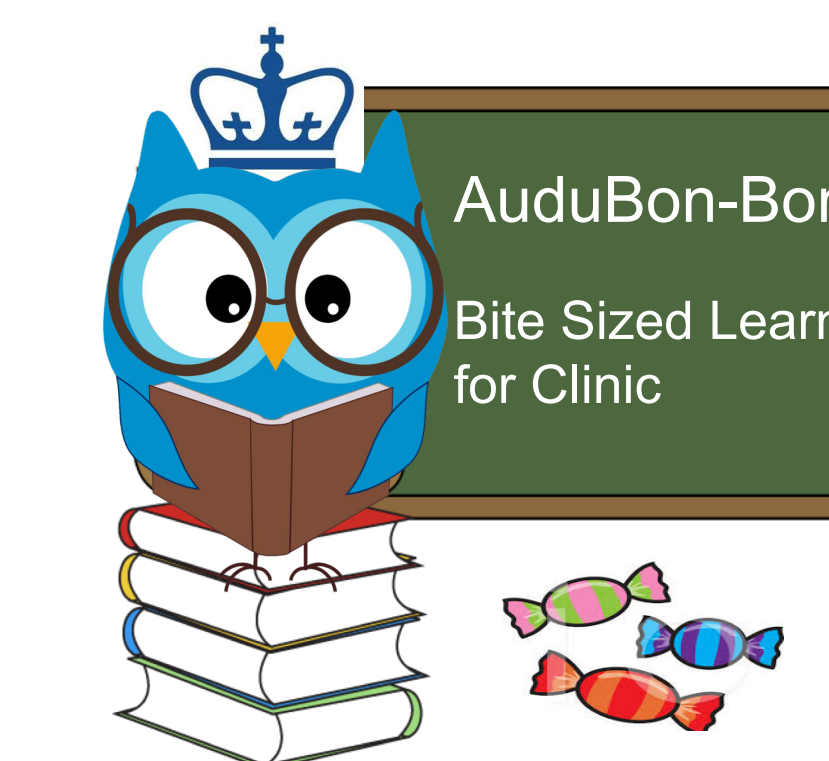


# Bold & Bite-Sized Learning Bonbons for Residents and Students in the Ambulatory Obstetrics & Gynecology Clinic

Elizabeth Will, MD<sup>1</sup>, Hemangi Shukla, DO, MS<sup>2</sup>, Chloe Altchek, BA<sup>3</sup>, Tiffany Sia, MD<sup>2</sup>, Rini Ratan, MD<sup>2</sup>  
New York University Langone Medical Center<sup>1</sup>, Columbia University Medical Center<sup>2</sup>, Columbia University Vagelos College of Physicians & Surgeons<sup>3</sup>



## BACKGROUND

### Training of residents in Ob/Gyn demands a unique curriculum comprised of training in obstetrics, surgery, and office practice

- There has been little innovation in pedagogical methods in the area of Ob/Gyn office practice [1]
- The demands on ambulatory providers in the field have increased exponentially

### Lack of formal curriculum for Ob/Gyn residents in office practice

- Graduate surveys completed by outgoing residents consistently reflect a lower level of confidence and comfort in readiness for practice in the outpatient setting compared to inpatient Ob/Gyn care
- While other residency programs have compiled lists of educational goals in the outpatient setting, there are no examples of a focused Ob/Gyn curriculum for office practice in the literature [2-4]

## PURPOSE AND RESEARCH QUESTIONS

### Purpose:

1. Create a structured ambulatory curriculum for residents and students in Ob/Gyn that draws on recommendations from educational guidelines and is supplemented with topics emphasized in the literature
2. Implement the curriculum in “bite-sized” modules, in situ during clinic hours, utilizing a flipped classroom format
3. Analyze the educational utility and feasibility of implementing an ambulatory Ob/Gyn curriculum to enhance resident readiness for outpatient practice

### Research Questions:

1. Can 15-minute bite-sized teaching sessions be effectively integrated into the ambulatory Ob/Gyn clinic setting?
2. Do residents feel more comfortable with their knowledge base on a given ambulatory Ob/Gyn topic following the module?
3. Do residents feel more confident in their ability to counsel a patient on a given ambulatory Ob/Gyn topic following the module?
4. Are brief mixed media homework assignments in a flipped-format classroom helpful in teaching an ambulatory Ob/Gyn curriculum?

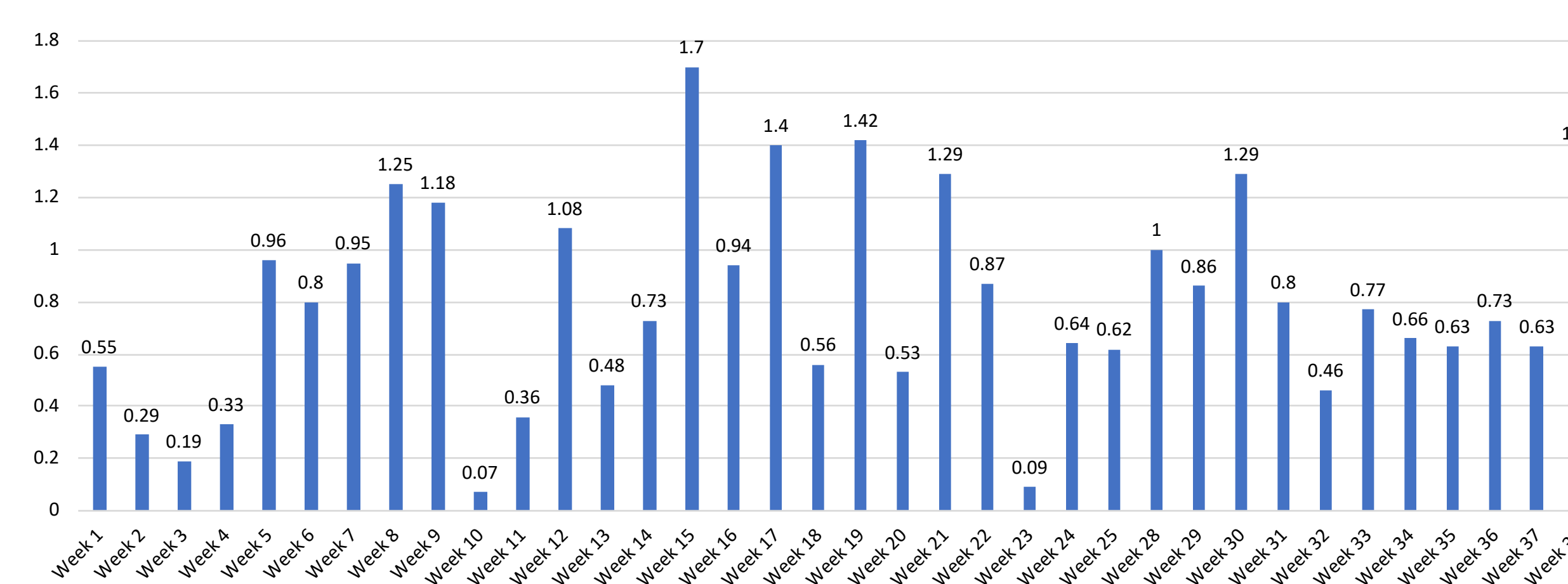
## METHODS

### Design

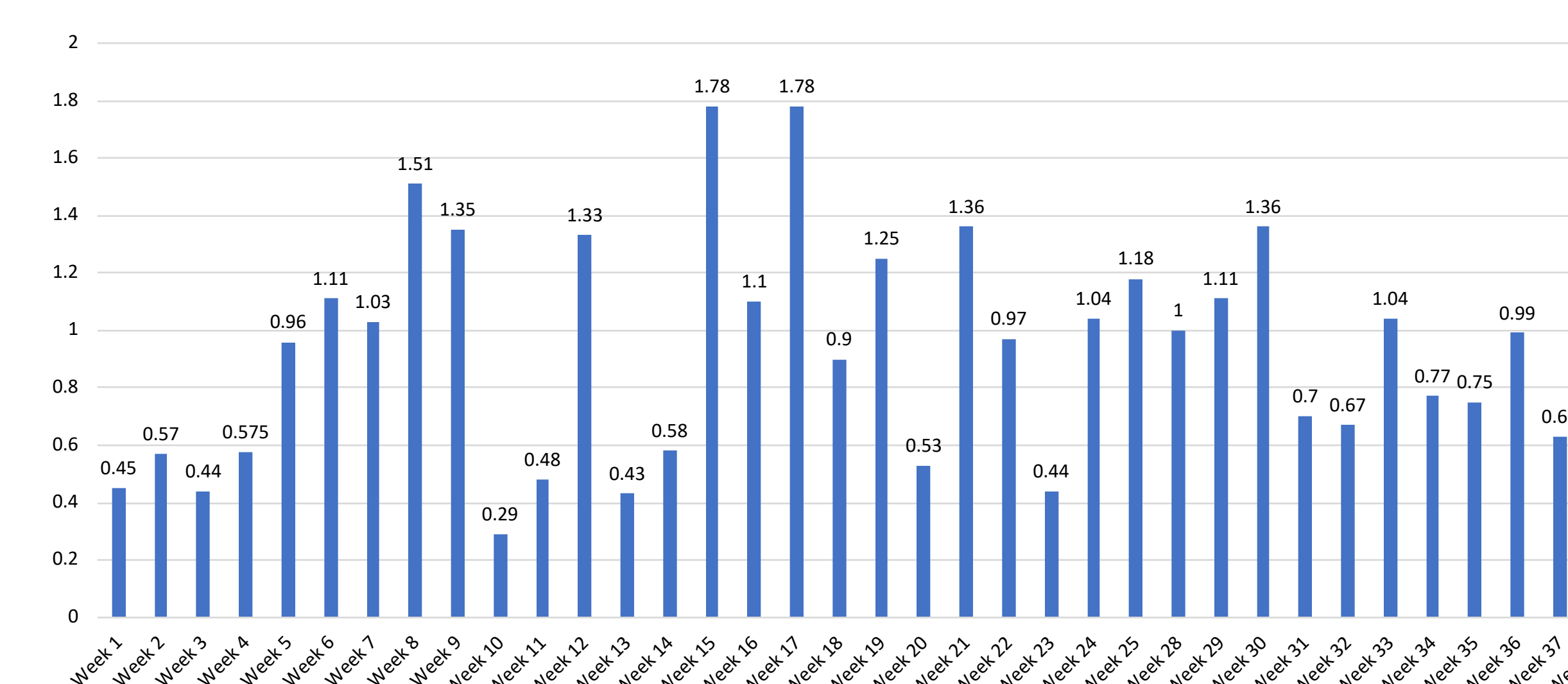
- Observational, survey-based study
- Enrollment of twenty-four residents and six academic specialists in Ob/Gyn

### Analysis

- Descriptive and inferential statistical analyses



**Graph 1:** Mean Change in Resident Comfort With Knowledge Base of Ambulatory Topic on Pre-Module and Post-Module Surveys



**Graph 2:** Mean Change in Resident Confidence Counseling a Patient Regarding Ambulatory Topic on Pre-Module and Post-Module Surveys

### MANAGEMENT

What are the available treatment options?

**Outpatient:**  
Ceftriaxone 250mg IM x1  
AND  
Doxycycline 100mg PO BID for 14 days  
• +/-  
Metronidazole 500mg PO BID for 14 days for any patients who have had recent gynecological instrumentation

**Inpatient:** IV tx x 24-48 hrs (until clinical improvement), then PO regimen  
Cefoxitin 2g IV q6h or Cefotetan 2g q12h  
AND  
Doxycycline 100mg PO or IV q12h  
Alt reg: Gentamicin (per body wt) AND Clindamycin 900 mg q8hrs

If outpatient therapy, re-evaluate patients within 3 days to assess for clinical improvement

### COUNSELING

- How will you counsel Ms. P.A.?
  - Importance of adherence to treatment
  - Abstinence from sexual activity until:
    - Treatment is completed
    - Symptoms have resolved
    - Partners have been tested and treated as well
- All patients diagnosed with PID should be screened for HIV, GC and CT
- Use of barrier contraception with all sexual encounters
- Screening sexually active asymptomatic young women for CT decreases rates of PID

## REFERENCES

1. Educational Committee. Council on Resident Education in Obstetrics and Gynecology. Educational objectives: Core Curriculum in Obstetrics and Gynecology, 11<sup>th</sup> ed. Washington (DC): American College of Obstetricians and Gynecologists (Council on Resident Education in Obstetrics and Gynecology); 2016.
2. Kacmar, J.E. and Weitzen, S., 2004. Identification of educational objectives for obstetrics and gynecology residents in the ambulatory setting. *American journal of obstetrics and gynecology*, 191(5), pp.1757-1761.
3. Farkas, A.H., Tilstra, S., Borrero, S. and McNeil, M., 2017. Establishing consensus on residency education in women's health. *Journal of Women's Health*, 26(1), pp.13-17.
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## RESULTS

### 15-minute bite-sized teaching sessions can be integrated into the ambulatory Ob/Gyn clinic setting

- Over the course of **36 weeks** of teaching, residents participated in the modules **334 times** (102 PGY1, 84 PGY2, 79 PGY3, 69 PGY4), and medical students participated in the modules **103 times**
- Average resident survey completion rate was **69.7%**, average preceptor survey completion rate was **74.6%**
- **56.6%** of modules had a run-time ≤ 15 minutes, **80.3%** of preceptor survey responses reported there was enough time to complete the module
- **98.3%** of preceptor survey responses reported learners were extremely engaged, **100.0%** of preceptor survey responses reported that information relayed in module was well-received by the learner
- **97.4%** of preceptor survey responses reported monthly allotment of work to create modules is appropriate and not burdensome
- **100.0%** of preceptor survey responses reported that curriculum is an effective means of teaching ambulatory care

### Residents feel more comfortable with knowledge of a given ambulatory Ob/Gyn topic following module

- Mean change in resident comfort from pre-module to post-module survey increased in **100.0%** (36/36) of modules
- Increase was statistically significant ( $p \leq 0.05$ ) in **72.2%** (26/36) of modules

### Residents feel more confident in ability to counsel patients on given ambulatory Ob/Gyn topic following module

- Mean change in resident confidence from pre-module to post-module survey increased in **100.0%** (36/36) of modules
- Increase was statistically significant ( $p \leq 0.05$ ) in **77.8%** (28/36) of modules

### Mixed media homework in a flipped-format classroom is helpful in teaching ambulatory Ob/Gyn curriculum

- Average homework completion rate is **70.8%**
- Average report of homework as a useful exercise is **83.5%**

## CONCLUSIONS

**This curriculum is a feasible and effective way to train residents in Ob/Gyn ambulatory practice**

**Promptness of module start time and run time are main challenges**

### Future directions:

- Evaluation of whether graduated residents feel better prepared for office practice as compared to classes that did not receive this curriculum