

**Clinical Information System Implementation  
Northwest Permanente Medical Group  
2000 Acclaim Award Honoree**

Northwest Permanente, PC, in partnership with Kaiser Foundation Health Plan of the Northwest, operates one of the largest installed comprehensive ambulatory computerized patient records (CPR) in the world. Used by more than 3,300 providers at 31 sites, the system functions as an interactive aid to health care, providing clinicians with access to patient data (both ambulatory and inpatient) and linking it to the latest treatment guidelines and medications.

**Goal**

To improve the care of individuals and populations across settings, specialties and teams through a seamless, comprehensive, computerized clinical information system.

**Intervention**

A computerized information system (CIS) in place in all outpatient settings, affiliated hospitals and contract facilities, and now accessible (and fully interactive) from physicians' homes. Over 35 evidence-based guidelines and more than 200 consensus-based recommendations are incorporated into data entry and care pathways within the Computerized Patient Record (CPR).

**Highlights**

- Well over 3,000 users (physicians, allied-health practitioners and nurses) have completed the required 16 and 20 hours of instruction and practice.
- The CPR incorporates alerts and reminders identifying when patients are due for breast and cervical cancer screening, HbA1c testing, lead screening, smoking cessation counseling, aspirin use in high-risk patients, and lipid testing.
- When ordering a procedure or referral using the CPR, clinicians routinely receive information such as procedure indications/contraindications, pre-referral testing, where and how to make both routine and urgent referrals.
- Clinicians can seek information on current drug recommendations for specific conditions and complete the order with a mouse click.

**Results**

Clinical practice guidelines embedded in order entry pathways, along with easy access to existing results and alerts, have changed utilization rates for many tests and procedures.

- In 1999, 81.1 percent of diabetes patients had received at least one HbA1c test within the last twelve months; of those, 57.3 percent had an HbA1c of <8.0 and 89 percent a result of <9.5.
- Conformity to UGI guidelines rose from 57 percent to 88 percent, cutting the volume of UGI orders by over one-half, from 10.6/1000 patients to 5.0/1000 between 1993 and 1998.

*Northwest Permanente, PC, is a multispecialty group practice of 653 physicians representing nearly all specialties that provides exclusive that provides exclusive service to the approximately 441,000 members enrolled in Kaiser Foundation Health Plan of the Northwest.*