

U. of California Professor Praises Institute for Quality Improvement Through Electronic Health Records

By Michelle Pichardo, MPH

The Institute for Urban Family Health is a national leader in an aspect of health care that all health care organizations will soon be expected to follow: the implementation of electronic health records (EHRs).



According to **Robert H. Miller, PhD**, "just as it would be impossible to think of today's banking system based on paper, electronic health records will be inevitable throughout the health care system."

Dr. Miller, a professor of health economics at the University of

California, San Francisco, is currently a principal researcher of clinical information systems and quality improvement (QI) among community health centers (CHCs). Recently, he participated in a discussion of his involvement with the Institute and his knowledge about EHRs and their usefulness in assessing and evaluating QI.

Dr. Miller first became involved with the Institute when he administered a survey sponsored by the Tides Foundation that examined the value of electronic health records at community health centers. (Miller, RH, *Electronic Medical Records in Community Health Centers: Assessing the Potential Business Case*. Tides Foundation.) He has continued his relationship with the Institute through a case study sponsored by the Commonwealth Fund that examines how the Institute has used EHRs for QI and the effectiveness of implementing clinical reminders, also known as best practice alerts (BPAs), and generating patient lists for follow-up.

Dr. Miller explained that performing quality improvement through electronic health records is not an automatic process; an organization has to work at understanding and programming the system to include QI measures. He found that "the Institute is more

aggressive than many other community health centers in using EHRs for QI, and in using reminders." He also noted, "the Institute stands alone in implementing BPAs, and to effectively pull that off is not easy. The Institute has done it successfully."

Additional findings from this study can be found in the article: Miller RH and West CE, *The Value of Electronic Health Records In Community Health Centers: Policy Implications*, Health Affairs 26, no. 1 (2007): 206-214. Dr. Miller's other research activities include an evaluation of advanced registry systems and their implementation and use in CHCs.

Although Clinical Information Systems can be very expensive, Dr. Miller says that, "community health centers can justify having EHRs through quality improvement efforts." The success of EHRs in supporting important QI can lead to better data, more effective care, better outcomes, and follow-up opportunities. This is why it is imperative for CHCs to take full advantage of their EHR system and show what quality improvements can be made. Additionally, quality improvement research through the EHRs "enables an organization to use BPAs to standardize processes by alerting providers to what should be done during a patient visit," Dr. Miller stated.

Dr. Miller recommends these important next steps regarding EHRs and QI in community health centers: "more opportunities for follow-up, the ability to connect more with the rest of the health care system electronically, and documented improved efficiency."

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Addressing the Low Health Literacy of our Patients

By Molly Heublein

Health literacy — the ability to read, understand, and act on health information — is one of the least recognized yet most widespread challenges to achieving better health outcomes and lowering health care costs in the United States. Estimates suggest that 30-60% of our patients have limited health literacy.

This means that many of our patients may have trouble understanding spoken information about their diagnosis, reading educational materials, computing drug doses, understanding nutrition facts, and navigating the health care system to follow through with appointments and referrals. Numerous studies highlight the link between low health literacy and difficulty following prescribed treatments, failure to seek preventative care, longer hospital stays, and increased morbidity and mortality.

The first step in responding to this problem is to be sensitive to and aware of the issue. You may have noticed some patients struggling with health care information, but many more may be hiding their difficulties. You cannot always tell who has low health literacy; even patients highly educated in other fields may have trouble with health information. Read and learn more about the issue of health literacy. A great book to start with is Doak's *Teaching Patients with Low Literacy Skills*. Visit www.pfizerhealthliteracy.com for a thorough and useful website.

Practice clear communication techniques with your patients. We are trained to speak and write with a professional, scientific style and language. But in talking with patients, we need to return to a common, lay approach. Avoid complex, confusing sentences and medical jargon, both in speaking and writing.

For example, when discussing taking vitamins with a patient, you could say or write, "Much scientific evidence suggests that taking a daily multivitamin-and-mineral supplement is a sensible precaution to help avoid nutrient deficiencies that are common in older

adults" (taken from our McKesson educational materials on EPIC). Or you could revise this for clear communication and say, "Taking a multi-vitamin every day can give you the vitamins that may be missing from your diet."

There are many medical words that we use so often, it is easy to forget they are not part of the public's vocabulary. A few examples include intake, screening, generic, cardiac, chronic, and systemic. These are all easily translatable into common language.

Avoid Using Medical Jargon	
<i>Instead of this word, consider saying this:</i>	
intake	what you eat or drink
screening	test
generic	not a brand name
cardiac	heart
chronic	happens again and again; lasts for a long time
systemic	in your whole body

Look at the materials you are using — referral letters, appointment notices, educational materials, etc. — and think about how they can be rewritten. Listen to your interactions with patients and think about ways to simplify them. Studies show that all patients prefer simplified health information; even well educated patients will not feel that you are talking down to them.

Work on creating a shame free, open dialogue so that patients feel comfortable asking questions. Avoid asking, "Do you understand?" as this usually receives a "yes" response. Instead, try asking, "Did I explain that clearly?" Use the proven "teach-back technique" to assess understanding and review of new information by asking patients to repeat back to you the important points regarding their diagnosis and care plan. Help clarify any confusion.

Look for other ways you can respond to low health literacy and better teach your patients. Think about how the Institute as a whole could do a better job, and share your ideas. We are already working to improve follow-through rates on referrals and make better patient educational materials available in EPIC. ■

Molly Heublein is an intern at the Institute, working on patient education, specifically in relation to patients with low health literacy. In March, she returns to her third year of medical school at the University of Vermont.

CQI Snapshot: Improving Depression Screening and Treatment Rates at Parkchester Family Practice

By Eric Gayle, MD, Medical Director,
Parkchester Family Practice

Approximately 10 percent of patients seen at primary care centers in New York have depression, yet only about 37 percent of these patients receive treatment. Since depression continues to be underdiagnosed and undertreated, the New York City Department of Health and Mental Hygiene (NYCDOHMH) has encouraged primary care providers to make depression screening routine by using the Patient Health Questionnaire (PHQ). This is a simple test used to determine whether someone may be experiencing depression: two initial questions (PHQ2) are followed, when indicated, by nine questions (PHQ9).

In 2004, the Institute for Urban Family Health partnered with the Department of Health to improve the well-being of our patients by using the PHQ2 and PHQ9. Parkchester Family Practice has been involved in this continuous quality improvement (CQI) activity for the past two years.

On first glance, the CQI effort appeared to be going

well: our nurses screened patients at the time of triage, validating our decision to include the PHQ2 in the electronic health record (EHR) system.

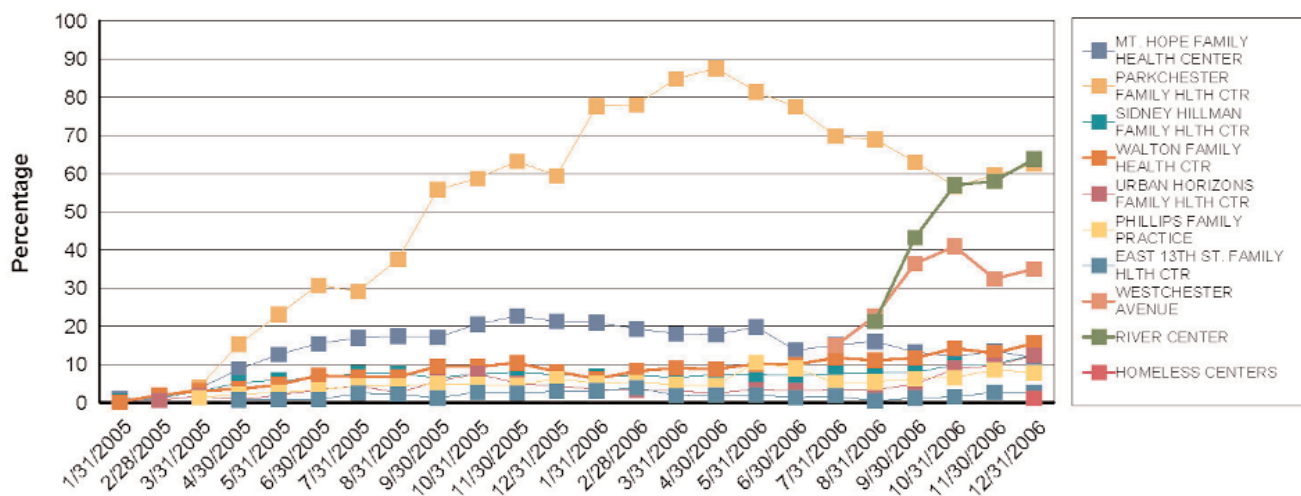
But on further review, we found that we were not working as a team to respond to patients who screened positive on the PHQ2; they were not being similarly evaluated with the PHQ9 as we had intended. If we did not identify our truly depressed patients, we were not able to help them with counseling or medication.

Evaluating our effectiveness:

The Parkchester CQI staff met to examine the problem areas, which included:

- Providers were unaware of a positive PHQ2 and thus were not administering the PHQ9;
- Providers who were aware that the PHQ2 was positive were not always able to respond right away because of other demands of the patient visit;
- Patients were keeping the PHQ2 given to them by

Chart 1. Percentage of Patients 18yrs and Older Screened for Depression Using the PHQ2 or PHQ9 by Clinic, September 2005 - September 2006.



The above graph illustrates the percentage of patient 18yrs and older who were screened for depression using the PHQ2 or PHQ9 by health center over a two year period. The Parkchester Family Practice was the first health center to receive the best practice alert which was implemented in April 2005, and the first to see an increase in the percentage of patients screened. The percentage of patients screened continued to steadily increase for Parkchester Family Practice peaking in April 2006 with about 90% of patients screened. After April 2006 a change in workflow occurred causing the percentage of patients screened to decrease. The workflow change has been reviewed and the percentage is increasing once again.

nursing staff as handouts so that they did not get to the provider for review;

- Some providers only documented PHQ2 and PHQ9 scores in the text of their clinical note, making it difficult to analyze the data;
- Providers needed to become more comfortable in using counseling and/or medications to manage depression in the clinical setting.

Strategies for Improvement

We sought to address these concerns as a multi-disciplinary team by engaging all staff in regular morning huddles and CQI meetings. We also used the Plan DO Study Act (PDSA) method for improvement: for each area needing improvement, a plan is made, implemented, studied for effectiveness, modified, and then reviewed again at a later time. This assures ongoing, continuous improvement.

Eventually, we arrived at this system: the PHQ2s are administered by the nursing team and the results are recorded in the patient's chart. PHQ9s are then administered by clinicians who either ask the patient to fill out the questionnaire or ask the questions of the patient and record the answers. If the patient is completing the PHQ9 form and does not return it to the provider, then it is collected at the front desk by a patient services representative (PSR) and forwarded to a social worker to record in the patient's chart.

It took some effort to put this system in place. We first needed to make sure that the PSRs were familiar

with the PHQ9 forms and the importance of retrieving them from patients or from the waiting area to forward to the psychosocial staff.

Nurses were encouraged to assist clinicians by alerting them when a patient scored positive on a PHQ2 and to be sure to provide the patient with a PHQ9. If necessary, they would leave the blank PHQ9 on the provider's chair to prompt the provider to administer the questionnaire. Providers became more responsive to the nurses' documentation of a positive PHQ2 and other prompts from the nursing team.

In addition, providers began to enter the results from both the PHQ2 and PHQ9 and respond appropriately to patient scores through management discussions and comprehensive decisions on treatment. To increase our comfort level of treating depression in the primary care setting, we began to have bi-monthly multi-disciplinary discussions between providers, social workers, and our psychiatrist to discuss individual patients, counseling techniques, and medications. We then created a mental health visit in the EHR system that allowed a provider to give patients an appointment specifically to address their depression, thus relieving the pressure to immediately address the depression in visit at hand.

Subsequent reviews of the above interventions showed notable improvement in the use of PHQ9 evaluations of patients with depression. Thus, as a team, our intervention incorporated all lines of staff and allowed us to meet the tenets of our CQI project: to screen all eligible patients and to initiate treatment decisions on patients with depression. ■

The Institute Awarded Grant to Study Diabetes Quality of Care Using EHRs

By Diane Hauser, MPA

Preliminary data obtained through our Epic system identified disparity in diabetic control between black, white, and Latino patients, as well as differences among practice sites and individual practitioners. To better understand how these disparities arise and how to address them, the Institute is undertaking a two-year study funded by the Commonwealth Fund entitled, Electronic Health Records: Improving Quality and Reducing Disparities.

The study is being led by **Drs. Neil Calman** and **Kwame Kitson**, with NYU's Center for Health and Public Service Research (CHPSR) serving as an academic partner. A study advisory committee has also been assembled which includes outside experts in

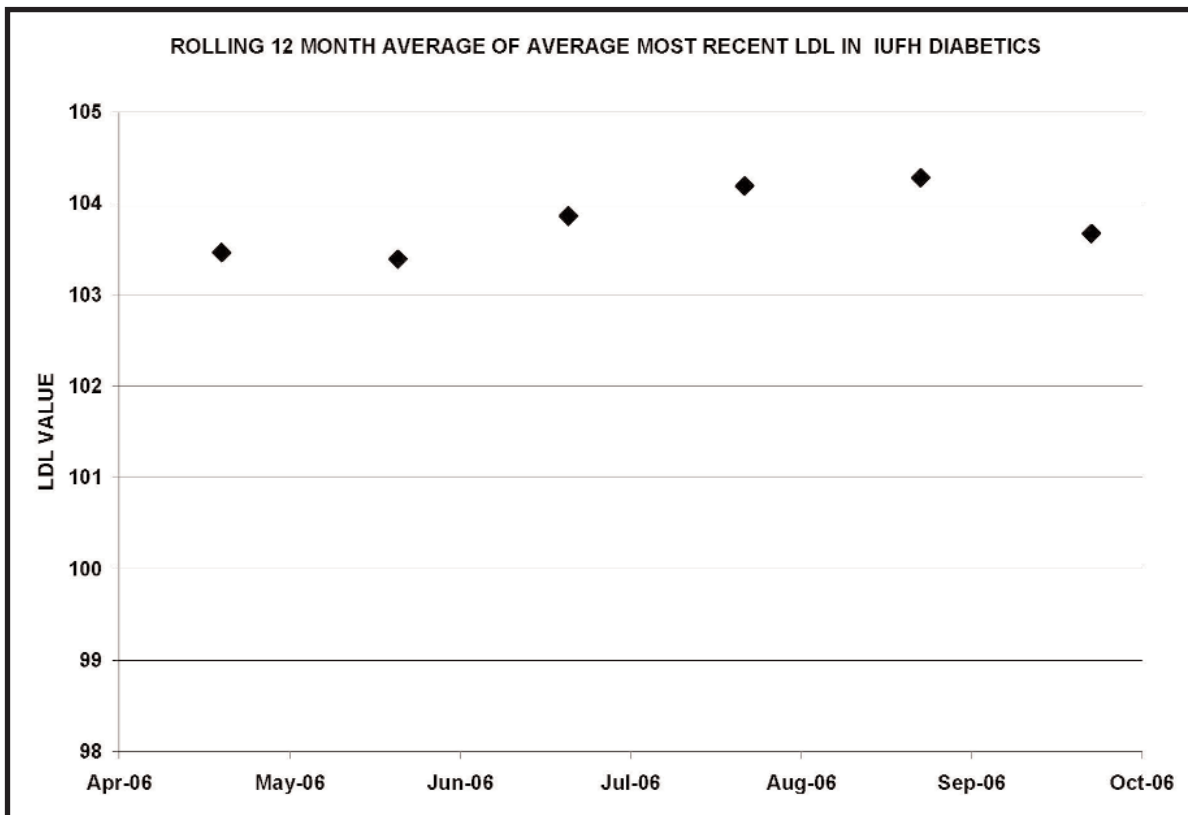
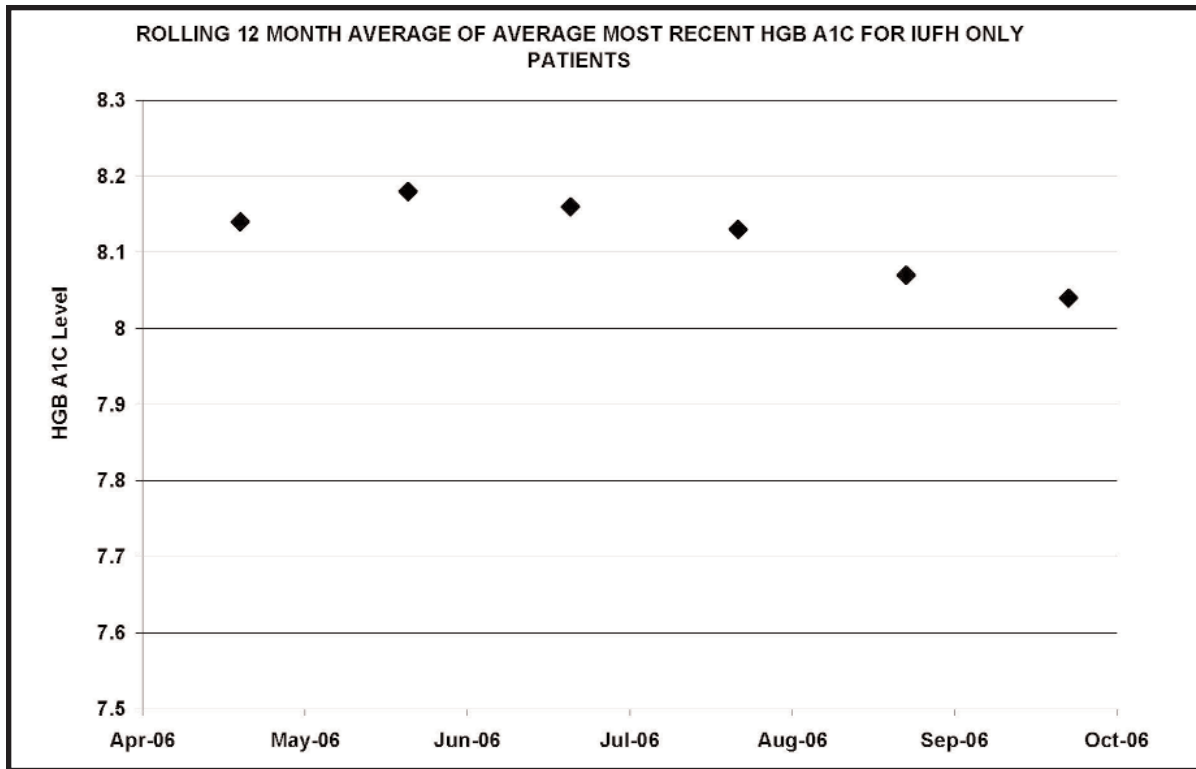
quality improvement, health information technology, and epidemiology.

Investigators will examine differences in care and outcomes through a rigorous review of Epic data, and determine elements of care that are correlated with specific health outcome measures. In a second phase of the study, a selected clinical practice found to be associated with better patient outcomes will be replicated at sites or among providers with disparate patient outcomes, and the impact of this intervention will be assessed. The study period is August 2006 through July 2008. ■

Diane Hauser coordinates research as well as the Institutional Review Board at the Institute for Urban Family Health.

HGBA1C and LDL lab results for diabetics, 2006

The following graphs illustrate the analysis of HGBA1C and LDL lab results for diabetics within a rolling 12-month average reporting period over the past three years. Institute providers have been successful in getting more diabetics under good control, and within a healthy LDL level.



CQI Notes is a publication of the Institute for Urban Family Health.

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* Operated in conjunction with Continuum Health Partners

CONGRATULATIONS TO OUR TOP PROVIDER PERFORMERS IN LDL SCREENING OF DIABETICS

As part of a new incentive program to promote clinical performance improvement, the Institute is making an award to its top three performers in LDL testing of Diabetic patients. The Diabetic LDL test rate was calculated by PCP for diabetic patients born between 1906 and 1988 and who visited the clinic anytime between July 2005 and October 2006.

Among providers who saw at least 30 patients who met the above criteria, the top performers were:

Christine Valdes, MD - 85/97 = 87.6%

Neil Calman, MD - 26/31 = 83.9%

Phillip Baird, MD - 57/70 = 81.4%

Other top performers included:

Joseph Ordoñez, MD - 59/73 = 80.8%

Jocelyne Sanon, MD - 62/87 = 71.3%

Kwame Kitson, MD - 38/54 = 70.4 %

Adam Szerencsy, MD - 38/57 = 66.7%

Quality Improvement Associate Hired

Ms. Anna Quiñones has started her employment in a newly created position, quality improvement associate. She previously served as one of our very best patient service representatives at the Walton Family Health Center.

Ms. Quiñones will supervise electronic patient outreach across the Institute. She will also function as a direct liaison between the Institute and the QI departments of our participating health plans. She will also help support the clinical sites and non-clinical areas with their CQI efforts.

We welcome Ms. Quiñones to her new position !