



The Contributions of Advanced Practice Clinicians to GME Trainees' Workplace Learning

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Learning Objectives

At the end of this session, participants should be able to:

1. Summarize existing literature describing how APCs are contributing to GME trainees' workplace learning through the lens of workplace guidance
 2. Explain key factors that enable APCs' educational contributions
 3. Identify how these contributions further optimize GME trainee learning in the workplace
 4. Describe ways in which we can support APCs and foster these interprofessional interactions
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Background

RIME Review

How Advanced Practice Clinicians Support Education *for* and Contribute to Education of Graduate Medical Education Trainees: A Critical Literature Review

Andrea M. Barker, MPAS, PA-C, Abigail W. Konopasky, PhD, Lara Varpio, PhD, Michael Soh, PhD, Brian R. Poole, MD, and Renée E. Stalmeijer, MSc, PhD

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How many of you on this session work on teams with ACPs-PAs and NPs?

For ACPs on the session how many of you interact with clinical teams with trainees?

For ACP leaders joining us, any comments on your experiences with GME education?

Introduction

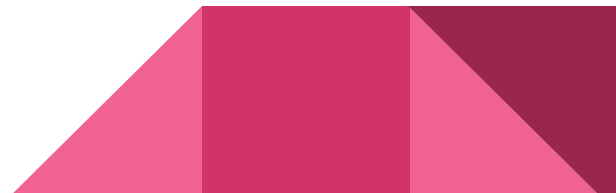
“Trainee” = intern, resident, fellow

Clinical environment for GME trainees' workplace learning has evolved

Increasing presence of PAs and NPs (Advanced Practice Clinicians, APCs)

“Resident substitute” → integrated team member = more workplace interactions

APCs' effect on trainee learning is gaining attention



Introduction

Focus on how APCs *enable* education *for* trainees

Little attention on direct contributions of APCs in *education of* trainees

Further optimize trainees' educational experiences in complex workplace

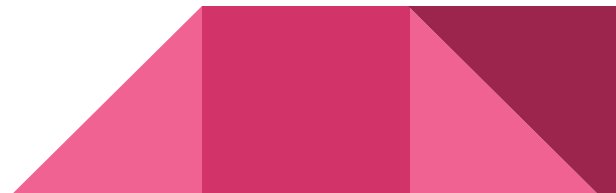
Consider all potentially valuable APC contributions to trainees' education



Purpose

Examine and synthesize literature on APCs' contributions to trainees' learning

1. How do APCs contribute to GME trainees' workplace learning?
2. What factors enable APCs' contributions?



Method: Critical Literature Review

Systematic or Scoping → collect and systematically report or map

Critical → collects, reports, AND analytically evaluates and interprets findings

Not related to critical theory

Apply existing theory or frameworks to inform data analysis

Informed by authors' clinical and research expertise

Reflexivity

Clinical and educational experience



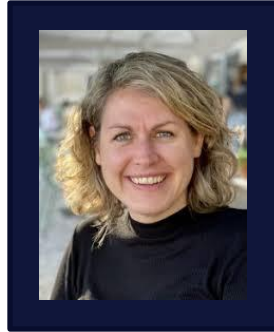
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Brian Poole
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Research expertise Medical education, workplace learning, IPE



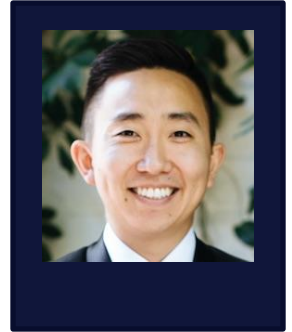
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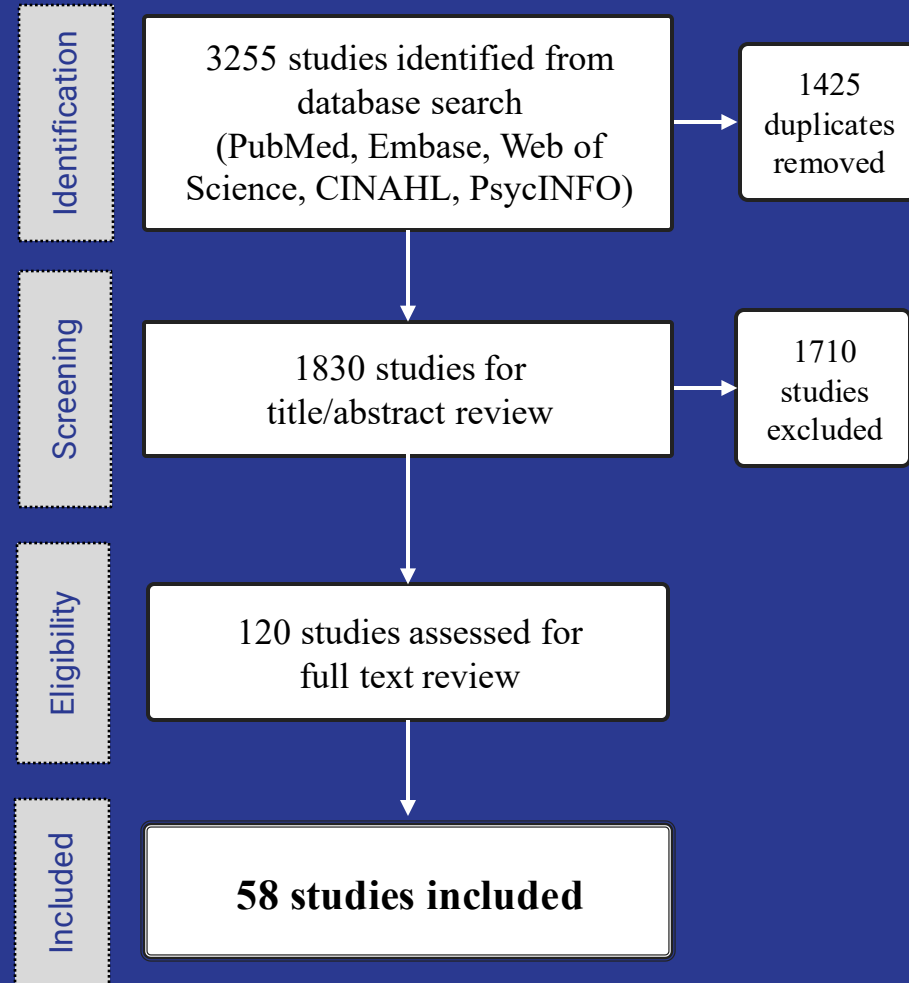
Search Strategy

Inclusion Criteria

Involved **APCs** and **GME** trainees

Interacting in **workplace**

Included **learning** or **education**



Synthesis: Framework Selection

Operationalize APC contributions using
workplace guidance:

Learning through participation

Experienced members guide novices

Billett S. Toward a Workplace Pedagogy: Guidance, Participation, and Engagement. *Adult Education Quarterly*. 2002;53:27-43.

Jansen et al. (2023) workplace guidance

Exploring nurses' role in guiding residents' workplace learning: A mixed-method study. *Med Educ*. May 2023;57(5):440-451.

Revised for APCs

Included

58 studies included



Framework Selection

Data Synthesis

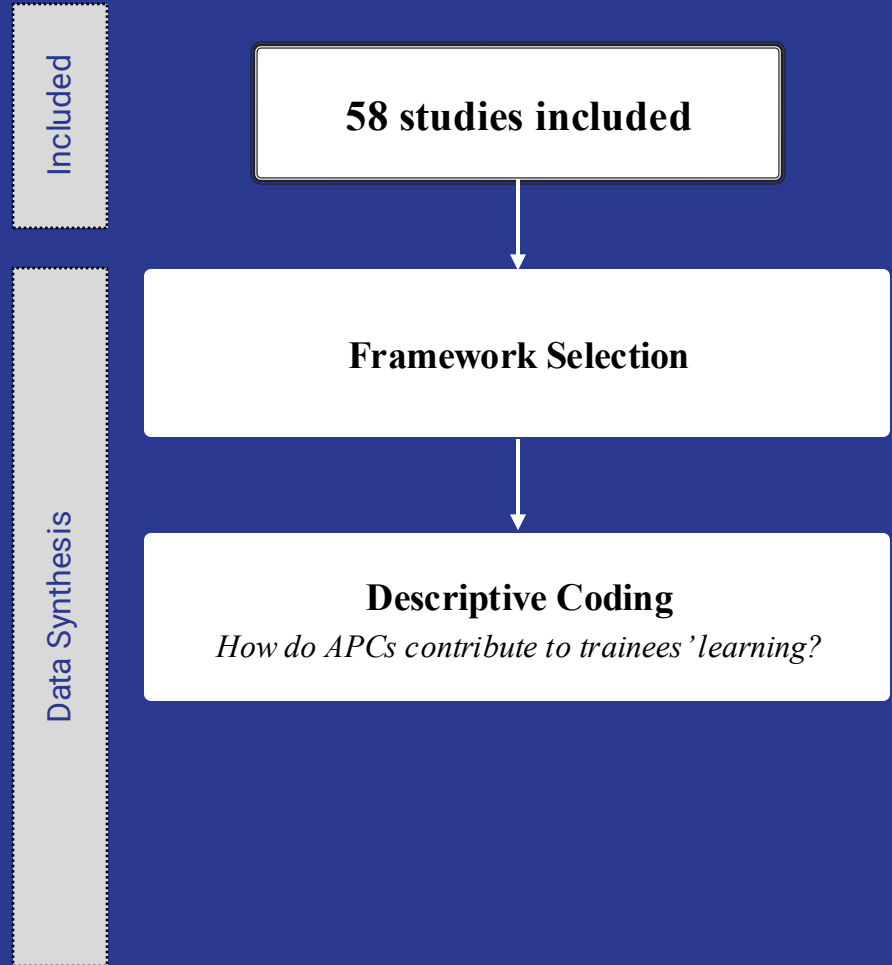
Synthesis: Descriptive Coding

Jansen et al. (2023) domains:

- Learning from patient care
- Demonstrating
- Support
- Socialization
- Feedback
- Evaluation

Iterative process

Added “unspecified contributions”



Synthesis: Reflexive Thematic Analysis

Identified factors enabling contributions

Extracted descriptions of factors

Inductively analyzed excerpts for themes

Included

58 studies included

Framework Selection

Descriptive Coding

How do APCs contribute to trainees' learning?

Reflexive Thematic Analysis

What factors enable APC contributions?

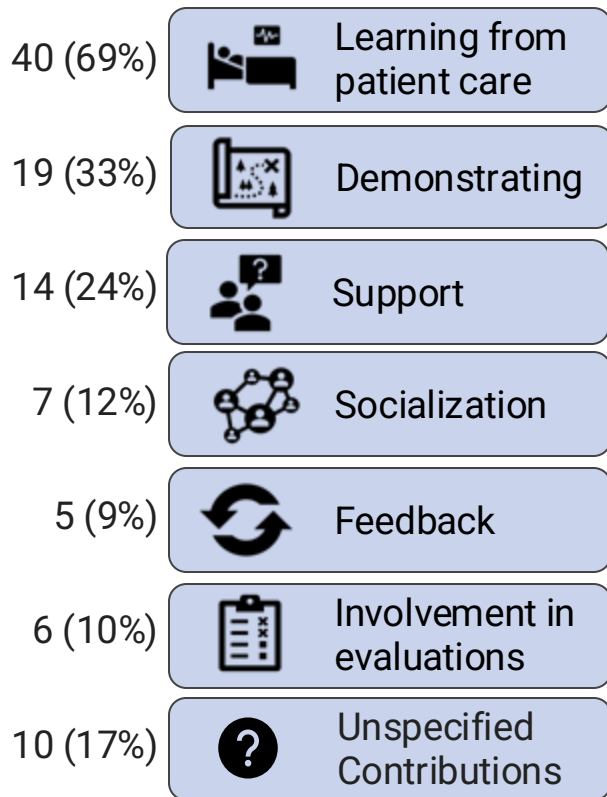
Data Synthesis

Results

Descriptive Category	N (%)
Corpus = 58	
Specialty	
Surgery, general and subspecialty	26 (45)
Adult internal medicine, general and subspecialty	12 (21)
Pediatric medical and surgical specialties	12 (21)
Family medicine	5 (9)
Critical care	3 (5)
Emergency medicine	2 (3)
Burn medicine	2 (3)
Obstetrics and gynecology	2 (3)
Anesthesiology	1 (2)
Ophthalmology	1 (2)
Study Location / Location of First Author	
United States	50 (86)
Canada	5 (9)
United Kingdom	3 (5)
APC Population	
PA + NP combined	24 (41)
NP only	23 (40)
PA only	11 (19)
Perspectives Represented in Study	
Trainee	22 (46)
Attending physician / GME faculty	14 (29)
APC	12 (25)
Aim of Study	
Broad exploration of APCs in GME	48 (83)
Focused exploration of APCs' contributions to trainee learning	10 (17)

Results – Descriptive Coding

How do APCs contribute to GME trainees' workplace learning?



Results – Descriptive Coding

40 (69%)




Learning from
patient care

Taught about relevant medical knowledge & skills

Guide bedside and OR procedures

Identified educationally valuable cases

Results – Descriptive Coding

40 (69%)  Learning from patient care

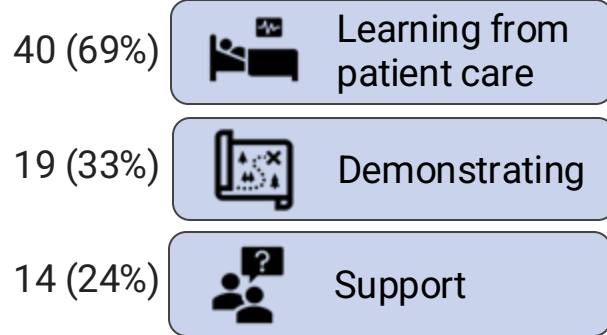
Patient care coordination

19 (33%)  Demonstrating

Navigate the clinical system and EHR

Manage time and workflow

Results – Descriptive Coding

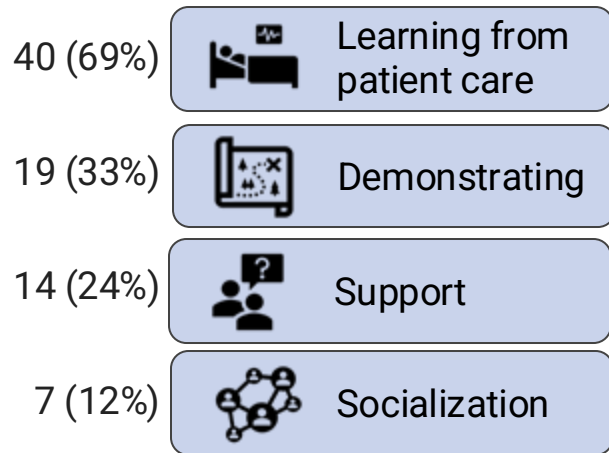


Offer professional and emotional help

Create a safe learning environment

Reassure and encourage

Results – Descriptive Coding

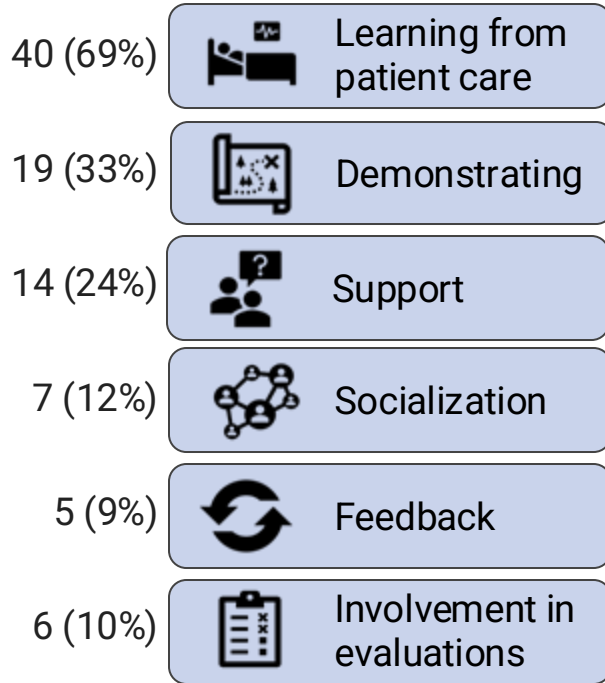


Familiarize with team structure

Facilitate workplace interactions

Prepare for attending preferences

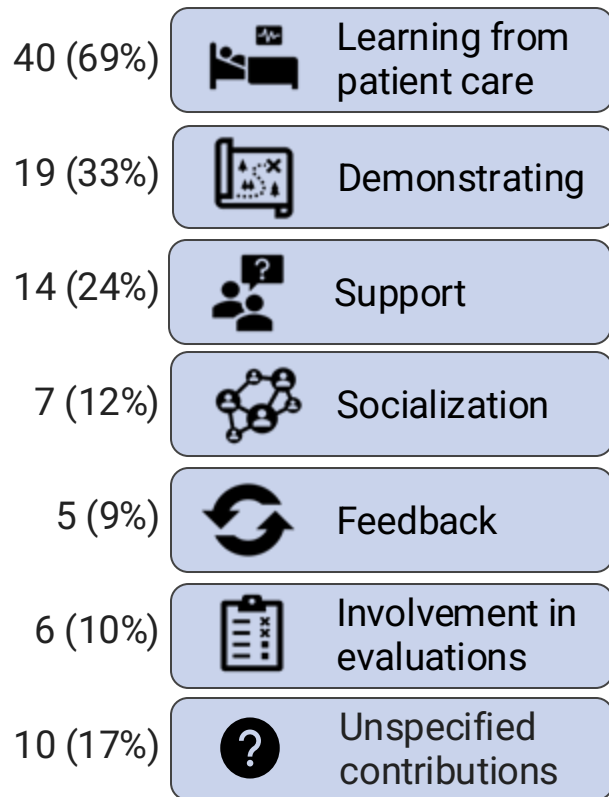
Results – Descriptive Coding



Informal feedback

Participate in and enhance formal evaluation

Results – Descriptive Coding



“Facilitate,” “positively impact,” or “contribute to”
trainee workplace learning

Group Discussion



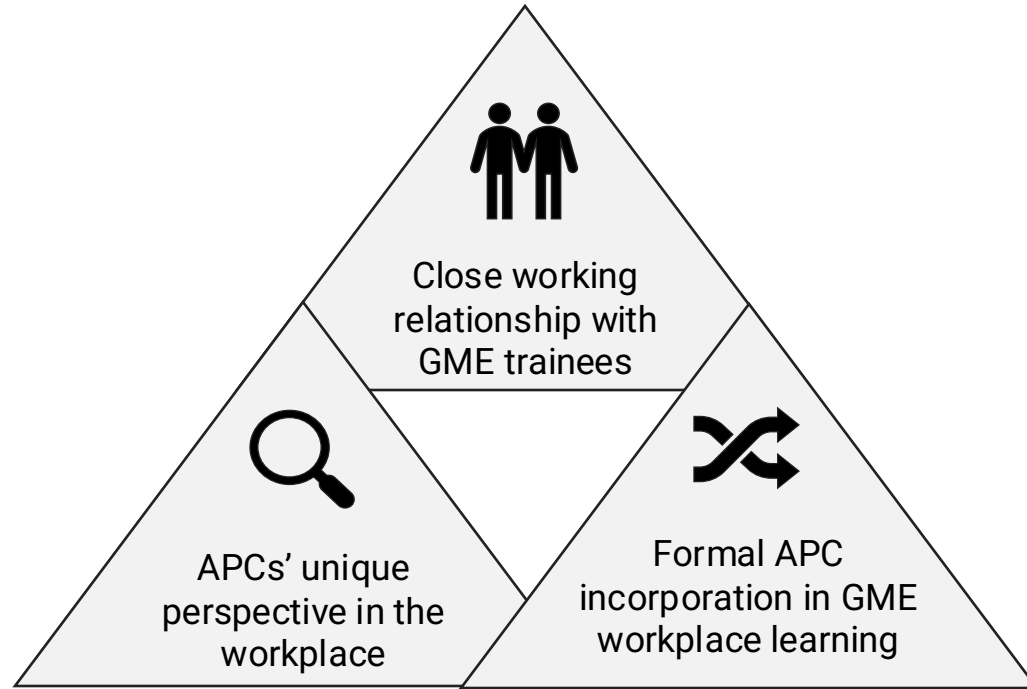
Had you thought about how your interactions with trainees might be contributing to their learning?



How do these descriptions resonate with your experiences?

Results – Reflexive Thematic Analysis

What factors enable APC contributions to GME trainees' workplace learning?



Results – Reflexive Thematic Analysis

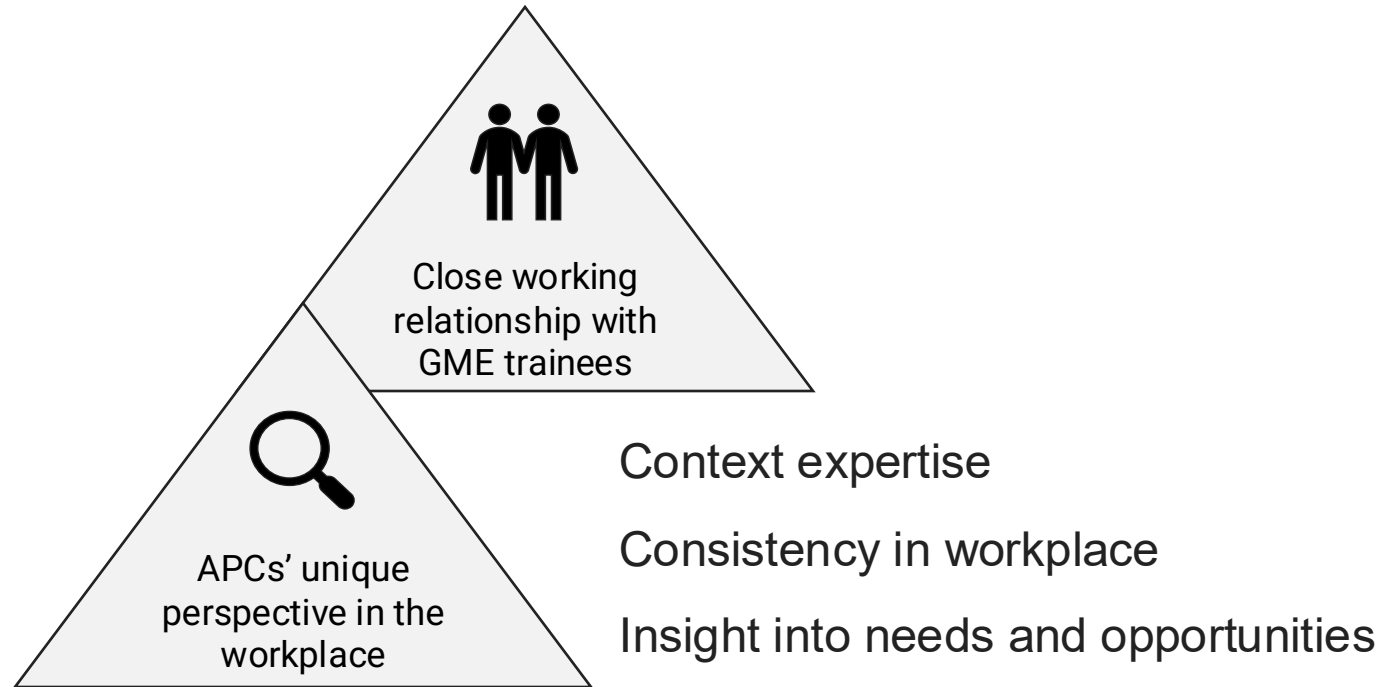


Similar clinical roles

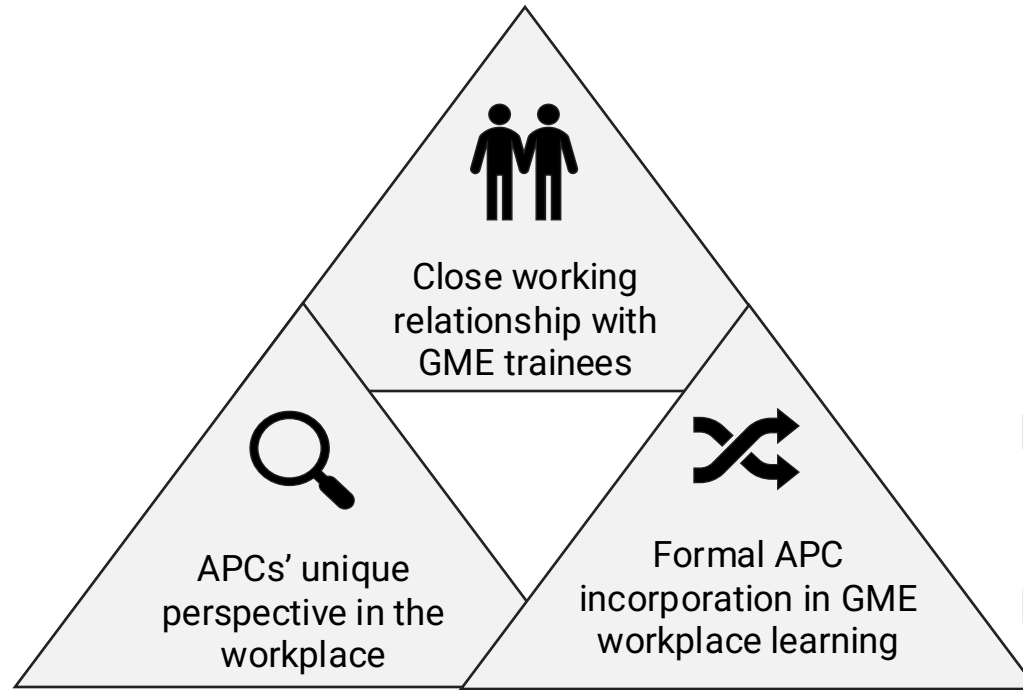
Incidental and informal guidance

Need help at point of care

Results – Reflexive Thematic Analysis

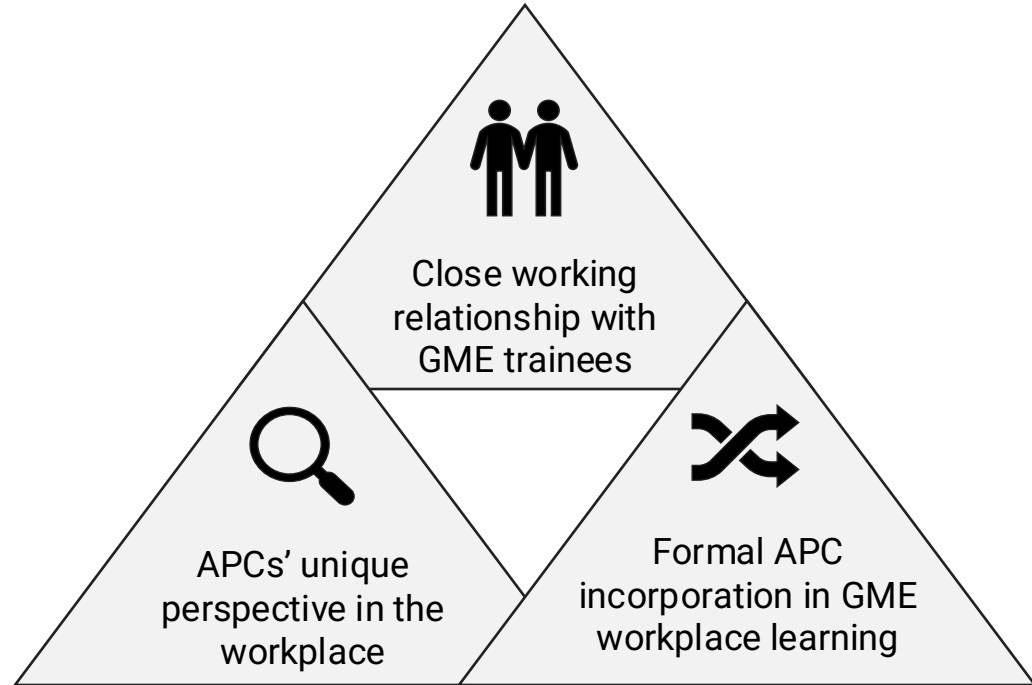


Results – Reflexive Thematic Analysis



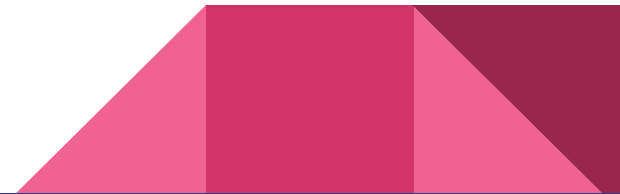
Part of the GME program
Included in trainee workflow
Endorsed by physician faculty

Results – Summary



Summary

- APCs have altered but also enriched the GME landscape
- Workplace guidance by APCs directly contributes to trainee learning
- To date, APCs' role in workplace learning has been informal and underutilized
- Limits trainees' benefit from APCs as an educational resource

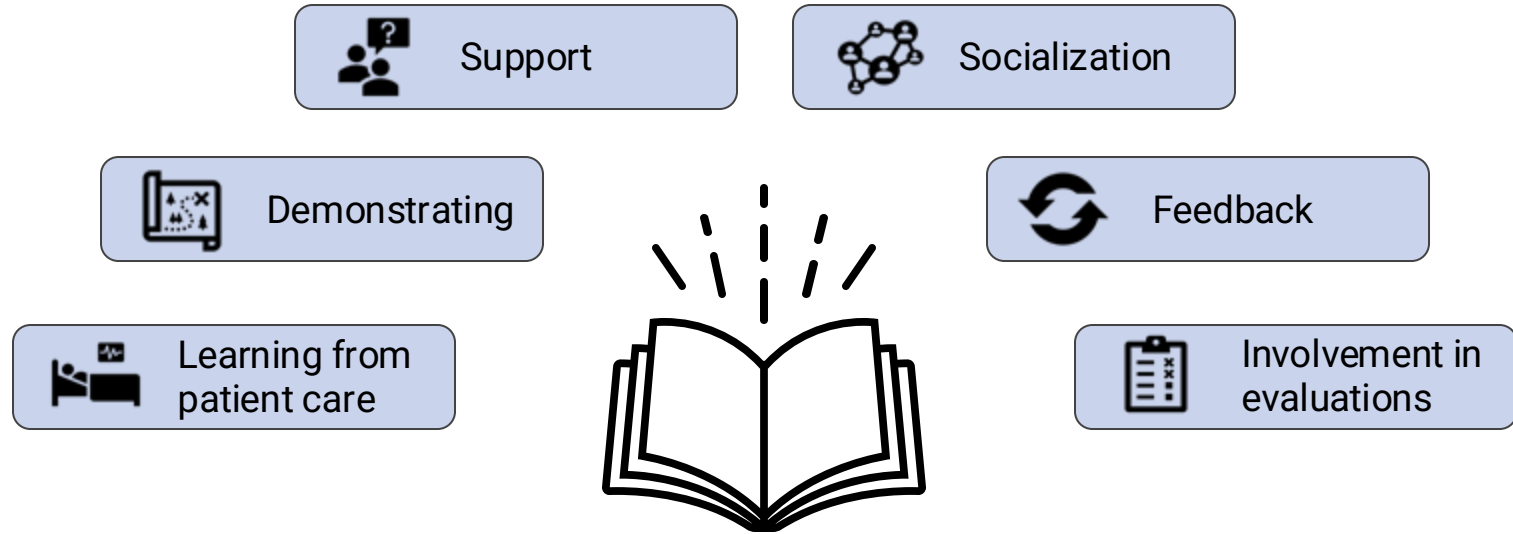


Discussion:

A lot to reflect on...

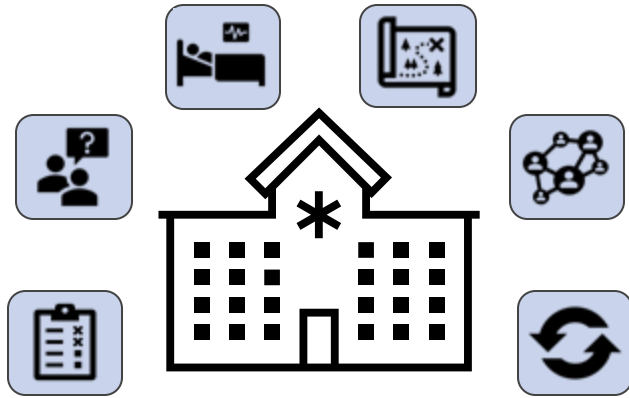
- 1 ? What are the practical implications of this study?
- 2 ? How can we foster these interprofessional interactions?
- 3 ? What considerations should be made to support APCs in GME?

Practical Implications

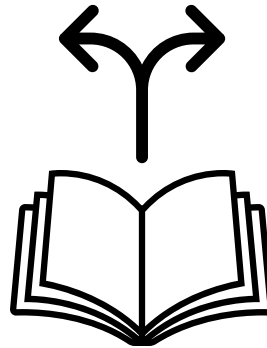


Language and Framework

Practical Implications



Variability in context and role



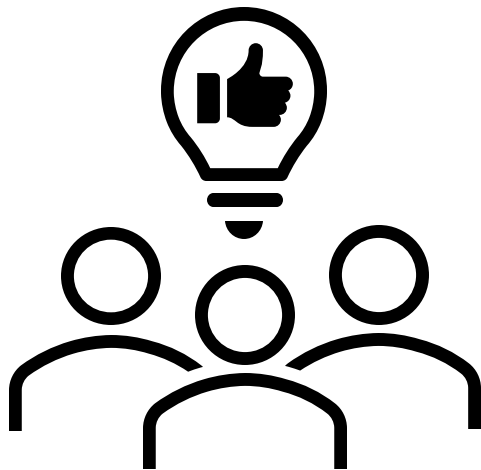
Alignment of context and APC



Heterogeneity amongst APCs

Considerations for Supporting APCs in GME

Endorsement by physicians and GME structures is critical



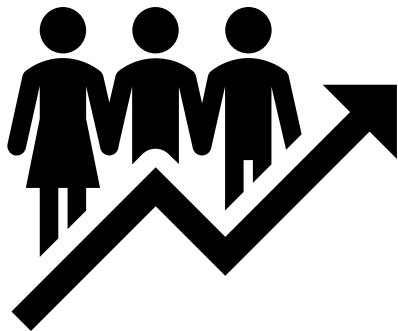
Relationship between physician and APC

How APCs are labeled and discussed

Recognize APCs as colleague not substitute

Considerations for Supporting APCs in GME

Contributions linked to explicitness and formalization of role



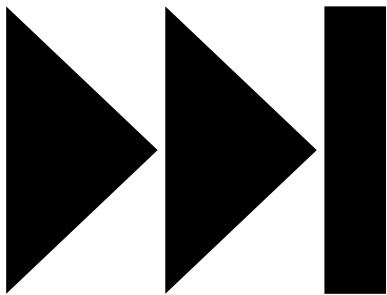
Calls for more formal integration of APCs

Offer professional development opportunities

Also consider what is lost with formalization

Next steps for research in this area...

Know more about what APCs do but little about APCs' experiences

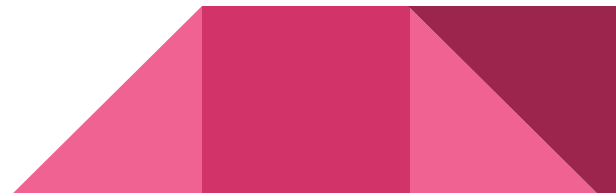


How do APCs navigate these interactions?

What makes it easier or more challenging?

How to balance own job demands and guidance?

Why? What motivates APCs in these moments?

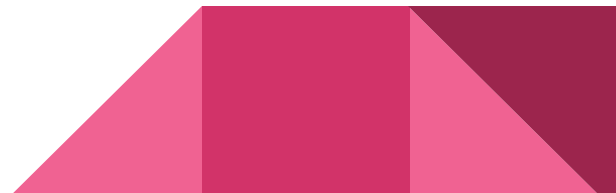


Conclusions

APCs have altered but also enriched the GME landscape

While APCs indirectly support trainee education (e.g., offloading work), they also directly contribute to trainee learning through workplace guidance

Further unlocking APC contributions → recognition and reconceptualization



Balance between patient care and trainee learning in the workplace





Thank you!

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Barker AM, et al. How Advanced Practice Clinicians Support Education for and Contribute to Education of Graduate Medical Education Trainees: A Critical Literature Review. *Acad Med*. 2024;99(11):1286-1297.

Review > Acad Med. 2024 Nov 1;99(11):1286-1297. doi: 10.1097/ACM.0000000000005858.
Epub 2024 Sep 4.

How Advanced Practice Clinicians Support Education for and Contribute to Education of Graduate Medical Education Trainees: A Critical Literature Review

Dimensions Badge



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Thank You

Will the results of these articles impact your future practice?

Survey Link:

<https://www.surveymonkey.com/r/HWCQGRX>



If you are interested in presenting on a topic, please contact Alice Fornari at afornari@northwell.edu