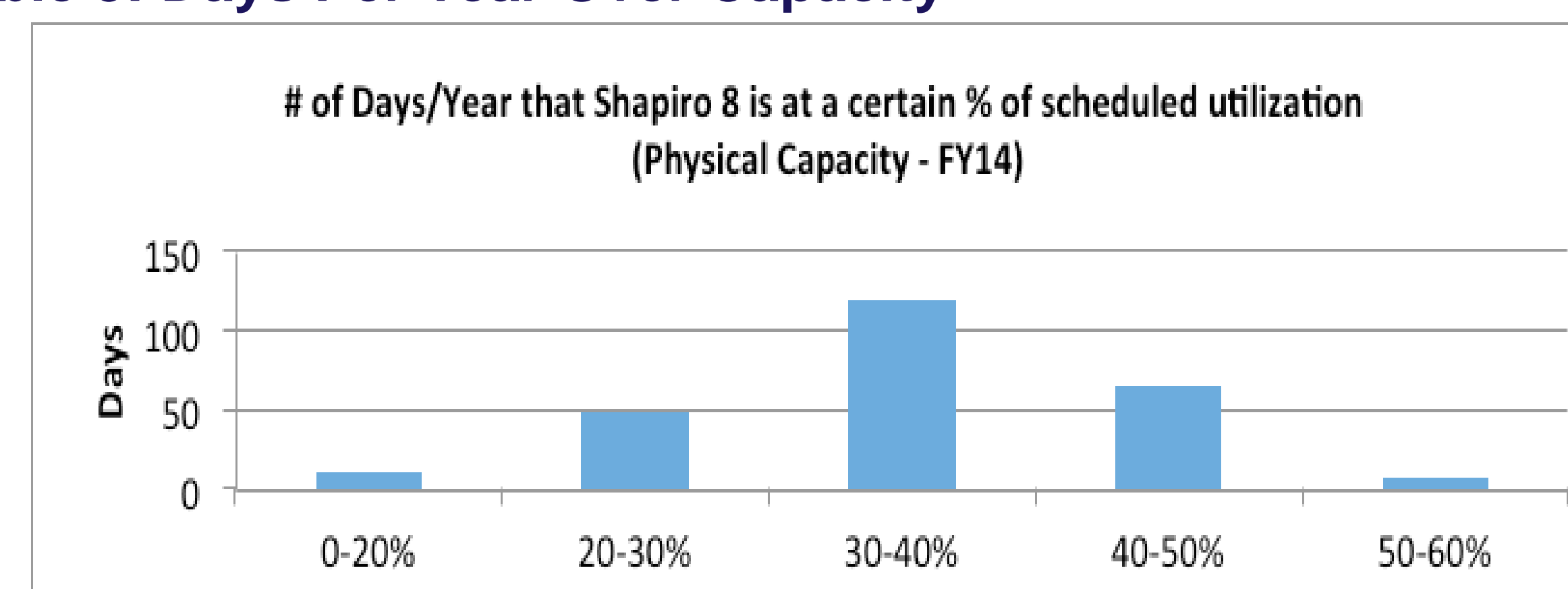


Table 2: Examination room capacity by day of week:

	Monday	Tuesday	Wednesday*	Thursday	Friday
AM - Rooms Needed	21	21	15	17	23
PM - Rooms Needed	23	19	22	19	18
Total Rooms Available	20	20	20	20	20

Red = over capacity Green = under capacity
 (*Wednesday morning didactics and Grand Rounds limit provider availability)

Table 3: Days Per Year Over Capacity



Outcomes/Evaluation Strategy (continued)

Sg2 forecasts – Sg2 is a consultant in healthcare business intelligence and market analytics, and forecasts 7% increase in GYN E&M visits by 2019 in Eastern MA, given national forecasts, local demographics.

- Obstetrics:**
 - Slight growth for outpatient obstetrics services as care redesign encourages high-touch prenatal care
 - BIDMC affiliation relationships, network strategy may lead to even higher volume expectations
- Non-Malignant GYN:**
 - Significant growth in nonmalignant gynecology services.
 - Incontinence diagnostics/treatment will rise as population ages and stigma decreases
- Malignant GYN:**
 - 2.9% increase forecast due to:
 - Shift of minimally invasive surgeries from inpatient to outpatient
 - Increase in ovarian cancer cases

Summary/Conclusions

Next steps for project:

Present to hospital administration background data and return on investment analysis for consideration for funding

- Estimated Construction Costs: \$7,900,000
- Time to Payback: 14 years

Given high capital expense relative to return on investment and long time to payback, alternative short-term plan developed:

- Convert two non-clinical offices into 2 additional examination rooms
- Create private nursing/ multi-use private consult room out of underutilized alcove/open area
- Estimated Construction Costs: \$72,000
- Time to Payback: .18 years

Long term plan:

- Investigate off-campus clinical space options

Presented at the 2015 ELAM® Leaders Forum

