

DEVELOPING A PAIN FELLOWSHIP CURRICULUM BLUEPRINT TO MEET THE CHALLENGES OF AN EVER-EXPANDING FIELD AN EDUCATIONAL QI PROJECT

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INTRO

- The current ACME pain fellowship structure provides one year to:
 - Impart core knowledge and skills required for safe, professional practice
 - Prepare fellows for the board certification exam
 - Establish a foundational framework to evaluate and integrate new information, skills, and procedures
- Our quality improvement goal was to design a comprehensive fellowship curriculum blueprint that incorporates all necessary content requirements, leverages multidimensional resources and provides the framework for fellows to integrate new information.

METHODS

- This curriculum QI process included 3 phases:
 - Content Planning:** We identified and categorized the fellowship requirements and curriculum via the ACGME Program Requirements and the ABA Pain Medicine Exam Content Outline
 - Resource Identification and Mapping:** We mapped textbook chapters to the Pain Medicine Exam Content. We mapped additional resources, including PubMed articles, Anesthesia Toolbox resources, and ASRA Success Kits.
 - Schedule Planning:** We assigned curriculum content to one of four blocks themed around the components of Targeted Pain Treatment: ‘Accurate Diagnosis’, ‘Targeted Treatment’, ‘Focus on Function’, and ‘Education and Empowerment’

RESULTS

- The resulting pain fellowship curriculum blueprint (Figure 1) consolidates all required content, book chapters, other resources, and faculty assignments into an easy-to-read spreadsheet.
- This blueprint ensures comprehensive coverage of required information, with both fellows and faculty noting improved structure and understanding using the new curriculum.

DISCUSSION

- We aimed to create a pain fellowship curriculum blueprint that logically and structurally incorporates all required content while providing resources for deeper exploration where needed.
- By meticulously cross-referencing required content with available resources and structuring the content into a coherent framework, we have developed a living document that can be updated with new information.
- Future studies will include analyzing ACGME fellowship feedback and comparing fellow In-Training Exam scores before and after implementing the new curriculum.



We developed a pain fellowship curriculum blueprint based on ‘Targeted Pain Treatment’ learning modules that incorporates all necessary content requirements, leverages multidimensional resources and provides a framework for fellows to integrate new information.

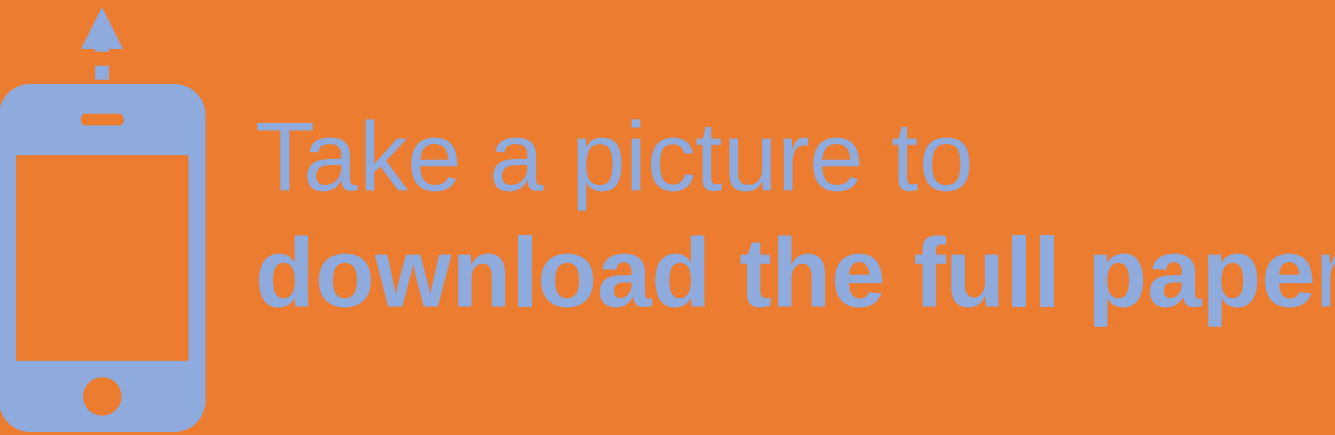


Figure 1:

Partial Pain Fellowship Curriculum Blueprint - Additional columns included in the blueprint but not shown in the figure include PubMed articles, Anesthesia Toolbox resources, Core and guest faculty assignments, and Pain Rounds multimedia content.

Block (1-4)	Pain Medicine Content Outline (summarized)	Pain Medicine Exam Blueprint	# of Questions	Avg # of Qs	Essentials Of Pain Medicine Book Chapters
Block 1 (Accurate diagnosis)	A1a	Anatomy, Physiology, and pharmacology of Nociception	2-4	2-4	1, 2,
Block 1 (Accurate diagnosis)	A1b	Development of pain systems	0-3	0-3	
Block 1 (Accurate diagnosis)	A2a	Clinical pain evaluation	2-4	2-4	4, 5,
Block 1 (Accurate diagnosis)	A2d	Psychosocial and cultural aspects of pain	2-4	2-4	6, 7,
Block 1 (Accurate diagnosis)	A2f	Imaging and Electrodiagnostic Evaluation	2-4	2-4	8,
Block 1 (Accurate diagnosis)	B1	Taxonomy: Classification of Pain Syndromes (1%)	1-3	1-3	3,
Block 1 (Accurate diagnosis)	B6	Visceral Pain (4%)	7-9	7-9	31,
Block 1 (Accurate diagnosis)	B7	Headache and Orofacial Pain (3%)	5-7	5-7	19, 20, 21, 22, 23, 32, 33, 34
Block 1 (Accurate diagnosis)	B8	Neuropathic Pain (8%)	15-17	15-17	27, 28, 29, 30, 50, 71
Block 1 (Accurate diagnosis)	B4	Musculoskeletal Pain (12.5%)	23-27	23-27	9, 24, 25, 65, 66
Block 2 (Targeted Treatment)	A2b	Placebo and pain	1-3	1-3	
Block 2 (Targeted Treatment)	A3a	Opioids	7-9	7-9	42, 43, 14, 15, 46
Block 2 (Targeted Treatment)	A3b	Antipyretic analgesics: Nonsteroidals, Acetaminophen and Phenazone derivatives	7-9	7-9	51,
Block 2 (Targeted Treatment)	A3c	Antidepressants and Anticonvulsants	7-9	7-9	48,
Block 2 (Targeted Treatment)	A3d	Other Analgesic Pharmacology	7-9	7-9	49, 55, 56,
Block 2 (Targeted Treatment)	A4a	General considerations: procedural Treatment	4-6	4-6	77, 78, 79,
Block 2 (Targeted Treatment)	A4b	Nonsurgical Stimulation Produced Analgesia	3-5	3-5	
Block 2 (Targeted Treatment)	A4c	Injections, Nerve blocks, and Lesioning	10-12	10-12	62, 63, 67, 68, 80, 81, 82, 83, 84, 70, 71
Block 2 (Targeted Treatment)	A4d	Neruomodulation (Implanted Devices)	7-9	7-9	73, 74, 75, 76,
Block 2 (Targeted Treatment)	A4e	Neuroablative pain Management	3-5	3-5	71, 72
Block 2 (Targeted Treatment)	B5	Cancer Pain and Cancer-Related Pain (6%)	11-13	11-13	34, 35, 36,
Block 3 (Focus on Function)	A1c	Research methodology of pain	2-4	2-4	
Block 3 (Focus on Function)	A2c	Functional outcomes and disability	1-3	1-3	10,
Block 3 (Focus on Function)	A4f	Regenerative Pain Management	1-2	1-2	
Block 3 (Focus on Function)	A5a	Cognitive-behavioral and Behavioral Interventions	4-6	4-6	59,
Block 3 (Focus on Function)	A5c	Physical Medical and Rehabilitation	4-6	4-6	58,
Block 3 (Focus on Function)	A5d	Work Rehabilitation and Return to Work	3-5	3-5	58, 10,
Block 3 (Focus on Function)	B2	Chronic Widespread Pain Syndromes (1%)	1-3	1-3	25, 26,
Block 3 (Focus on Function)	B3	Acute Pain, Pain due to Trauma, and Procedural Pain (6.5%)	12-14	12-14	5, 11, 12, 13, 16, 18,
Block 4 (Education & Empowerment)	A1d	Teamwork and Care coordination	2-4	2-4	
Block 4 (Education & Empowerment)	A1e	Legal and Regulatory issues	1-3	1-3	
Block 4 (Education & Empowerment)	A2e	sex and gender issues in pain	0-3	0-3	
Block 4 (Education & Empowerment)	A5b	Mental Health Treatment	4-6	4-6	59,
Block 4 (Education & Empowerment)	A5e	Complimentary and Integrative Therapies (CAM)	3-5	3-5	60, 61
Block 4 (Education & Empowerment)	B9	Special Cases (8%)	15-17	15-17	17, 37, 39, 40, 41, 44, 45, 46, 47