

2007 JOSEPH E. AND NANCY O. WHITLEY AWARD RECIPIENT

Dedicated Core Clerkship in Radiology for Medical Students: Development, Implementation, Evaluation, and Comparison with Distributed Clerkship¹

Annemarie Relyea-Chew, JD, MS, Felix S. Chew, MD, MBA

Rationale and Objectives. The authors performed this study to develop, implement, and evaluate a dedicated core clerkship in radiology for the required clinical clerkship year of medical school, and to compare it with the distributed core clerkship that it replaced.

Materials and Methods. A dedicated 5-day clerkship was added to the clinical core year of medical school. The course offered a variety of learning experiences, including lectures, clinical observation, case discussions, and a team project. Learner achievement was measured by posttest and compared with a control group. Student satisfaction was determined by structured and unstructured surveys. Faculty comment was elicited by survey, and administrative staff perspective was established through interviews. The evaluation of the dedicated clerkship was compared with the distributed clerkship along the dimensions of learner achievement, student satisfaction, faculty comment, and administrative staff perspective.

Results. The dedicated clerkship was developed and implemented successfully. Compared with the distributed clerkship, there was no significant difference in learner achievement or student satisfaction for the dedicated clerkship, but the dedicated clerkship was easier to conduct for faculty and administrative staff.

Conclusion. The dedicated clerkship was advantageous for faculty and administrative staff, whereas maintaining a comparable level of learner achievement and student satisfaction as the distributed clerkship.

Key Words. Radiology education; medical students; core clerkship.

© AUR, 2007

In 1998, our medical school implemented a new undergraduate curriculum that stressed problem-based learning and computer delivery of instructional materials. To this end, all medical students were provided with laptop computers and technical support, and the local area network

was expanded to cover the entire medical center. This created the opportunity to augment instruction in diagnostic radiology during various portions of the curriculum by incorporating computer aided instruction (CAI) radiology modules, however radiology was not originally included among the core clinical rotations. After a process of negotiation with the curriculum committee and the core clerkship directors, a required radiology clerkship was accepted into the core clinical year as a series of 10 independent half-day teaching sessions distributed throughout the year, and partially integrated with existing clerkships.

Web-based curriculum materials, in-class lectures, and tutorials were developed for the radiology clerkship. Subsequently, it was demonstrated that a Web-supported radi-

Acad Radiol 2007; 14:1127-1136

¹ From the Department of Radiology, University of Washington, Box 359960, Seattle, WA 98104 (A.R.-C., F.S.C.). Study conducted at Department of Radiology, Wake Forest University School of Medicine, Winston-Salem, NC. Supported by a grant from the Radiological Society of North America Research and Education Fund. Received January 8, 2007; accepted June 20, 2007. **Address correspondence to:** A.R.C. e-mail: archew@u.washington.edu

© AUR, 2007

doi:10.1016/j.acra.2007.06.022

Table 1
Sample Student Schedule for Dedicated Radiology Clerkship

Time	Day 1	Day 2	Day 3	Day 4	Day 5
7:30–8:15	Resident lecture	Resident lecture	Resident lecture	Resident lecture	Resident lecture
8:30–9:00 Morning activity	Orientation	Quiz 1: bone	Quiz 2: chest	Quiz 3: pediatrics	Team project
9:00–10:30 Lecture block	Intro to radiology Fractures	How to read a chest X-ray Chest Radiology	Pediatric abdomen Pediatric airway and chest	Neuroradiology MRI center tour	Abdominal radiography Abdominal CT
10:30–12:00 Observation block	Clinical area	Clinical area	Clinical area	Clinical area	Clinical area
12:00–1:30 Midday block	Resident conference 12:30–1:15	Resident conference 12:30–1:15	Resident conference 12:30–1:15	Resident conference 12:30–1:15	Resident conference 12:30–1:15
1:30–3:00 Tutorial block	Arthritis tutorial	Chest radiology tutorial	Osteoporosis tutorial	Imaging for screening	Final exam
3:15–4:45 Case discussion block	Case discussion: fractures	Case discussion: chest	Case discussion: pediatrics	Case discussion: neuroradiology	Final exam

ology curriculum distributed over a required clinical clerkship year was feasible, but several disadvantages were observed (1). The disadvantages included discontinuity in episodes of teaching, conflicts with patient care responsibilities in other rotations that prevented students from attending all lectures and tests, and complex administration and scheduling. It had been hoped that the clinical rotations into which the radiology sessions were integrated would complement one another. Unavoidably, nevertheless, schedules were often in conflict and at times the radiologic topics did not correlate well with the clinical clerkships. The success of the distributed core clerkship, in spite of its disadvantages, ultimately led the medical school to consolidate it as a 5-day dedicated clerkship within the required clinical core year.

In this article, we describe the development, implementation, and evaluation of this dedicated core clerkship and compare it with the distributed clerkship that it replaced. The main question we sought to answer was: is a 5-day block of diagnostic radiology instruction given to third-year medical students superior to similar instruction distributed over the course of an academic year in 10 half-day sessions? We formulated the following hypotheses.

- Hypothesis 1: student performance will be improved during the dedicated clerkship.
- Hypothesis 2: student satisfaction will be improved during the dedicated clerkship.
- Hypothesis 3: faculty utilization will be improved during the dedicated clerkship.

- Hypothesis 4: administrative and technical support will be simpler during the dedicated clerkship.

MATERIALS AND METHODS

Development and Implementation

The dedicated clerkship was a single block of 5 consecutive days offered six times during the clinical core year. The learning objectives and the course content were substantially the same as those from the previously offered distributed clerkship (1). Each formal day began with 1) a 30-minute morning activity; 2) followed by a 90-minute lecture block; 3) a 90-minute clinical area observation block; 4) a 90-minute midday block that included a lunch break, optional attendance at the residents' noon conference, individual study time, or team meeting time; 5) a 90-minute tutorial block; and 6) a 90-minute case discussion block (Table 1). The time for these instructional blocks included breaks. Medical students were also assigned a team project, expected to require approximately 2 hours of time to complete, and required textbook reading (Ouellette H, Tetreault P. *Radiology made ridiculously simple*. Miami, FL: Medmaster, 2000), expected to require approximately 2 hours of time to complete. Attendance at the morning lecture for residents, offered before the start of the medical students' activity, was optional.

The morning activity consisted of orientation on Day 1; quizzes and discussion of answers on Days 2, 3, and 4; and presentation and discussion of the team project on

Download English Version:

<https://daneshyari.com/en/article/4219969>

Download Persian Version:

<https://daneshyari.com/article/4219969>

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