Comparative Evaluation of Two Obstetrical/Gynecology Resident Bootcamps of Different Lengths

David Boes, DO, FACOOG
Salvatore Finazzo, DO, FACOOG
Jeff Postlewaite, DO, FACOOG
Cammie Cantrell, MA
William Corser, Ph.D, RN
History

• **Prior to 2014:** 1 day orientation/lectures/suturing (SCS)

• **2014 Bootcamp:**
  - Decision to implement to prepare incoming residents for osteopathic Ob/Gyn Residency in the Statewide Campus System
  - 13 residency programs
  - # 1st year residents 33

• **2015 Bootcamp:**
  - Decision to shorten to 3 days
Day 1:
- Intro to Research and Research Modules
- Professionalism
- Introduction to Deliveries
- Instrumentation in Labor and delivery
- Suture introduction - Ethicon speaker (2 hours)
- Introduction to OR Etiquette and First Assist
- Time-out/Fire Risk in the OR Suite
Agenda Day 2

- Suture Review and Practice (1 hour)
- Elogs
- Duty Hours
- Handoffs
- Fetal Monitoring (2 hours)
DAY 3 (skills)

• **Suture** Review and Practice (1 hour)
• **Cx Exam** and **Amniotomy**
• **FSE** Placement and **IUPC** Placement
• **NRP** Review and **Megacode** Review
• **Bus to Simulation Center:** (skills)
  – Complete Megacode Certification and Practice
    Cx Exam, Amniotomy, FSE, and IUPC placement
DAY 4

• High Reliability and Safety
• Introduction to Episiotomy Repair
• Hands-on Beef Tongue model on episiotomy repair
• Normal Labor and Delivery
DAY 5 (1/2 day)

- **VAGINITIS**: Microscope usage with didactic lecture as well as practical usage and practice, ID of *wet prep slides*.

- **OB Triage topics**: *(interactive/vignettes)*
  - Vaginal bleeding
  - PTL evaluation, Labor evaluation
  - MVA and/or *abdominal pain* evaluation in the pregnant patient
  - Vaginitis
Assessments

• A 33-item **self-assessment**
  – **Day 1** @registration &
  – **Day 5** @check out

• **Pre and Post** test for 3 lectures:
  – Normal Labor and Delivery
  – Time Out and fire score
  – Patient Handoff

• 3 month follow up: PD and PGY-1
2015 bootcamp changes:

• Compressed to 3 days
  – Cost considerations
  – Time considerations
  – Feedback from residents

• Consideration that each hospital will have its own requirements for orientation

• Bootcamp is voluntary, but strongly encouraged (not yet under the employment of resident contracts, coming from various DO schools)
OB/GYN Orientation Boot Camp
June 10-12, 2015

DAY 1

• Introduction to Research (modules/SCS)
• Professionalism/Social Media
• Introduction to Normal Labor and Delivery
• Fetal Monitoring I & II: (2 ¾ hours)
• Introduction to Suturing – Ethicon (2 hours)
• Time-Out in the OR – Proper OR Etiquette
Day 2

• Safety Issues
• Suture Review
• NRP and Mega Code Review
• Bus to Sim Center: (afternoon)

• Skills:
  – Amniotomy, Internal Monitor Placement, and Introduction to LARCs and ESSURE
  – Vaginal delivery, NRP
DAY 3

- eLogs, Duty Hours, Hand-Offs
- Cervical Exams and Internal Fetal Monitors
- Surgical Assisting (CS)
- **Obstetrics Triage**: Case vignettes/interactive
  - First Trimester Bleeding, PTL, N/V in Pregnancy, MVA, Abdominal pain, vaginitis
- Introduction to **Episiotomy/laceration Repair**
  - “Hands-on” beef tongue model for episiotomy repair
- Triage of **abnormal vaginal discharge**:
  - Point of care evaluation: Wet Preps, pH.
  - Vaginitis: diagnosis and treatment
- Dating the pregnancy
- Professional Organizations for Ob-Gyn (AOA, ACOOG, AOBOG, ACGME, ACOG, ABOG)
Importance for Medical Education

3 day bootcamp:

• Overall equivalent outcomes compared to 5-day boot camp was demonstrated by resident self-assessment scores,

• These results suggest that the shorter three-day boot camp may serve as a more cost-effective means of achieving equivalent first-year OB/Gynecology resident skill outcomes.

• Duration and items covered may be adjusted to fit institutions needs and resources.
Methods of Comparison

The purpose of these analyses was to examine the self-assessment rating differences in two cohorts of first-year OB/GYN residents after equivalent “boot camps” of two different lengths:

• a five-day 2014 camp (n = 33 resident respondents) and
• abbreviated three-day 2015 boot camp (32 residents).

Methods

Respondents from both camps were asked to complete an identical 25-item self-assessment survey using a 1 to 5 Likert scale at the end of their respective camp. Survey data from both cohorts were entered into an electronic S.P.S.S. 22 data set for analyses.
OUTCOMES

Mean per resident *pre-post self-assessment* scores:

- **Three-day boot camp** items increased by 0.1096 (SD 0.5487), over double (although not statistically significant) the amount of pre-post improvement difference of 0.0453 (SD 0.1628) obtained from the original **five-day camp**.
Responses for the six following items were most relatively increased from the 2014 to 2015 boot camps:

• “I can discuss the fire risk score and what it means to us and our patients;”
• “I am able to competently repair simulated lacerations of the perineum and simulated episiotomies;”
• “I understand the Duty Hour Rules, how to log them, and their significance;”
• “I can describe and perform the closure of first degree midline episiotomy;”
• “I can describe the important components of “handoffs” and their importance;”
• “I am aware of the Statewide Campus System Research Modules.”
• Notably, only one self-assessment item score decreased during the shorter 2015 boot camp compared to 2014:
DISCUSSION

- These results confirm that similar outcomes were achieved with a shortened boot camp experience for OB/GYN residents.

- Additional studies with larger resident samples of OB/GYN residents and faculty are needed to examine the most cost-effective formats and lengths of these types of boot camps currently offered to first-year residents across the nation.
2016—FUTURE DIRECTIONS

Planning is well underway for our Third Annual Ob/Gyn Boot Camp which will be held in June 2016 for our 33 OB/GYN newest residents. We intend to utilize the

• **APGO** Preparation for Ob-Gyn Residency Knowledge Assessment Tool (pre and post) &

• **Skills Assessments** of:
  – fetal monitoring strips
  – vaginal wet preps
  – suture and knot tying technique

• Tie outcomes assessments to milestones
CONCLUSION

• This study can be used to inform program directors and medical educators about planning of future Boot Camps.

• Variety of Models exist and are being developed around the country

• With the importance of documented Scholarly Activity in our current world and being community-hospital based programs, capturing data from projects such as these will be helpful to our PD’s and Core Faculty

• Importance of being tied to University in future for support and resources
Selected examples of self assessment tool:

- I can discuss the components involved in the conduction of normal labor and delivery
- I am able to identify the different types of suture materials
- I can discuss the different uses of the different types of suture materials.
- I can perform well done one- and two-handed square knot ties.
- I am able to competently repair simulated lacerations of the perineum and simulated episiotomies.
- I am able to competently perform interrupted, figure of eight, running and running interlocking wound closures.
- I am able to describe the steps in preparation for surgery and appropriate hand washing, gloving and gowning techniques.
- I can describe 3 aspects of an institution that utilizes high reliability standards and its beneficial effects on patients and staff.
3-month post assessment

• Residents:
  – 17 items on 1-5 Likert scale. Asked them to rank how helpful each topic was to starting residency.
  – 7 open-ended questions for feedback

• Program Directors:
  – Same 17 items. Did they notice a knowledge increase over previous years’ residents?
  – 9 open-ended questions for items such as: length, suggestions for improvement, etc.
ACKNOWLEDGEMENTS

The authors wish to thank the 14 OB/GYN Program Directors in the MSUCOM OPTI for their support and dedication to medical education and assistance in the coordination and implementation of the SCS OB/GYN Boot Camp:

- Thomas Alderson, D.O., OB/GYN Program Director, McLaren Macomb, Mt. Clemens, MI
- William Anderson, D.O., FACOOG, OB/GYN Program Director, Detroit Wayne County Health Authority
- Gustav Barkett, D.O., FACOG, FACOOG, OB/GYN Program Director, Mercy Health Muskegon, Muskegon, MI
- David Boes, D.O., FACOOG, OB/GYN Program Director, Metro Health Hospital, Wyoming, MI
- Salvatore Finazzo, D.O., OB/GYN Program Director, Henry Ford Wyandotte, Wyandotte, MI
- Angela Fleming, D.O., FACOOG, OB/GYN Program Director, Botsford Hospital, Novi, MI
- Craig Glines, D.O., Osteopathic Director of Medical Education and OB/GYN Program Director, Beaumont Hospital
- Joseph Kingsbury, D.O., OB/GYN Program Director, Genesys Regional Medical Center, Grand Blanc, MI
- Kurt Ludwig, D.O., FACOOG, OB/GYN Program Director, Henry Ford Macomb Hospitals, Clinton Township
- Anissa Mattison, D.O., Osteopathic Director of Medical Education and OB/GYN Program Director, St. Joseph Mercy Oakland, Pontiac, MI
- Todd Moyerbrailean, D.O., OB/GYN Lead Program Director, Alliance OB/GYN, East Lansing, MI
- Hamid Sanjaghsaz, D.O., FACOOG, OB/GYN Program Director, Garden City Hospital, Garden City, MI
- Robert Seiler, D.O., FACOOG, OB/GYN Program Director, McLaren Greater Lansing, Lansing, MI
- Patrick Woodman, D.O., MS, FACS, FACOOG, OB/GYN Program Director, St John Macomb-Oakland Hospital - Oakland Center, Warren, MI
ACKNOWLEDGEMENTS

THANKS TO MSU-COM-SCS EDUC. SPECIALISTS:

• CAMMIE CANTRELL
• WILLIAM CORSER
Comparative Evaluation of Two Obstetrical/Gynecology Resident “Boot Camps” of Different Lengths

Jeffrey D. Postlewaite DO FACOOG,1 David Boes, D.O., FACOOG,1 Salvatore Finazzo, D.O., FACOOG,2 Cammie Cantrell MA3 William Corser, PhD, RN 3

1Metro Health Hospital, Wyoming, MI, 2Henry Ford Wyandotte Hospital, Wyandotte, MI, 3Michigan State University Statewide Campus System, College of Osteopathic Medicine, East Lansing, MI.

Background

In an effort to more systematically prepare new osteopathic Obstetrical/Gynecology (OB/GYN) residents in Michigan starting their programs on July 1, our 13-program consortium initiated a five-day skills and competency boot camp in June 2014. To more efficiently use available resources, the boot camp was reorganized into a more compact three-day format during 2015 on the basis of three-month post-camp usability data obtained from 2014 residents and faculty.

Objective

The purpose of these analyses was to examine the self-assessment rating differences in two cohorts of first-year OB/GYN residents after equivalent “boot camps” of two different lengths: a five-day 2014 camp (n = 33 resident respondents) and abbreviated three-day 2015 boot camp (n=12).

Data Collection / Methods

Respondents from both camps were asked to complete an identical 25-item self-assessment survey using a 1 to 5 Likert scale at the end of their respective camp. Survey data from both cohorts were entered into an electronic S.P.S.S. 22 data set for analyses.

Methods

Respondents from both camps were asked to complete an identical 25-item self-assessment survey using a 1 to 5 Likert scale at the end of their respective camp. Survey data from both cohorts were entered into an electronic S.P.S.S. 22 data set for analyses.

Discussion

➢ These results confirm that similar outcomes were achieved with a shortened boot camp experience for OB/GYN residents.

➢ Additional studies with larger resident samples of OB/GYN residents and faculty are needed to examine the most cost-effective formats and lengths of these types of boot camps currently offered to first-year residents across the nation.

The overall equivalent outcomes obtained from the shorter three-day OB/Gynecology 2015 boot camp was demonstrated in stable resident self-assessment scores, without a sizable decrease in most all self-assessment items compared to the longer boot camp format.

Outcomes / Results

Mean per resident pre-post self-assessment scores for the shorter three-day boot camp items increased by 0.1096 (SD 0.5487), over double (although not statistically significant) the amount of pre-post improvement difference of 0.0453 (SD 0.1628) obtained from the original 2014 five-day camp. Responses for the six following items were most relatively increased from the 2014 to 2015 boot camps:

➢ “I can discuss the fire risk score and what it means to us and our patients;”

➢ “I can describe and perform the closure of first degree midline episiotomy;”

➢ “I understand the Duty Hour Rules, how to log them, and their significance;”

➢ “I can describe and perform the closure of first degree midline episiotomy;”

➢ “I can describe and perform the closure of first degree midline episiotomy;”

➢ “I am aware of the Statewide Campus System Research Modules.”

Notably, only one self-assessment item score decreased during the shorter 2015 boot camp compared to 2014:

➢ “I can discuss the importance and components of e-logs.”

Conclusions and Implications

These results suggest that the shorter three-day boot camp may serve as a more cost-effective means of achieving equivalent first-year OB/Gynecology resident skill outcomes.

This study can be used to inform program directors and medical educators about planning of future Boot Camps.

Planning is well underway for our Third Annual OG/GYN Boot Camp which will be held in June 2016 for our 33 OB/GYN newest residents. We intend to utilize the APGO Preparation for Ob-Gyn Residency Knowledge Assessment Tool and skills assessments of:

• fetal monitoring strips
• vaginal wet preps
• suture and knot tying technique

Acknowledgements

The authors wish to thank the 14 OB/GYN Program Directors in the MSUCOM-OPT for their support and dedication to medical education and assistance in the coordination and implementation of the SCS OB/GYN Boot Camp:

• Thomas Alderson, D.O., OB/GYN Program Director, McLaren Macomb, Mt. Clemens, MI
• William Anderson, D.O., FACOOG, OB/GYN Program Director, Detroit Wayne County Health Authority
• Gustav Barkett, D.O., FACOOG, FACOG, OB/GYN Program Director, Mercy Health Muskegon, Muskegon, MI
• David Boes, D.O., FACOOG, OB/GYN Program Director, Metro Health Hospital, Wyoming, MI
• Salvatore Finazzo, D.O., OB/GYN Program Director, Henry Ford Wyandotte, Wyandotte, MI
• Angela Fleming, D.O., FACOOG, OB/GYN Program Director, Botsford Hospital, Novi, MI
• Craig Glines, D.O., OB/GYN Program Director, Beaumont Hospital - Trenton, Trenton, MI
• Joseph Kingbury, D.O., OB/GYN Program Director, Genesys Regional Medical Center, Grand Blanc, MI
• Kurt Ludwig, D.O., FACOOG, OB/GYN Program Director, Henry Ford Macomb Hospitals, Clinton Township, MI
• Anissa Mattison, D.O., OB/GYN Program Director, St. Joseph Mercy Oakland, Pontiac, MI
• Todd Moyerbrakien, D.O., OB/GYN Lead Program Director, Alliance OB/GYN, East Lansing, MI
• Hamid Sanjaghsaz, D.O., FACOOG, OB/GYN Program Director, Garden City Hospital, Garden City, MI
• Robert Seiler, D.O., FACOOG, OB/GYN Program Director, McLaren Greater Lansing, Lansing, MI
• Patrick Woodward, D.O., MS, FACOS, FACOOG, OB/GYN Program Director, St John Macomb-Oakland Hospital - Oakland Center, Warren, MI

Knowledge Assessment Tool and skills assessments of:

• fetal monitoring strips
• vaginal wet preps
• suture and knot tying technique