HEALNet Clinical Theme: Evidence-Based Solutions for Health Care Problems

Melissa C. Brouwers, PhD, E. Ann Murrary, and R. Brian Haynes, MD, PhD
on behalf of the HEALNet Clinical theme investigators
Health Information Research Unit,
Department of Clinical Epidemiology and Biostatistics, McMaster University
Hamilton, Ontario, Canada

The Health Evidence Application Linkage Network (HEALNet) is a federally funded Canadian network of 132 researchers developing information tools to improve the effectiveness and efficiency of health care services. The Clinical Theme of HEALNet brings together leading Canadian researchers in health services and medical informatics to design and implement projects focused on providing health care professionals and patients with the most up-to-date evidence-based information to facilitate optimal health care decision-making. There are several project areas.

HOME CARE

In response to the growth of the home-based health care sector, a series of Clinical Theme investigators are developing a prototype clinical data base model and system that will provide a common language and support the information requirements of key home care provider groups.

ENHANCING EVIDENCE BASED PREVENTION IN PRIMARY CARE

A series of projects have been designed to strengthen preventive care in primary care settings by supporting the implementation of practice guidelines of the Canadian Task Force on Periodic Health Examination.

Primary Care Network Inventory Project: This project is directed to determining the needs and operational capability required for implementing software-supported preventive care programs in 7 participating regional networks of community-based practitioners.

CTF Prevent: Clinical Theme researchers are dedicated to developing software information tools for preventive primary care, based on Canadian Task Force guidelines. This expert system matches direct-from-patient-data with evidence-based guidelines for prevention and generates summaries of applicable guidelines to patients and providers.

PATIENT VERSIONS OF CLINICAL PRACTICE GUIDELINES

This study focuses exclusively on the evaluation of patient versions of clinical practice guidelines and uses these results as the foundation for the development of optimal patient information services. It has been shown that patient access to effective evidence-based patient guidelines will result in improved patient-clinician communication, increased patient participation in health care decisions, and a positive impact on clinical outcomes and resource utilization. This research will attempt to optimize these benefits.

CHRONIC AMBULATORY CARE INFORMATION SYSTEMS: DIABETES MELLITUS

Research and evaluation is being conducted to create a diabetes information system for clinicians and lay persons. This system is comprised of four components:

Evidence Module: This module provides computer access to the current best evidence regarding diabetes treatment and care as well as practical information and guidelines for care.

Patient Data Module: Extending the advances in software authoring programs and patient-interface technology, this module is designed to collect information directly from diabetic patients and to create individually tailored feedback forms and reminders for both patients and health care workers.

Home Monitoring Module: Through the use of telephone transmission, this component will integrate the daily diabetes monitoring activity of patients with a central computer base (Clinical Data Module) to facilitate evidence-based decision-making processes.

Clinical Data Module: This component will integrate information from the other three modules in addition to laboratory information to create an information system that summarizes patient status and provides feedback and evidence-based reminders for needed assessments and care.

1091—8280/97/$5.00 © 1997 AMIA, Inc.