Interdisciplinary medical rounds improved patient care efficiency and the care process and decreased costs


Question
Can interdisciplinary rounds improve efficiency of patient care and staff satisfaction and decrease costs on inpatient medical wards?

Design
Randomized controlled trial.

Setting
3 medical firms and 6 inpatient health care teams of an acute care, tertiary referral, and teaching hospital in Cleveland, Ohio, USA.

Patients
Patients who were admitted to and discharged from medical wards. Patients were excluded if they spent < 50% of their hospital stay on the medical ward, were transferred to another service, or were not admitted to their assigned firm.

Intervention
On their first admission, patients were randomly allocated to 1 of 3 medical firms from which they received all services including those for any subsequent admissions; all admissions were considered separately. Each of the 3 firms comprised 2 independent ward services; the 6 ward services were divided so that 3 conducted daily interdisciplinary rounds, designed by a continuous quality improvement team, and 3 continued traditional rounds. Interdisciplinary rounds included physicians, a nurse patient-care coordinator, a pharmacist, a nutritionist, and a social worker, and orders were written during rounds with the patient charts present. Traditional rounds included physicians only on a daily basis with interdisciplinary rounds once a week; orders were written throughout the day, and patient charts were left at the nursing station. Of 1102 patient admissions, 567 patients were allocated to receive interdisciplinary rounds, and 535 were allocated to receive traditional rounds.

Main outcome measures
Length of hospital stay, total charges (U.S. dollars), hospital death, type of hospital disposition, and self-reported health care provider satisfaction.

Main results
Patients who received interdisciplinary rounds compared with those who received traditional rounds had shorter mean lengths of hospital stay (5.46 vs 6.06 d, P = 0.006) and lower mean total charges (U.S. $6681 vs $8090, P = 0.002), but no differences occurred in the rates of hospital death (1.8% vs 1.9%, P = 0.90) discharge to home (73.9% vs 73.1%, P = 0.79), and discharge to an intermediate care facility (9.4% vs 12.3%, P = 0.12). Factor analysis and comparison of provider satisfaction surveys, completed by 21 providers of interdisciplinary rounds and 19 providers of traditional rounds, revealed 3 factors that represented underlying concepts; comparison of these factors showed that providers of interdisciplinary rounds had a greater understanding of patient care, more effective communication, and more teamwork than providers of traditional rounds (P < 0.05 for each factor).

Conclusion
Interdisciplinary health care team rounds compared with physician-focused traditional rounds led to decreased length of hospital stay and costs for hospitalized patients on medical wards and improved the care process.

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