

The HELP System: A System for Clinical Decision-Making

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HELP is a comprehensive integrated Clinical Information System developed over the past 15 years to acquire medical and administrative data and implement medical decision-making strategies. The HELP system consists of two major data bases: 1) A clinical data base with a abundant array of clinical data from areas such as laboratory, intensive care, surgery, radiology, pharmacy, respiratory care, medical records, and nursing care plans. 2) A knowledge base made up of medical rules which are applied to new data as it is stored into the patient's clinical data base. The system has an interactive communications networking capability which allows distributed computers in laboratories, intensive care units, and nursing divisions to share patient information quickly and efficiently.

Several new or enhanced clinical applications have been added to the system during the past 3 years: 1) Laboratory alerting warns physicians about "life-threatening" situations based on laboratory data which triggers the decision criteria using the "data-driven" mode when new data is added to the patient's clinical file.

2) A computerized microbiology monitoring strategy identifies patient with hospital acquired infection quickly and automatically, recommends less expensive yet effective antibiotics, and suggests optimal therapeutic and prophylactic antibiotic regimen. 3) Respiratory care charting is now implemented which results in increase productivity of therapists, more accurate and legible clinical charting, and better administrative management features than the manual charting. 4) Computerized nursing care plans have been implemented on the system and assist nurses to better document the care process and allows nursing to bill their services based on acuity of patient care.

This demonstration will give an overview of the HELP system with a slide presentation. The capabilities needed to implement an effective decision-making system will be outlined. Then "live" computer displays of patient information from LDS Hospital will be presented. After presenting several interactions and following through with interesting patient data we will present recently completed evaluations relating to the clinical value of the system and its acceptance by the medical and nursing staff at LDS Hospital.
