

Faculty perceptions of entrustable professional activities-based resident evaluations in Obstetrics and Gynecology residency

Lord MG, Lawrence AA, Murchison AB, Johnson IM



Background

- 2014: ACGME Milestones introduced
- Incorporated into semi-annual review of resident performance
- Semi-annual report to ACGME
- Never intended to replace a program's evaluation process (although this is what has happened across the country)



Background

| Patient Care | | | | | | |
|--------------------------|--|--|---|--|---|---|
| Has Not Achieved Level 1 | Level 1 | Level 2 | Level 3 | Level 4 (Graduation Target) | Level 5 (Aspirational) | |
| | <ul style="list-style-type: none"> ▪ Demonstrates a basic knowledge of normal obstetrical care and common medical complications seen in pregnancy | <ul style="list-style-type: none"> ▪ Resident provides complete antepartum care for women with uncomplicated pregnancies ▪ Resident recognizes basic risk factors, symptoms, and signs of common medical complications (hypertension, diabetes, infectious diseases) ▪ Recognizes basic risk factors, symptoms, and signs of common obstetrical conditions. | <ul style="list-style-type: none"> ▪ Resident is able to manage common medical complications (hypertension, diabetes, infectious diseases) ▪ Manages common obstetrical complications (previous C/S, abnormal fetal growth, multifetal gestation) | <ul style="list-style-type: none"> ▪ Demonstrates a comprehensive understanding of the varying patterns of presentation and treatment options for a variety of medical and obstetrical complications ▪ Recognizes atypical presentations of medical and obstetrical complications ▪ Identifies indications for consultation, referral, and/or transfer of care for patients with medical and obstetrical complications ▪ Effectively supervises and educates lower level residents in antepartum care ▪ Collaborates and provides consultation to other members of the health care team in antepartum care. | <ul style="list-style-type: none"> ▪ Resident manages patients with complex and atypical medical and obstetrical complications ▪ Applies innovative approaches to complex and atypical antepartum conditions and implements treatment plans based on emerging evidence. | |
| ▲ Collapse ▲ | | | | | | |
| | ○ | ○ | ○ | ○ | ○ | ○ |

1. Antepartum Care and Complications of Pregnancy



Background

- Faculty consistently dissatisfied
 - “Time consuming to complete and try to figure out the rating scale.”
 - “Cumbersome to use, unsure if it conveys appropriate feedback to the resident”
- Residents dissatisfied
 - Difficult to interpret evaluations
- Grade inflation



There must be a better way...



CARILIONCLINIC

Entrustable Professional Activities

- “... identify the critical activities that constitute a specialty ... the activities of which we would all agree should be only carried out by a trained specialist.”

ten Cate O, Scheele F. Acad Med. 2007 Jun;82(6):542-7

Entrustable Professional Activities

- Part of essential work for a qualified professional
- Requires specific knowledge, skill, attitude
- Acquired through training



Chart 1

The Two-Dimensional Matrix Relationship Between Entrustable Professional Activities (EPAs) and General Competencies*

| | | EPAs | | | | | | |
|---------------------|---|---|-----------------|--------------------------------------|------------------------------------|--------------------|-------------------------------|---|
| | | Care of uncomplicated pregnancies | Normal delivery | Uncomplicated puerperium and neonate | The high risk complicated delivery | Perioperative care | Surgery estimated as low risk | |
| ACGME competencies† | The ability to provide adequate <i>patient care</i> | ● | ● | ● | ● | ● | ● | The overall assessment of competencies is not actually done. In stead, their presence is inferred from the assessment of sufficient EPAs. |
| | The possession and ability to apply <i>medical knowledge</i> | ● | ● | ● | ● | ● | ● | |
| | The ability to <i>learn from clinical practice and to improve it</i> | | | | ● | ● | | |
| | The possession and ability to apply <i>interpersonal and communication skills</i> | | ● | | ● | ● | | |
| | The ability and commitment to carry out <i>professional responsibilities</i> | ● | | ● | | ● | | |
| | The awareness of and ability to operate optimally within the <i>context, system, and resources of health care</i> | | | | ● | | ● | |
| | | <u>EPAs</u> are the focus of assessment, by observation, ratings or otherwise | | | | | | |

* EPAs for obstetrics–gynecology and Accreditation Council for Graduate Medical Education (ACGME) competencies are used as examples.

† The terminology is slightly adapted, to abide by a consequent use of competency terminology as the ability of a professional.

ten Cate O, Scheele F. Acad Med. 2007 Jun;82(6):542-7.



CARILION CLINIC

Levels of entrustment

Resident may act as a supervisor and instructor

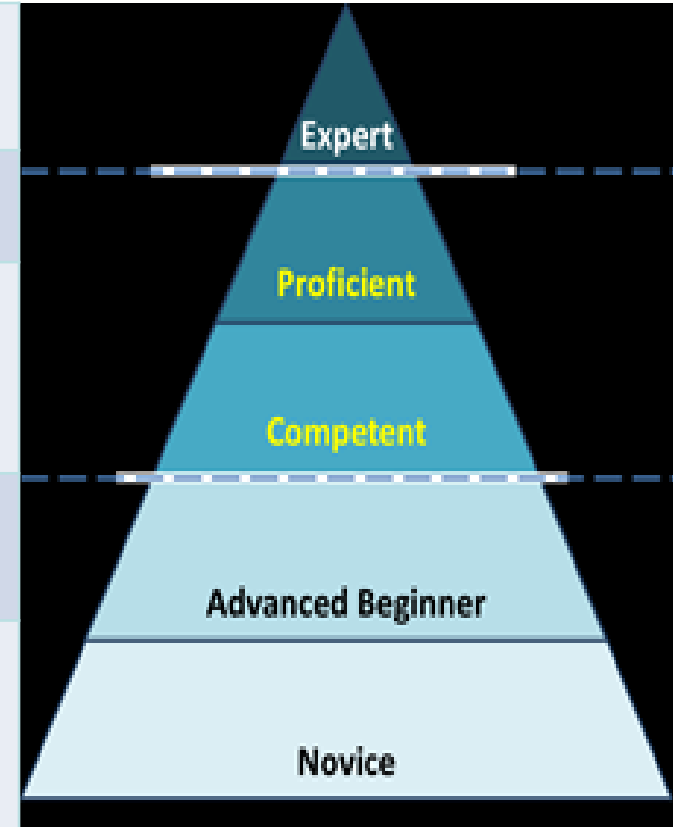
Resident may act independently

Resident may act under reactive supervision, i.e., supervision is readily available on request

Resident may act under proactive, ongoing, full supervision

Resident has knowledge and some skill, but is not allowed to perform the EPA independently

Dreyfus Competencies



EPA Evaluation System

- Creation of rotation-specific Entrustable Professional Activities (EPA) based evaluations
- EPAs mapped to the corresponding milestones.



EPA Evaluation System

- Goals:
 - Shorter evaluations
 - Questions easy to answer
 - Provide more meaningful feedback to the residents
 - Still provide milestone date to the CCC



OB EPA

After direct observation, I trust this resident to...

Recognize and manage obstetrical emergencies.

| Only with Complete Supervision | With Partial Supervision | With Minimal Supervision | Independently and supervise learners | Innovative practice |
|--------------------------------|--------------------------|--------------------------|--------------------------------------|---------------------|
| | | X | | |



Inpatient Obstetrics - OBGYN Milestones c. 2016

[Insufficient contact to evaluate](#) (delete evaluation)

| | Does not have basic knowledge | Basic knowledge, but requires complete supervision | Partial supervision | Minimal supervision | Practices independently, supervises lower level learners | Innovative practice |
|--|-------------------------------|--|-----------------------|-----------------------|--|-----------------------|
| 1. Demonstrates a comprehensive understanding of the presentation of medical and obstetrical complications of pregnancy, appropriately counsels patients and makes cost effective management plans, including consults when appropriate. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Provides care and communicates plans for women with abnormal labor or complex intrapartum conditions. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. Performs complicated vaginal deliveries/operative vaginal deliveries independently. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Appropriately consents patient for and performs a complicated cesarean. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. Recognizes, repairs and manages obstetrical lacerations. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Recognizes and manages obstetrical emergencies. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Provides postpartum care and directed counseling; recognizing and managing complications while considering cost and socioeconomic barriers. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. Manages the obstetrical service, teaching others and serving as a consultant. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. Consistently models compassion, integrity and respect for others, navigates ethically complex situations and coaches others. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Comments:

* Required fields  Option description (place mouse over field to view)

Reset Form

Submit completed evaluation

Submit

PC9-1: Verbalizes basic knowledge about common contraceptive options.

ICS1-1: Demonstrates adequate listening skills. Communicates effectively in routine clinical situations

GYN 3. Effectively manage complications of pregnancy terminations and ectopic pregnancy.

Basic knowledge but requires complete supervision

ICS3-1: Understands The importance of informed consent

PROF3-1: Understands the importance of respect for patient privacy and autonomy Understands the ethical principles of appropriate physician relationships



Study Aim

To assess faculty perceptions of the milestones-based tool, the EPA-based tool, and to compare the two to determine whether the EPA-based tool represents an improvement.



Methods

- Prospective
- First anonymous survey sent to faculty
- Relevant Entrustable Professional Activities were developed and were “mapped” to the milestones



Methods

- The milestone-based evaluations tool were replaced with a new evaluation tool based on Entrustable Professional Activities
- Second anonymous online survey



Results

- 75% of faculty completed the pre- and post-intervention survey.
- Faculty overwhelmingly preferred the EPA-based evaluation system.
- Faculty consistently
 - rated the new tool as **easier to use**,
 - stated they better **understood the rating scale**
 - and said that completing the new evaluations **fit better into their workday**.



Results

Comments:

- 20% of respondents described the milestones-based tool as “cumbersome”
- Subspecialists noted that “Most of the categories as currently written are not applicable to my subspecialty.”



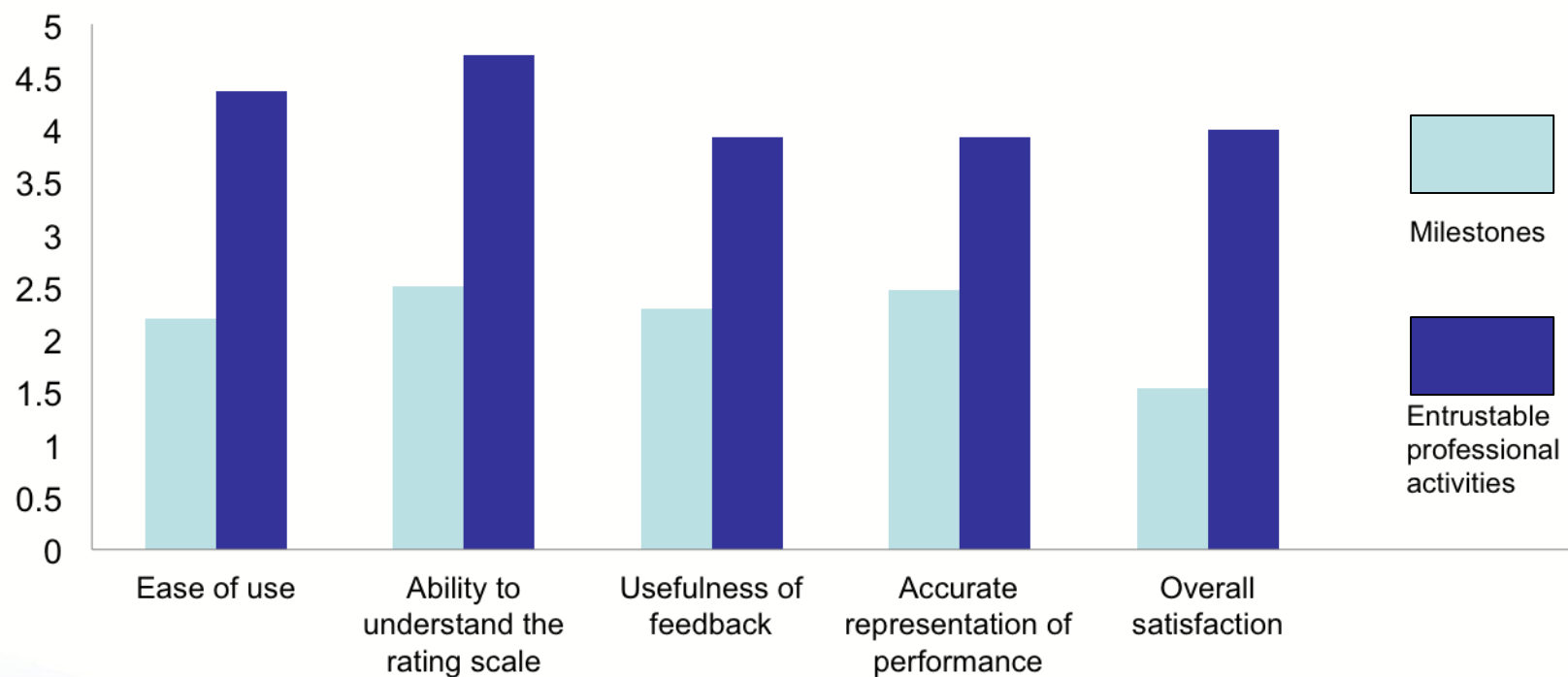
Results

- Faculty described the new tool as “efficient and appropriate” and “easy to complete and focused.”



Results

Mean rating on a 5-point Likert scale of disagree (1) to strongly agree (5)



Conclusion

While semi-annual reporting of resident performance based on the milestones is required, Entrustable Professional Activities provide a **more user-friendly way to complete resident evaluations**, which can still be mapped to the milestones for generating semi-annual milestone reports.



Acknowledgements

Special thanks to Ellen Lockhart, MS, who contributed statistical analysis to this project.



References

van Loon KA, Teunissen PW, Driessen EW, Scheele F. The Role of Generic Competencies in the Entrustment of Professional Activities: A Nationwide Competency-Based Curriculum Assessed. *J Grad Med Educ.* 2016;8(4):546-552.

Ten Cate O. Nuts and bolts of entrustable professional activities. *J Grad Med Educ.* 2013;5(1):157-158.

Carraccio C, Englander R, Gilhooly J, et al. Building a Framework of Entrustable Professional Activities, Supported by Competencies and Milestones, to Bridge the Educational Continuum. *Acad Med.* March 2016. doi:10.1097/ACM.0000000000001141.

Kwan J, Crampton R, Mogensen LL, Weaver R, van der Vleuten CPM, Hu WCY. Bridging the gap: a five stage approach for developing specialty-specific entrustable professional activities. *BMC Med Educ.* 2016;16:117.



Questions?



CARILIONCLINIC