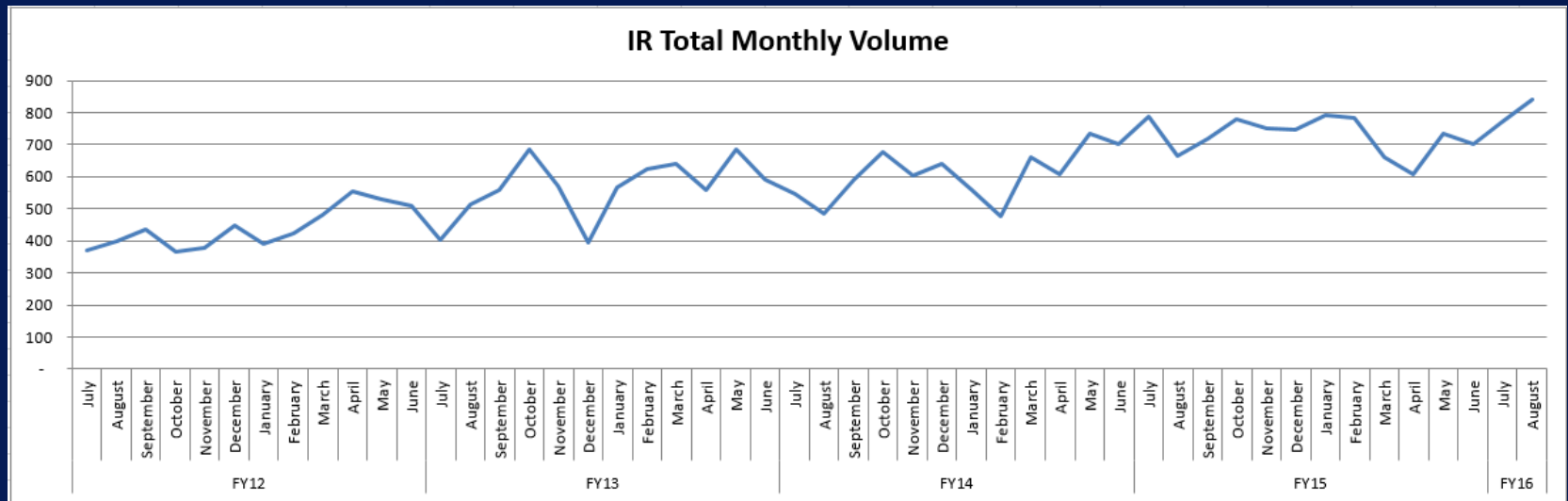


# Lean and Interventional Radiology SHS Webinar September 15, 2015 2pm

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P.L. J. Luther and Ada Warren Professor  
Chair, Radiology and Imaging  
Medical College of Georgia  
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Lean tools can be used to increase capacity and subsequent volume in Interventional Radiology without buying additional equipment

# VIR Procedure Volume



# What is Interventional Radiology?

- Image guided procedures
- X-ray guidance: Angiography suite, C-arm
- Ultrasound guidance
- CT guidance

# Angiography Suite



# CT



# Timeline: Physician

- March 2013 Moved from part time to full time physician with part time back up
- July 2013 Two additional full time physicians joined practice
- July 2014 One full time physician left; part time physician added for call
- July 2014 VIR Fellow (one year position) added

# Timeline Technologists

- No increase in technologists for past four years



# Timeline Nursing

- 2013-2015 added 3 FTEs of nursing

# Scheduling staff

- Added 1 FTE scheduling staff

# Timeline equipment

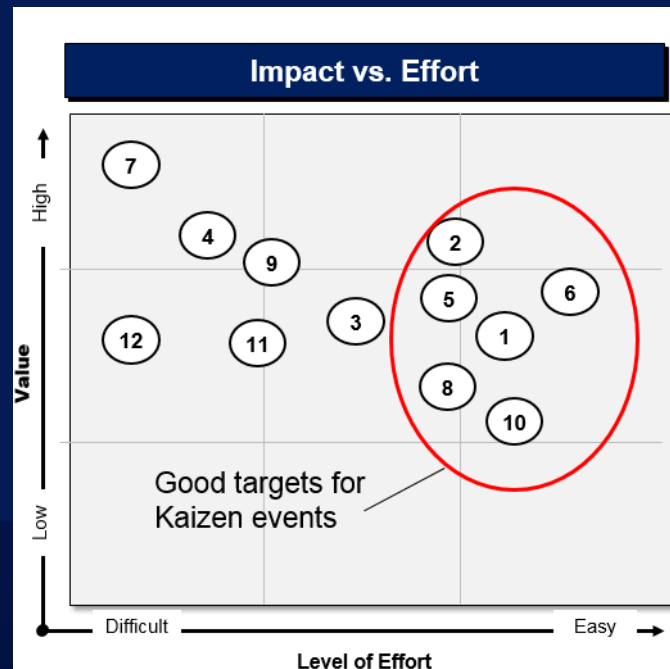
- Baseline (2013): One biplane Angiography suite; one single plane angiography suite, one c-arm, access to CT
- Replaced Single plane Angiography suite with biplane (redundancy)
- Added c-arm during replacement of suite
- June 2015 added CT scanner

# Workflow Analysis

- Philips Health consultation 2013
- Interviews
- Data form Radiology Information System
- Manual data collection
- On site observations
- External benchmarks

# Recommendations

- Twelve recommendations for improvement
- Identified six “easy” and “high value”
- Chose mix of “easy” and difficult



# Themes

- Focus on process changes
- Under our control
- Did not require permission
- Not implementing software
- No new equipment acquisitions

# Projects

1. Review and update procedure duration
2. Verify inpatient readiness prior to patient movement
3. Document procedure time and room usage
4. Create standing orders/protocols for patient prep (standard work)
5. Schedule C-Arm rooms for eligible procedures
6. Shift scheduling responsibility to schedulers

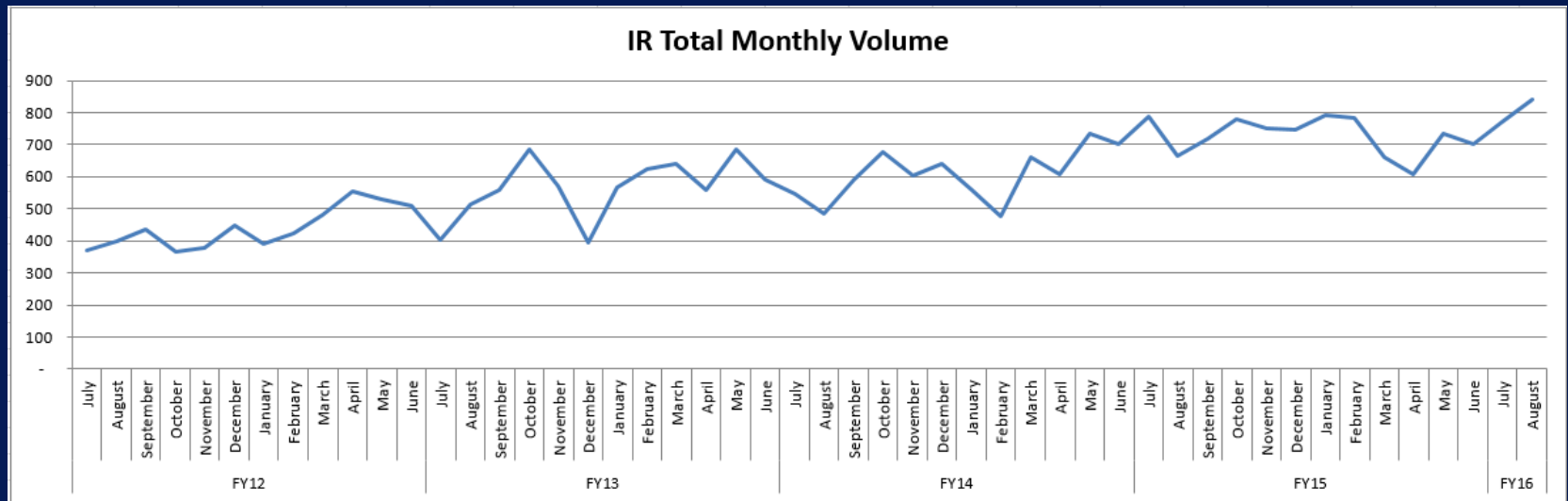
# Quality Unit Council-Vascular and Interventional Radiology

- Chair by Department Chair
- Chief of VIR
- Lead nurse
- Lead technologist
- Chief technologist
- Scheduler (new position)
- Met monthly and tracked progress/removed barriers

Topic	Action	Assigned To	Date of Origin	Date to Complete	Status	Resources Needed
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# VIR Procedure Volume



# Conclusion

- Opportunity exist to improve throughput and volume in Vascular and Interventional Radiology
- Not a short term process
- Improvements/ROI likely to cross fiscal years
- Culture/leadership matter

Thank you