

Six Month Follow-up Results for A Four-Week Residency Preparation Course "Boot Camp"

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BACKGROUND

- Literature pertaining to residency preparation courses (RPCs) or "boot camps" dates back to at least 2004¹
- There is growing acceptance of RPCs²
 - Better prepares medical students for day one of internship
 - Mitigate safety concerns around a "July Phenomenon"3
- RPC required for all graduating students from Michigan Medicine, so there was a mandate to develop a course for Family Medicine
- Previously described RPCs for primary care were ≤ 2 weeks, but we believe this was the first 4 week transition course in Family Medicine (FM)⁴⁻⁶
- Previously reported feedback data showed lukewarm reception from involved students⁷
 - We hypothesized that Six-Month Follow-up data would be more favorable
 - Six-Month follow-up data presented here

METHODS

- Course completed March 2018
 - Around the time of Match
 - Eight students, all matching in Family Medicine
- Course Content (see Figure 1)
 - Created with focus groups of interns and residency leadership within our department
 - Medical knowledge review
 - Clinical simulations of procedures
 - Mock paging curriculum

Assessments

- Pre-, post-, and Six-Month follow-up surveys of students' attitudes relative to the course and future practice of medicine
- Pre/post knowledge test and feedback on performance of procedures and paging were reported previously⁷
- Six-month follow-up survey completed September
 - Three months into residency, six months after course
 - Via Qualtrics to permanent email addresses they had provided
 - No remuneration

Date	Time	Topic			
	8A-9A	Intro, Orientation			
Mon/5	9A-12P	Pre-test (Aquifer)			
	1-2P	Approach to Respiratory Emergencies			
	2-5P	Respiratory Cases & Colonoscopy			
Tues/6	9A-10A	Approach to Paging			
	10A-12P 1P-2P	Screening (HME) Resilience			
	2P-4P	NG Tube and IV placement			
	4P-5P	Intro to Individual Development Plan			
Wed/7	10A-12P	Lumbar Puncture			
vvca, /	1P-3P	Billing/coding Basics			
	8A-12P	Thoracentesis (with IM)			
Thurs/8	1-2:30P	Resident as Teacher			
111015/0	2:30-5P	Self-directed learning (e.g., develop chalk talks)			
F.: /O	8A-12P	Co-precepting (Chelsea) KM, ES, SW			
Fri/9	1P-5P	Co-precepting (Chelsea) YB, BD, MK			
Date	Time	Topic			
	104 125				
Mon/12	10A-12P	ACLS Cases			
, 	1:30-5	ACLS Cases			
	0.1.1.	AIDAAE II III O			
T 140	9A-12P	NBME Health System Science Exam			
Tues/13	1P-3P 3P-5P	Efficiency, Intern Survival Skills Self-directed learning (e.g., iSim)			
	JF-JF	Self-directed learning (e.g., iSim)			
	8A-10A	Fam. Med. Grand Rounds			
Wed/14	10A-12P	FM Resident Conference			
	1P-5P	FAST/Abdominal Ultrasound			
	9A-10:30	Professionalism			
Thurs/15	10:30-12	Communication Skills (with staff and agenda setting w/ pts.)			
	1P-4P	Perineal Repair and OB Ultrasound			
- :/		MATCH DAY – no residency prep activities scheduled			
Fri/16					
Date	Time	Topic			
Mon/19	10A-12P	Note Writing			
	1P-5P	Co-precepting (Chelsea) CL, NZ			
Tues/20	10A-12P	Paracentesis			
	1P-5P	Self-directed learning (e.g., Aquifer cases)			
	9A-11A	Difficult Conversations (Breaking Bad News)			
Wed/21	11A-12P	EBM Overview			
	12:50-1:50 2-3P	Briarwood All Team Meeting Chalk Talks			
	2-31	Clidik laiks			
	9A-10A	Outpatient Management of Chronic Disease			
Thurs/22	10-10:30	Break/Room Change			
	10:30-12	Anx/Dep/Mental Illness			
	1P-5P	Self-directed learning			
	9-10	Shock			
F.: /22	10-11:30	Central Lines			
Fri/23	10-11:30 11:30-1:30	Central Lines Individual feedback			
Fri/23	10-11:30	Central Lines Individual feedback Paging Debriefing			
·	10-11:30 11:30-1:30 1:30-3	Central Lines Individual feedback			
·	10-11:30 11:30-1:30 1:30-3 3-5	Central Lines Individual feedback Paging Debriefing Self-directed learning			
·	10-11:30 11:30-1:30 1:30-3 3-5 Time	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D			
·	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam			
·	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium			
Date	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage			
Date	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam			
Date	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage			
Date Mon/26	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam			
Date	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20 4:20-5P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam Bugs and Drugs			
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Date Mon/26 Tues/27	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20 4:20-5P 9A-12P 1P-5P 8A-10A 10A-12P 1P-2P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam Bugs and Drugs Self-directed learning Self-directed learning Self-directed learning Fam. Med. Morbidity and Mortality Conf. FM Resident Conference Cervical Cancer Screening			
Date Mon/26	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20 4:20-5P 9A-12P 1P-5P 8A-10A 10A-12P 1P-2P 2P-3P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam Bugs and Drugs Self-directed learning Self-directed learning Fam. Med. Morbidity and Mortality Conf. FM Resident Conference Cervical Cancer Screening Vaginitis			
Date Mon/26 Tues/27	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20 4:20-5P 9A-12P 1P-5P 8A-10A 10A-12P 1P-2P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam Bugs and Drugs Self-directed learning Self-directed learning Self-directed learning Fam. Med. Morbidity and Mortality Conf. FM Resident Conference Cervical Cancer Screening			
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Date Mon/26 Tues/27	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20 4:20-5P 9A-12P 1P-5P 8A-10A 10A-12P 1P-2P 2P-3P 3P-4P 4P-5P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam Bugs and Drugs Self-directed learning Self-directed learning Fam. Med. Morbidity and Mortality Conf. FM Resident Conference Cervical Cancer Screening Vaginitis Contraception 101 Self-directed learning			
Mon/26 Tues/27 Wed/28	10-11:30 11:30-1:30 1:30-3 3-5 Time 10A-12P 1P-2P 2P-3P 3P-3:40 3:40-4:20 4:20-5P 9A-12P 1P-5P 8A-10A 10A-12P 1P-2P 2P-3P 3P-4P 4P-5P 5P-6P	Central Lines Individual feedback Paging Debriefing Self-directed learning Topic OB Triage, Day 1 L&D Death Exam Delirium Signout/Cross Coverage Stress Testing + Pre-operative Exam Bugs and Drugs Self-directed learning Self-directed learning Self-directed learning Vaginitis Contraception 101 Self-directed learning NBME Health System Science Review PCMH/Population Management			
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RESULTS

Demographics

- 8 total student participants
 - All fourth year medical students
 - 4 male, 4 female
- All applied to Family Medicine
- All matched into Family Medicine
- 6 (75%) responded to Six-Month Follow-up Survey

Narrative Comments

If you already used something from the course during internship, what was it?

- "Perineal lac (sic) repair"
- "Antibiotic coverage, pap smear guidelines"
- "Closed loop communication from paging curriculum"

Selected 6-Mos. Follow-up Survey Responses

	N	Mean (1=strongly disagree to 5=strongly agree)	Standard Deviation	Range			
I used something I learned from the RPC already	6 (75%)	4.33	0.47	4-5			
The RPC helped me learn to communicate with staff	6 (75%)	4.00	0				
The RPC helped prepare me for internship	6 (75%)	3.50	0.5	3-4			

What skill or knowledge did you attain in this course that you did not acquire from a sub-internship?

- "OB procedure training"
- "Placing central lines"
- "Procedure experience"
- "Revisiting primary care topics that I would not have seen on a sub-I"

"Outpatient cross-cover calls"

"How to respond to pages"

CONCLUSIONS

- RPCs are appreciated by students and teaching faculty alike²
- We created a novel four week long pilot course that can serve as a launching point for further development and study
- Immediate feedback was critical of the course design, especially the amount of time devoted to clinical simulation. After experience in residency, the course seemed to be viewed more favorably and time in clinical simulation was judged as one of the more valuable aspects of the course.

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