



Revista Clínica Española

www.elsevier.es/rce



ORIGINAL ARTICLE

The Computer Book of The Internal Medicine Resident: Competence acquisition and achievement of learning objectives[☆]

J. Oristrell^{a,*}, J.C. Oliva^b, A. Casanovas^a, R. Comet^a, R. Jordana^a, M. Navarro^c

^a Servicio de Medicina Interna, Hospital de Sabadell, Corporació Sanitària i Universitària Parc Taulí, Sabadell, Barcelona, Spain

^b Unidad de Estadística, Fundació Parc Taulí, Corporació Sanitària i Universitària Parc Taulí, Sabadell, Barcelona, Spain

^c Servicio de Enfermedades Infecciosas, Hospital de Sabadell, Corporació Sanitària i Universitària Parc Taulí, Sabadell, Barcelona, Spain

Received 24 May 2013; accepted 28 July 2013

Available online 4 October 2013

KEYWORDS

Educational measurement;
Self-assessment;
Competency-based education;
Clinical competence;
Internship and residency;
Internal Medicine

Abstract

Background: The Computer Book of the Internal Medicine resident (CBIMR) is a computer program that was validated to analyze the acquisition of competences in teams of Internal Medicine residents.

Objectives: To analyze the characteristics of the rotations during the Internal Medicine residency and to identify the variables associated with the acquisition of clinical and communication skills, the achievement of learning objectives and resident satisfaction.

Methods: All residents of our service ($n=20$) participated in the study during a period of 40 months. The CBIMR consisted of 22 self-assessment questionnaires specific for each rotation, with items on services (clinical workload, disease protocolization, resident responsibilities, learning environment, service organization and teamwork) and items on educational outcomes (acquisition of clinical and communication skills, achievement of learning objectives, overall satisfaction). Associations between services features and learning outcomes were analyzed using bivariate and multivariate analysis.

Results: An intense clinical workload, high resident responsibilities and disease protocolization were associated with the acquisition of clinical skills. High clinical competence and teamwork were both associated with better communication skills. Finally, an adequate learning environment was associated with increased clinical competence, the achievement of educational goals and resident satisfaction.

Conclusions: Potentially modifiable variables related with the operation of clinical services had a significant impact on the acquisition of clinical and communication skills, the achievement of educational goals, and resident satisfaction during the specialized training in Internal Medicine.

© 2013 Published by Elsevier España, S.L.

[☆] Please cite this article as: Oristrell J, Oliva JC, Casanovas A, Comet R, Jordana R, Navarro M. El Libro Informático del Residente de Medicina Interna: adquisición de competencias y consecución de objetivos docentes. Rev Clin Esp. 2014;214:8–16.

* Corresponding author.

E-mail address: joristrell@tauli.cat (J. Oristrell).

PALABRAS CLAVE

Evaluación;
Autoevaluación;
Educación basada en
competencias;
Competencia clínica;
Residentes;
Medicina Interna

El Libro Informático del Residente de Medicina Interna: adquisición de competencias y consecución de objetivos docentes**Resumen**

Antecedentes: El Libro Informático del Residente de Medicina Interna es un programa que ha sido validado para cuantificar la adquisición de competencias durante el periodo de formación en Medicina Interna.

Objetivos: Este estudio se propone analizar las características de las rotaciones durante la formación en Medicina Interna e identificar las variables asociadas con la adquisición de competencias clínicas y comunicativas, la consecución de los objetivos docentes y la satisfacción del residente.

Métodos: Participaron todos los residentes de nuestro servicio (n=20) durante un período de 40 meses. El Libro Informático del Residente de Medicina Interna está constituido por 22 cuestionarios de autoevaluación específicos para cada período de rotación, con ítems referentes a las características de los servicios dónde se desarrolló la rotación y a los resultados docentes (competencia clínica y comunicativa, consecución de los objetivos docentes y satisfacción global).

Resultados: La dedicación asistencial intensa, con elevada responsabilización del residente y la protocolización se asociaron a una mayor adquisición de competencias clínicas. Una elevada competencia clínica y el trabajo en equipo se asociaron a mejores resultados en habilidades comunicativas. Finalmente, un entorno facilitador para el aprendizaje se asoció a mayor competencia clínica, mayor consecución de los objetivos docentes y mayor satisfacción global.

Conclusiones: Diversos factores relacionados con el funcionamiento de los servicios influyeron de forma significativa en la adquisición de competencias, la consecución de los objetivos docentes y la satisfacción de los médicos residentes durante la formación especializada en Medicina Interna.

© 2013 Publicado por Elsevier España, S.L.

Background

The Spanish Society of Internal Medicine has in recent years made a notable effort to define the training schedule and competencies that should be achieved by medical residents during their specialized training in Internal Medicine.¹ Based on these competencies, our team of tutors recently developed and validated software based on self-assessment questionnaires that analyze the acquisition of clinical and communication competencies over the course of the specialized training in Internal Medicine.²

During their training, medical residents in Internal Medicine usually conduct rotations in various medical specialty departments, in the Department of Internal Medicine itself and in the Emergency Department. These residents are subjected to various levels of patient load, responsibility, organization of departments and relationships among the healthcare teams. In this study, we analyzed the impact these variables had on the process of acquisition of competencies for medical residents.

Materials and methods**Construction and validation of the "Computer Book of Internal Medicine Residents" for the analysis of clinical and communication competencies**

The construction and validation of self-assessment questionnaires on clinical and communication competencies for

Internal Medicine residents have been described previously.²

A total of 22 electronic questionnaires were designed for the self-assessment of each of the rotations of specialized training in Internal Medicine (3 questionnaires for the initial rotation period for Internal Medicine, 7 for the rotation period for medical specialties, 6 for the senior resident rotations by specific Internal Medicine areas [hospitalization, doctor's office diagnostics, geriatric medicine, infectious diseases, systemic diseases and palliative care], 4 for each rotation period in the Emergency Department, a general questionnaire halfway through the residency and a final self-assessment questionnaire). Junior resident rotations were considered those that took place during the first 2 years of residence; senior resident rotations were those that took place in the last 3 years of specialization. The collection of questionnaires to complete during the training period was organized as the "Computer Book of Internal Medicine Residents" (CBIMR) using Microsoft Access 2000® (Microsoft), with restricted access to the responses by means of personal access codes.

Professional participants and study period

All Department of Internal Medicine residents of the *Corporació Sanitaria Parc Taulí* (Healthcare Corporation Parc Taulí, CSPT) (20 residents) participated in this study for a period of 40 months (November 2009 to February 2013). CSPT is a public university hospital with 714 beds serving a reference population of 394,000 inhabitants. The

Download English Version:

<https://daneshyari.com/en/article/3829892>

Download Persian Version:

<https://daneshyari.com/article/3829892>

[Daneshyari.com](https://daneshyari.com)