

Conclusions

- In this first ever survey of acute hospital PM&R consultation services affiliated with US residency training programs, most respondents were from large urban medical centers and the primary intent of the consultation service was to identify patients appropriate for admission to an inpatient rehabilitation facility and secondarily to provide psychiatric management of rehabilitation related medical conditions.
- Future surveys of this type should evaluate alternative methods to enhance response rates.
- These survey results may be used as a basis for comparison with future evaluations of PM&R consultation services, and additional research might examine non-academic PM&R consultation services as well.

Abstract

Introduction / Objective:

Physical medicine & rehabilitation (PM&R) acute hospital consultation services are available at many hospitals across the United States (US) although they appear to be most prevalent at academic medical centers with an affiliated residency training program.

As there is only limited prior research in this important area of PM&R clinical practice, the purpose of this study was to collect data regarding the intent, scope and workforce characteristics of acute hospital PM&R consultation services provided at all US psychiatric residency training programs.

Design:

Survey

Setting:

US Physical Medicine & Rehabilitation residency training programs

Methods:

Descriptive analysis

Outcomes:

Demographic characteristics of the acute hospital and inpatient rehabilitation facilities, key intent/purpose of the PM&R consultation service, and participating personnel.

Results:

The response rate was ~40% with a majority of responses from urban programs with a single large acute care hospital (mean 735 beds) and one large IRF (mean 53 beds). The primary intent, based on the responses received, was to identify rehabilitation patients for the affiliated IRF and secondarily to provide psychiatric expertise for acute care patients with primary rehabilitation medical conditions. The workforce was primarily physicians with a minority of programs utilizing mid-level providers.

Conclusion:

In this inaugural survey examining acute hospital PM&R consultation services at all US residency training programs, the majority of respondents were programs in urban settings affiliated with a single large acute hospital with a primary role of identifying patients appropriate for admission to an affiliated inpatient rehabilitation facility (IRF).

Introduction

- In the US, acute hospital PM&R consultation services are most commonly found at medical centers with an Accreditation Council for Graduate Medical Education (ACGME) accredited PM&R residency training program.
- PM&R resident physicians are required to gain experience evaluating acute hospital patients¹, including to determine appropriateness for admission to an IRF versus an alternative post-acute care setting.
- Anecdotally, PM&R acute hospital consultation services have traditionally focused on the identification of patients for their affiliated inpatient rehabilitation facility, though this may be evolving as the PM&R specialty expands its' catchment to other post-acute rehabilitative care settings.
- There is a paucity of research related to acute care PM&R consultation services though this a residency training requirement and a critical skill for psychiatrists working in an IRF or other post-acute care setting.
- **Study Purpose:**
To collect data regarding the intent, scope and workforce characteristics of the acute hospital PM&R consultation services provided at US ACGME accredited PM&R residency training programs.

Methods

Survey Information

Survey Questionnaire: Minimum of 4 and maximum of 32 questions addressing the following focus areas:

- Role(s) / purpose of the acute hospital PM&R consultation service
- Personnel including physicians (eg, attending, resident) and non-physicians
- Demographics of the acute hospital(s) and IRF(s)

Survey Distribution:

- E-mail invitation was sent to the department chairperson at all 92 US ACGME accredited PM&R residency training programs.
 - Initial e-mail sent Dec19 with follow up emails 2 and 4 weeks later.
- For those not responding, an email was sent to the PM&R residency program coordinator in Feb20 with a follow up email 2 weeks later.

Data Collection:

- Study data were collected and managed using Research Electronic Data Capture (REDCap) software hosted at UC Davis.³

Data Analysis:

Descriptive

IRB Review: Exempt by VANCHS IRB and UC Davis IRB.

Results

Table 1: Survey Demographics & Purpose / Intent

Response Rate	Total: 41% (38/92) Complete data: 39% (36/92)
PM&R Program Respondent Demographics	
Urban (>100k population)	95%
Acute Hospital:	
One:	46% (range: 1-6 hospitals)
Bed Capacity:	Mean: 735 beds (Range 200-1265 beds)
Affiliated IRF:	
One:	56% (range: 1-5 IRFs)
IRF Bed Capacity:	Mean: 53 beds (Range 14-114 beds)
Non-Affiliated IRF:	25% of programs
Primary Intent Consultation Service:	#1. Identify patients for affiliated IRF #2. Provide PM&R input/expertise for patients with specific rehabilitation conditions (eg, SCI, stroke) #3. Identify patients for non-affiliated IRF

Results

Table 2: Respondent Workforce Characteristics

PM&R Consult Physicians	Full Time 43% (Mean 1.85; range 1-4) Part Time 23%
Resident physician participation	100% More than 1 consult rotation: 83%
Advanced Practice Provider	36%
Consult Volume:	Means: 9 per day / 45 per week / 178 per month
Education / Outreach efforts:	89%

Discussion

- This is the first national study to evaluate acute hospital PM&R consultation services at ACGME accredited residency training programs. The response rate was somewhat low, and this limits the generalizability of the data; however, the results of this survey can be used as a baseline for future studies evaluating psychiatric acute hospital consultation services.
- In general, responses were from large urban PM&R training programs with a specific team of staff and resident physicians covering 1-2 large acute care hospitals with a primary intent to identify patients for a single large inpatient rehabilitation facility and secondarily to address the psychiatric needs of acute care patients with rehabilitation specific medical conditions (eg, stroke, SCI). While there are no prior similar studies for comparison, our results are consistent with anecdotal information regarding acute hospital PM&R consultation services.
- **Strengths:**
 - First national study evaluating this critical aspect of PM&R practice.
 - Provides baseline data for subsequent similar surveys or other evaluations of PM&R consult services.
- **Limitations:**
 - Limited survey response rate; total with complete data was 39% (36/92).
 - Potential survey data accuracy concerns include the following:
 - Email sent to department chair to then forward to correct physician most knowledgeable regarding the PM&R consultation service.
 - Incomplete / invalid responses
 - Respondent misinterpretation of questions.
- Future studies should address trends in PM&R consult service care, identify methods to improve survey response rate (eg, incentive for completion), and examine community PM&R consult services.

References:

1. Accreditation Council for Graduate Medical Education (ACGME) Program Requirements for Graduate Medical Education in Physical Medicine and Rehabilitation. Page 17/IV.A.8. July 2017.
2. Post-acute care determination for hospitalized older adults. Kortebein P. Current Phys Med Rehabil Reports. 2019 Jun; 7(2): 126-33.
3. The REDCap consortium: Building an international community of software partners. PA Harris, R Taylor, BL Minor, V Elliott, M Fernandez, L O'Neal, L McLeod, G Delacqua, F Delacqua, J Kirby, SN Duda, REDCap Consortium. J Biomed Inform 2019 May 9.

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