

# Prioritizing Resources for Third-Year Medical Students

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## Objective

To assess the effectiveness of using surveys as a means of prioritizing library resources for collection development.

## Background

In the third year of medical undergraduate education, students are undergoing their core clinical rotations. During this period, shelf and board exams in the core areas must be passed; therefore, access to relevant library resources is vital for successful completion.

Utilization of resources for this target group is often divided into two areas:<sup>1</sup>

1. Preparing for rounds with attending physicians or preceptors, which are followed by shelf exams;
2. Preparing for COMAT, COMLEX PE, and COMLEX CE board exams.

Because the DeBusk College of Osteopathic Medicine at Lincoln Memorial University follows the community-based distributive medical education (CDBME) model as described by Farnsworth et al (2012)<sup>2</sup>, library resources must be accessible electronically.

## Methods

- Learning resources survey data administered to third year medical students in the Spring of 2018 by Examination and Assessment Services was used in this study.
- These instruments are deployed in the Spring Semester of even-numbered years.
- A total of 103 students (48.3%) of the student population responded to the survey.
- Questionnaires included both Likert (pre-defined) and open-ended questions.
- Open-ended questions were coded using a modification for structuring qualitative data as described by Ose (2016)<sup>3</sup>.
- Resource categories were developed from the survey responses according to the MECE principle (Table 1). Assignments into categories were made independently by the authors. After comparison, any discrepancies were resolved.
- Individual items within a resource category were evaluated for limited or no library accessibility, and were subsequently assigned a barrier type (Table 2).
- Each barrier was countered with an action plan.
- However, since the aim of this study was to prioritize resources for purchase as part of the library's collection, only those items considered as financial barriers were analyzed and presented.

Table 1. List of student resources by category.

Code	Category List
1	Clinical Resource/POC
2	Database (Does not require access code)
3	Governing Board
4	Journals (Articles or Named Journals)
5	Other
6	Test Prep Question Bank
7	Textbook
8	Undecided
9	Website (Free or Subscription)

Table 2. Barriers to library acquisition of resources.

Barrier Type	Definition
Library Policy	Access to databases is restricted
Administrative	Owned/Administered by DCOM or Library
Financial	Library budget constraints
Communication	Uninformed of current collection

## Results

- Tables 3 and 4 show the percent response from pre-defined choices for general resources;
- Question banks and video resources were 3 to 6 times more likely to be used for board test preparations compared to other resources (Table 3).
- The main titles used for COMAT Shelf Exam preparation were initially given as a proportion of students using the resources, but converted to actual number of responses for the analysis (Table 4).

Table 3. General resources used for board exam preparation.

Question: Which of these general learning resource(s) were most helpful for your COMAT preparation?

n=103	2 <sup>nd</sup> -Year Course Lectures	Questions Banks	Point of Care	Review and Blueprint	Video Resources	Clinical Guides	Articles
OB/GYN	9.6%	32.8%	5.8%	8.2%	28.3%	8.9%	6.5%
General Surgery	2.0%	37.5%	6.7%	9.9%	31.2%	8.7%	4.0%
Family Medicine	3.6%	33.6%	7.6%	9.4%	25.6%	14.1%	6.1%
Internal Medicine I and II	6.4%	31.5%	10.4%	10.4%	25.2%	8.4%	7.7%
Pediatrics	5.7%	35.9%	6.9%	9.5%	30.9%	7.3%	3.8%
Behavioral Medicine	10.2%	37.1%	4.9%	9.0%	27.3%	8.6%	2.9%

Table 4. Top responses to pre-defined choices for specific resources used during each core rotation.

Question: What specific learning resource(s) were most helpful for COMAT Shelf Exam preparation?

n=103	Title	Proportion of Students	Number of Responses
OB/GYN	Essentials of Obstetrics and Gynecology	51.7%	53
General Surgery	Recall Series for Clerkship	12.5%	13
Family Medicine	Step Up To Medicine	77.4%	78
Internal Medicine I and II	Step Up To Medicine	30.4%	31
Pediatrics	BRS Pediatrics Board Review Series	11.8%	12
Behavioral Medicine	Diagnostic and Statistical Manual of Mental Disorders	16.4%	17
Emergency Medicine	Clinical Procedures in Emergency Medicine	42.9%	44
Osteopathic Principles and Practice	Osteopathic Approach to Diagnostics and Procedures; Foundations of Osteopathic Medicine	28.6%; 25.7%	29; 26

- Open-ended questions reflected the need for resources based on:
  - a. Recommendations by preceptors;
  - b. Independent Readings;
  - c. Additional items requested;
  - d. Exam preparation.
- Using the methodology described to structure qualitative data from survey results, responses to all open-ended questions were tabulated according to barrier type. In total, 113 and 303 responses were classified as financial barriers for open-ended questions and pre-defined choices, respectively (Table 5).

Table 5. Combined number of responses for resources considered as financial barriers.

Number of responses from Open-Ended Questions	Number of Responses from Pre-defined Questions	Barrier Classification
73	55	Library Policy
74	0	Administrative
113	303	Financial
8	0	Communication

## Conclusions

- This method provided a means to identify resource needs from open-ended questions.
- A final list (Table 6) of prioritized resources was developed from Tables 4 and 5, based on both demand and ease of purchase.

Table 6. Breakdown of responses into categories for the prioritization process.

Order of Priority	Category List	Title	Number of Responses*	Rationale
1 <sup>st</sup>	2	Step Up to Medicine; Surgical Recall; BRS Pediatrics; The Washington Manual; Boards and Wards	124	Publications found in LWV Health Library: Clerkship/Clinical Rotations considered as top priority major purchase.
2 <sup>nd</sup>	7	Diagnostic and Statistical Manual of Mental Disorders V	17	Ebook for unlimited users currently in process for circulation
3 <sup>rd</sup>	7	Hacker and Moore Essentials of Obstetrics and Gynecology	53	Ebook for 3 concurrent users within budget
4 <sup>th</sup>	7	Roberts and Hedge Clinical Procedures in Emergency Medicine	44	Ebook for 3 concurrent users within budget
5 <sup>th</sup>	6	COMQUEST	42	Wish List; Desirable, but not within budget.

\*Combined responses from pre-defined and open-ended questions.

## References

1. Cooper AL, Elnicki DM. Resource utilization patterns of third-year medical students. *Clin Teach*. 2011;8(1):43-47.
2. Farnsworth TJ, Frantz AC, McCune RW. Community-based distributive medical education: Advantaging society. *Med Educ Online*. 2012;17:8432. doi: 10.3402/meo.v17i0.8432.
3. Ose SO. Using Excel and Word to structure qualitative data. *J Appl Soc Sci*. 2016;10(2):147-162.

## Acknowledgements

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