

Health Information Technology and Quality Improvement *A Public Health Approach*

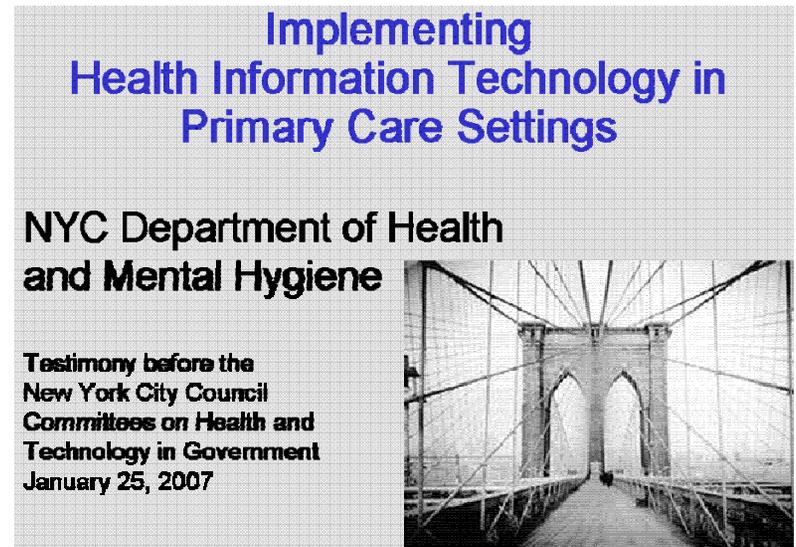
NYC Department of Health
and Mental Hygiene

Testimony before the
New York City Council
Committee of Technology in
Government
January 28th, 2008



Today's Testimony

- Background on the Primary Care Information Project
- Update on Activities
 - EHRs
 - Health Information Exchange
 - Quality Improvement
- Key Goals and Challenges



Primary Care Information Project

- Mission
 - Increase the quality of care, particularly in medically underserved areas, through health information technology (HIT)
- Resources
 - NYC: \$30 million
 - Federal, State, Private: \$10 million

PCIP Roadmap

1. Citywide EHR Network

- Procure “best of breed” Electronic Health Record
- Add prevention functionality
- Prepare network and hardware infrastructure
- Extend to correctional health and community providers

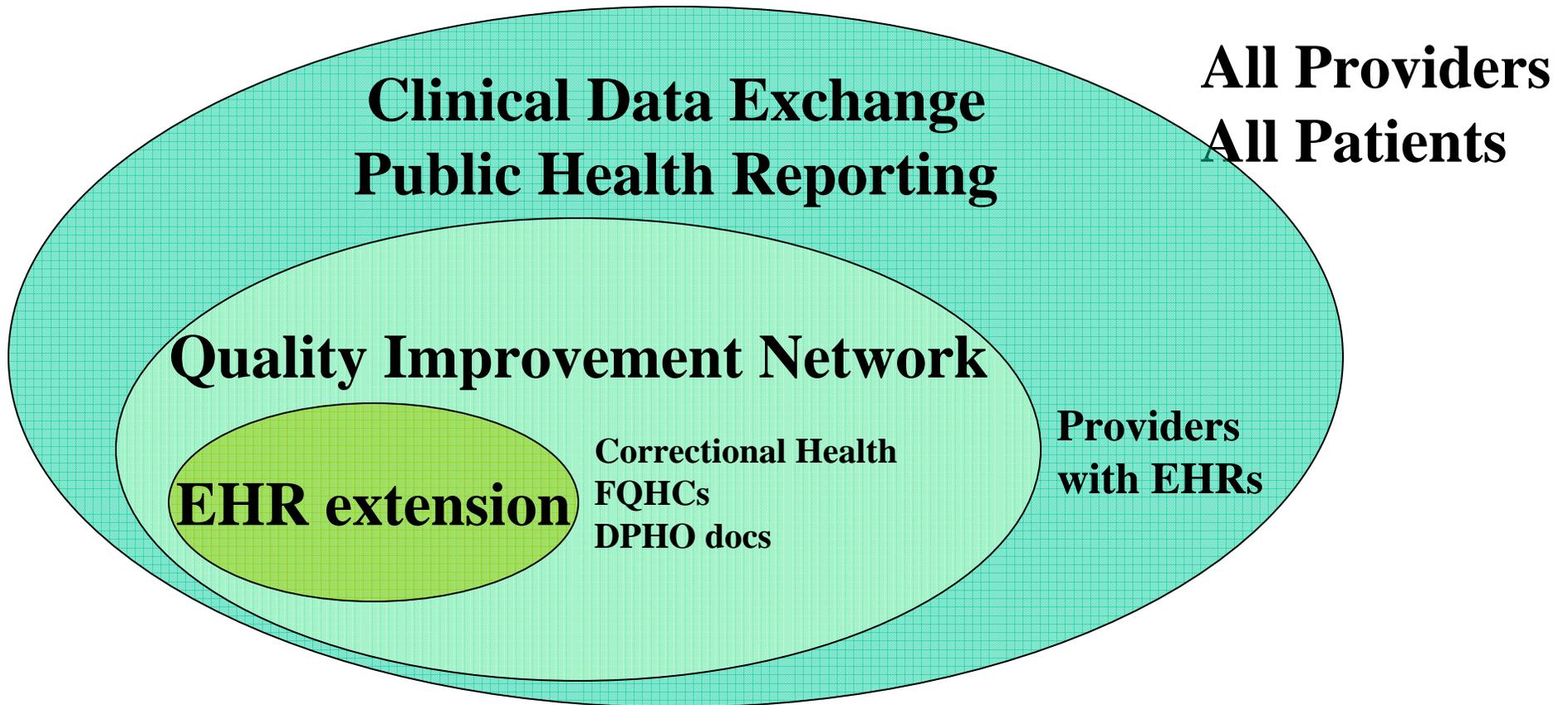
2. Citywide Quality Improvement Network

- Citywide automated quality measurement and reporting
- Decision supports and other quality improvement
- Extend to other ambulatory EHRs

3. Citywide Health Information Exchange Network

- Interfaces to other systems (e.g., HHC)
- Syndromic and notifiable disease reporting
- Citywide Immunization, Lead Registries, and School Health
- Linkages to RHIOs
- Medicaid medication history

All New Yorkers Can Benefit

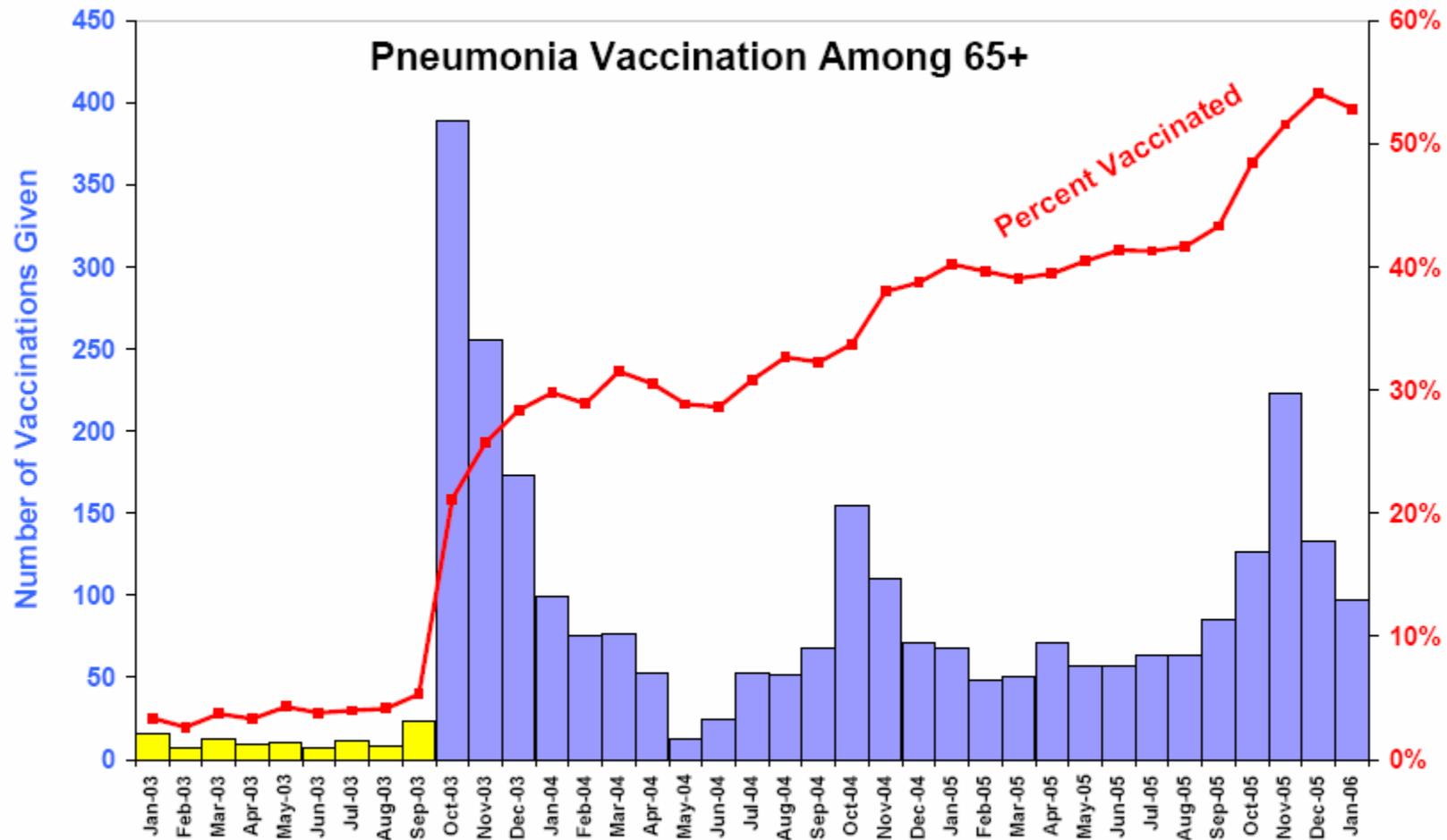


Why Are Electronic Health Record (EHR) Systems Critical?

- Patient information frequently missing
- Medical knowledge and guidelines overwhelming
- Medical errors become inevitable



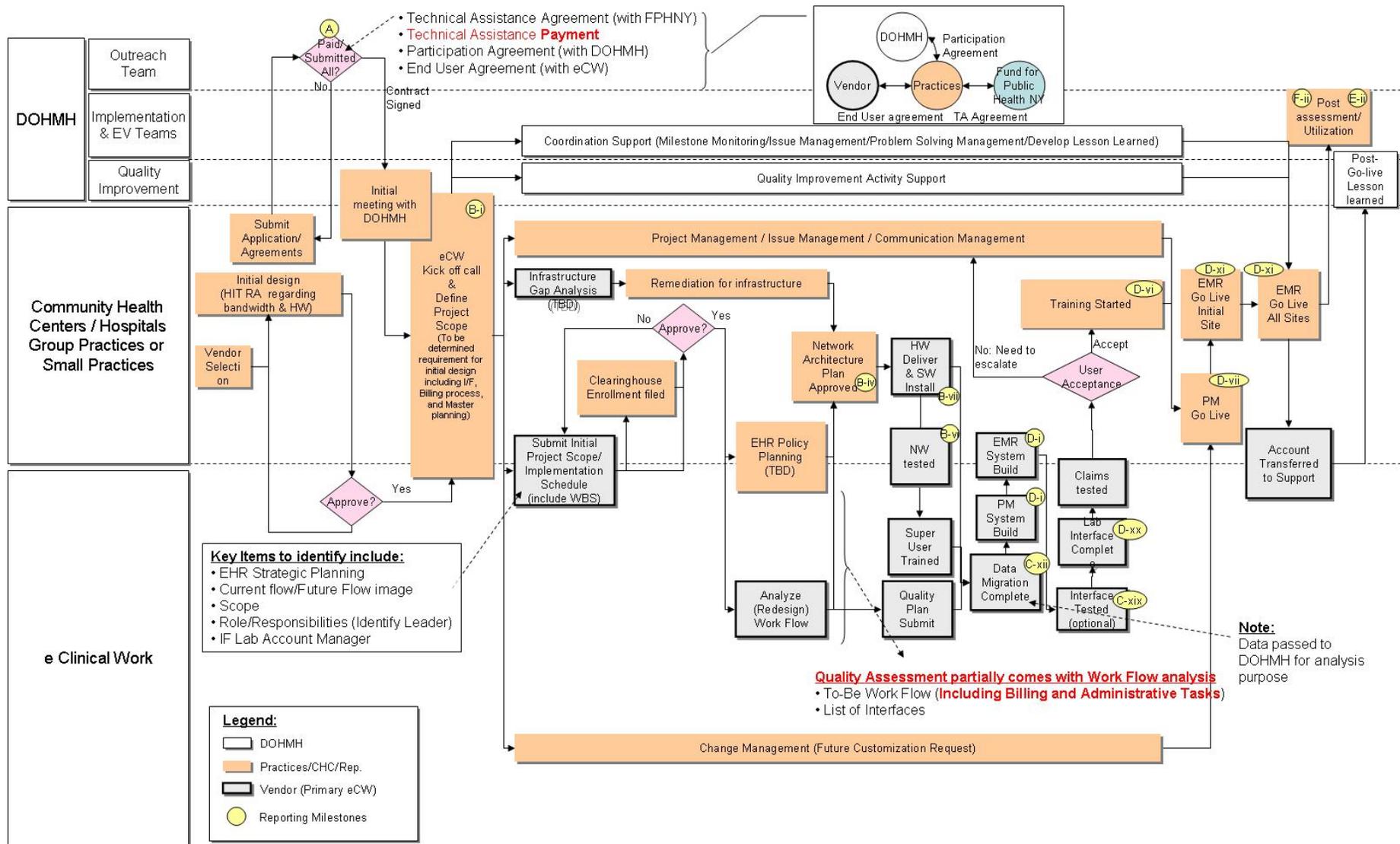
Electronic Health Record Reminders Increase Preventive Services



Electronic Reminders Begin

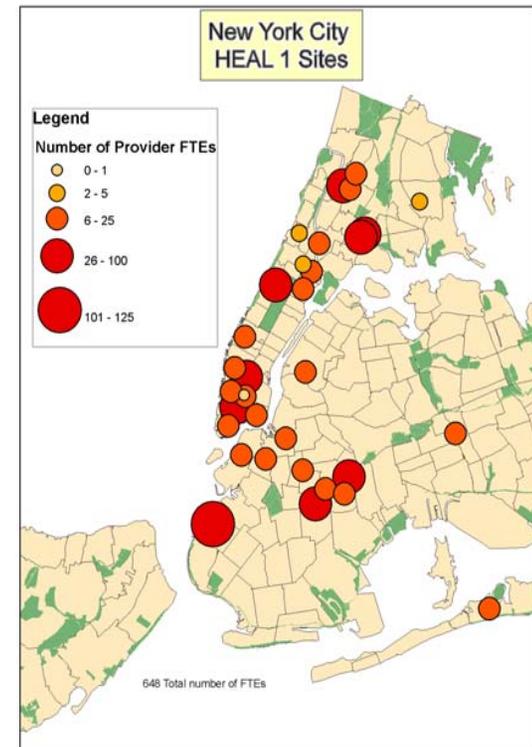
EHR Implementation is Complicated

-Example of steps a practices must complete to implement



Where to Start? Community Health Centers

- All NYC Community Health Centers to have EHRs by 2009
 - 648 providers
 - 500,000 patients
 - 50% Medicaid, 20% uninsured
- \$3.2 million HEAL-NY 1 state grant
 - Up to \$5.6 million City Capital match
 - Up to \$9 million CHC match
 - New EHRs, or preventive functionality in existing EHRs

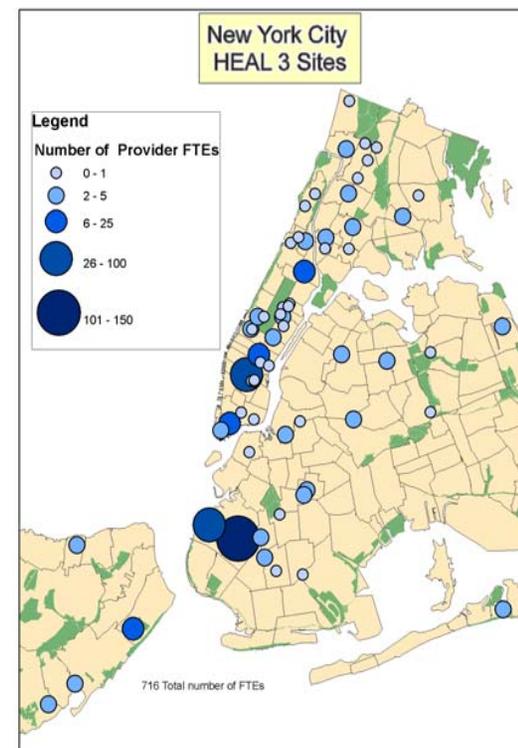


CHC Consortium



Other Providers

- Small doctors offices
 - Deliver 85% of primary care
 - Lowest EHR adoption rates
 - Greatest challenges in quality and financing
- Convening and support
 - Medical Societies
 - QIO (IPRO)
 - Hospitals
 - Health plans



What do Practices Get?

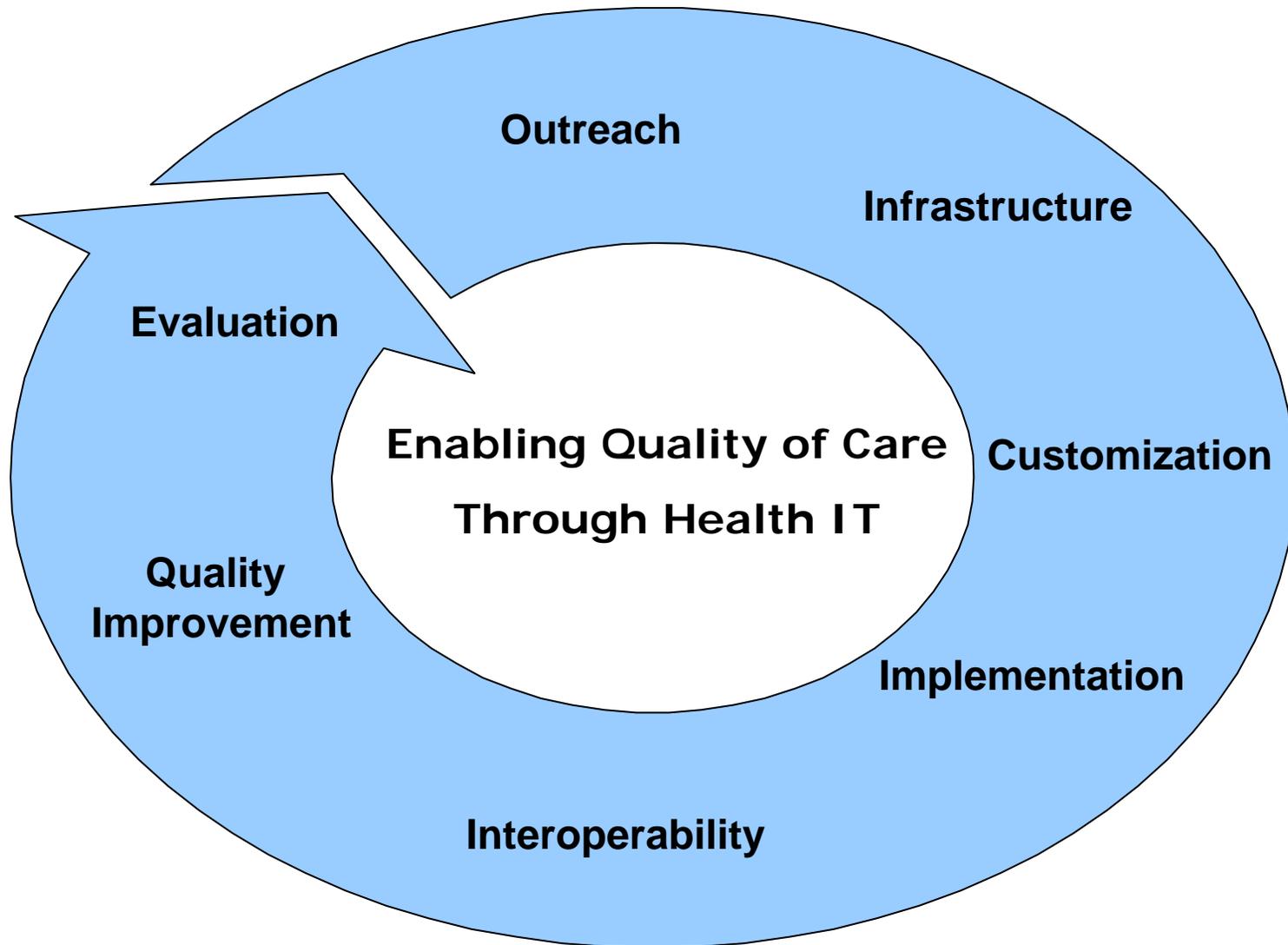
- Licenses to “NYC Build” eClinicalWorks
 - (Vendor selected by open competitive RFP)
- Common interfaces included
- On-site training
- Quality improvement technical assistance

- Predictable, low ongoing (M&S) costs
 - ~ \$1,500 per FTE provider/ yr

EHR Eligibility and Public Purpose

- Care for underserved / vulnerable populations
 - Medicaid and uninsured
 - DPHO areas (S Bronx, Harlem, Central Brooklyn)
- Participate in public health goals
 - Mandatory indicator reporting (automated, confidential)
 - Quality improvement (incl. decision support tools)
 - Public health interfaces (school health, CIR)
- Financial commitment
 - \$4k per provider contribution to QI fund
 - Assume all ongoing costs after 2 yr testing phase

PCIP Status Report



EHR Outreach

- Education
 - EHR CHI – Mailed to 33,000 of providers
 - Onsite detailing to 327 DPHO providers
 - 350 + WebEx Participants / 40 + on-site Demonstrations
- Partnerships
 - 8 Managed care plans, 13 medical associations & 5 hospital affiliate groups
- Online Application and Contact Tracking Process
 - 313 practices applied, 263 (84%) eligible
- First implementation wave filled!
 - 600 providers, 74 practices, 120 sites

Electronic Health Records Action Kit

Electronic Health Records

Are We Ready to Adopt an Electronic Health Record System?

Implementing electronic health records (EHRs) requires more than a financial commitment. To make the transition from paper charting systems to EHRs, a practice must have organizational buy-in at all levels, the commitment and support of practice leadership and a positive outlook on change.

This readiness checklist can help your practice assess "readiness" when preparing for transition.

Place a "✓" in the box if your practice satisfies the requirement below.

REQUIREMENT

✓ Yes! Our practice satisfies this requirement.

I. Leadership Support	
a. Has our practice identified clinical and administrative goals for adopting an EHR system?	
b. Has our practice identified a clinical champion? <i>(A health care provider who sees value in EHRs and is willing to support staff as they adopt the system.)</i>	
c. Has our practice communicated the benefits of adopting EHRs to our staff, and engaged them in the transition process?	
II. Financial Commitment	
a. Would our practice be willing to sustain a one to three month decrease in productivity during implementation and training?	
b. Has our practice budgeted for the ongoing expenses required for an EHR system? <i>(information technology [IT] support,</i>	

EHR Infrastructure

- CHCs
 - \$2 MM City Council capital
 - ~1/3rd of total need
 - Infrastructure Deployment to 11 CHC's in first wave of implementation
 - Gap analysis, procurement and delivery
 - Procured ~ \$ 3 MM worth of equipment
- Correctional Health
 - Created high-reliability data center

EHR Customization

- Developed innovative public health-focused EHR
 - Integrated disease registries
 - Decision support tools, alerts
 - Automated quality measurement
 - Immunization registry reporting

You are viewing: Cheryl Bombard's Desktop

eClinicalWorks (eclinicalworks,support) ny-testsrv

File Patient Schedule EMR Billing Reports Fax Tools Community Lock Workstation Help

ew eClinicalWorks 7.0 S 0 D 0 R 0 T 1 L 0 M 0

Admin Practice

Resource Sche... Willis, Sam Office Visits Progress Notes Telephone/We... Labs/Imaging Out of Office Vi... Recalls Referrals Messages Documents Billing

Progress Notes

Robert Smith, 40 Y, M Sel Info Hub


 H: 508-845-6789
 DOB: 04/04/1967

Allergies
 Billing Alert

Wt: **210 lbs.**
 Appt(L): **11/20/07**
 PCP: **Willis, Sam**
 Language: **Chinese**
 Translator: **No**

Ins: **Self Pay**
 Acc Bal: **\$0.00**
 Guar: **John Smith**
 Gr Bal: **\$0.00**

CLICK TO EDIT SECURE NOTES ADV DIRECTIVE

Medical Summary | Alerts | Labs | DI | Procedures | Growth Chart | Immunization | Encounters | Patient Docs | Flowsheets | Notes

SF Rel Bulleted Encounters 11/20/2007

Examination:

General Examination
 GENERAL APPEARANCE: NAD, pleasant.

Physical Examination:

Assessment:

Assessment:

- Hypertension - 401.9 (Primary)
- Diabetes mellitus type II - 250.00

Plan:

Treatment:

Diabetes mellitus type II
Lab:Hgb A1c with MBG Estimation

Procedures:

Immunizations:

Diagnostic Imaging:

Lab Reports:

Preventive Medicine:

Next Appointment:

Print Fax Record Lock Details Scan Templates Claim Letters Ink Tx

Overview History **Alerts** Labs|DI

Alerts

- (363-CM) BP Control (130/80) in patients with DM
- (350-CE) LDL testing in high risk patients (IVD, DM)
- LIPID PROFILE Historical Data
- (400-CT) HIV Testing
- (500-CT) Depression Screening
- (804-OI) Influenza Vaccination (High Risk)

Actionable, non-intrusive alert will show on the right-pane.

- Admin
- Practice
- Recalls
- Patient Recall
- Group Encoun...
- Registry
- Registry Reports
- Quality Measures
- Time Measure
- Referrals
- Messages
- Documents
- Billing

Registry

Medical History Immunization Encounters / Visits Structured Data Saved Reports Referrals Generate Reports

Demographics Vitals **Labs / DI** ICD CPT Rx Alerts

Labs [v] Lipid Profile [Sel]

Attribute	Lower Limit	Upper Limit
RISK RATIO (CHOLHDL)		
CHOLESTEROL	150	
CALCULATED LDL CHOL		

Results Date Range: 7/26/2005 to 7/26/2007

Fasting status: [v]

Number of tests >= [] Include tests with no results []

Query Attributes [x]

[Save Queries] [Run Subset (NOT)] [Run Subset] [Run New]

	Patient Name	DOB	Sex	Age	Tel. No	Acc #
<input checked="" type="checkbox"/>	ABBOTT, MONICA	11/03/1964	F	42Y	508-836-3663	
<input checked="" type="checkbox"/>	ADAIR, LINDA	12/17/1946	F	60Y	508-836-3663	
<input checked="" type="checkbox"/>	ADAM, JEFFREY	01/01/1976	M	31Y	508-836-3663	
<input checked="" type="checkbox"/>	ADAMS, ART	12/02/1957	M	49Y	508-836-3663	
<input checked="" type="checkbox"/>	ADAMS, MARK	08/30/1955	M	51Y	508-836-3663	
<input checked="" type="checkbox"/>	AKE, DIANNE	03/12/1958	F	49Y	508-836-3663	
<input checked="" type="checkbox"/>	ALDERETE, AUGUSTINA	07/23/1951	F	56Y	508-836-3663	
<input checked="" type="checkbox"/>	ALDERETE, PATRICIA	09/07/1958	F	48Y	508-836-3663	
<input checked="" type="checkbox"/>	ALEMAN, JOHN	01/22/1954	M	53Y	508-836-3663	
<input checked="" type="checkbox"/>	ALKIER, MICHAEL	08/07/1959	M	47Y	508-836-3663	
<input checked="" type="checkbox"/>	ALLEN, GEORGIA	06/17/1967	F	40Y	508-836-3663	
<input checked="" type="checkbox"/>	ALMAZAN, HECTOR	06/26/1950	M	57Y	508-836-3663	
<input checked="" type="checkbox"/>	ALTMAN, JAMES	07/02/1943	M	64Y	508-836-3663	
<input checked="" type="checkbox"/>	AMMONS, CHANTEL	04/27/1972	F	35Y	508-836-3663	
<input checked="" type="checkbox"/>	ANDERSON, JAMES	07/24/1945	M	62Y	508-836-3663	
<input checked="" type="checkbox"/>	ANDERSON, ROBERT	09/24/1942	M	64Y	508-836-3663	

Demographics :: Age >=18 AND Age <=65 AND Sex = Both
ICD :: 401.9
Labs :: Lipid Profile AND CHOLESTEROL >=150 AND Date >= 07/26/2005 AND Date <= 07/26/2007 AND Search Lab Attributes

Choose Letter [] ... [Run Letter] [< Prev] [Next >] [1-25] of 1039 records

[25] [Patient Hub] [New Appointment] [Copy] [Send eMessage] [Flowsheet] [Exclude From Search] [DOQ-IT]

- Admin
- Practice
- Recalls
- Patient Recall
- Lookup Enc...
- Registry
- Registry Re...
- Quality Mea...
- Define Meas...
- Summary R...
- Referrals
- Messages
- Documents
- Billing

Quality Measures

Quality Measure Reports

Run Date ...
Measure Name
Reporting Interval
Reporting Date Range ... to ...
 Exclusions

Cross Tabs **Facility** **Provider** **Insurance** **Race**

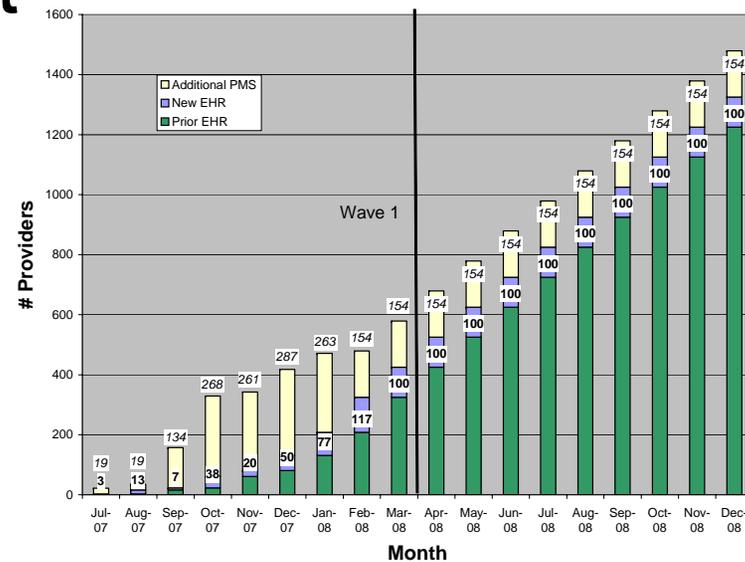
Measure Definiton:

Patient 18-75 years of age with diabetes who have a poorly controlled lipid panel with LDL > 100.

Facility	Provider	Numerator	Denominator	Percentage
Westborough Medical Associates	BERG, PAUL	0	5	0.00%
Westborough Medical Associates	BOHMFALK, THOMAS	0	29	0.00%
Westborough Medical Associates	DONOVAN, JIM	0	14	0.00%
Westborough Medical Associates	LAB/IMMUNIZATIONS,	0	2	0.00%
Westborough Medical Associates	PADGETT, JR, LARRY	0	46	0.00%
Westborough Medical Associates	PEARCE, RICHARD	0	50	0.00%
Westborough Medical Associates	VOSS, DANIEL	0	27	0.00%
Westborough Medical Associates	WILLIS, SAM	1	32	3.12%

EHR Implementation

- Workflow mapping
- Project management
- Troubleshooting
- As of today
 - 152 providers on EHR
 - 150 providers on PMS



Are We Ready to Adopt an Electronic Health Record System?

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Interoperability

- Statewide consensus-building process regarding privacy and security policies
- Developed materials for practices and patients
- Enabled medicaid medication history queries

Protecting Patient Data

The security of patient health information is extremely important to health care practices already follow HIPAA rules and regulations, practices must face different challenges than paper charting systems. Practices need to ensure their patients' electronic health information is kept safe and private.

According to recent surveys, patients worry that their personal health information is being shared electronically. Patients are especially concerned about who will have access to their information.

Despite these concerns, patient health information has not been the target of financial fraud and identity theft (such as Social Security numbers). Health care practices must do everything to maximize the security of their patient information.

To ensure the safety of your patients' information:

- I. Choose an EHR product that has all of the recommended security features.
- II. Follow the proper procedures and practices to maintain data security.

I. Choose an EHR product that has all of the following features:

1. Role-Based Access

- > Allows the practice to define access privileges of each staff person and ensures that only authorized health care providers can see patients' health information. Administrative staff should be restricted to basic information such as address, date of birth and other demographic information.
- > Practice leadership should be the only people who are responsible for establishing the access privileges of staff members.

2. Audit Trails

- > Audit trails track activities within the EHRs. Documented events in an audit trail include: a staff member logging in or out of the system, opening, modifying, creating or deleting a record, scheduling a patient, signing a chart, querying the system or printing personal health information.
- > Audit trails also document the date and time of an event, where the event occurred and who performed the event.
- > Only authorized administrators should have access to read these records. No one, not even the office administrator, should be able to modify or delete audit trails.

3.

4.

5.

What is a Health Information Exchange?

A **Health Information Exchange (HIE)** is a way to electronically share patient health information among doctors, hospitals and other health care providers. Health information is protected and exchanged under current medical privacy laws. A health information exchange allows patients to make sure their information is safe and that they are getting the best care possible when seeking medical care or treatment.

How can a Health Information Exchange improve care?

Health care providers can access critical medical information throughout the continuity of treatment, provides emergency providers with more information and minimizes harm from unnecessary procedures.

Benefits of a secure Health Information Exchange

- > In an emergency, hospital or emergency department staff can access patients' medical records.
- > By communicating with other health facilities, health care providers can ensure that patient information is available, even if the patient is transferred to another facility.
- > When patients switch primary care providers, vital information is transferred along with them.
- > As patients move from outpatient to inpatient and long-term care, their information is available to all providers.
- > Some HIEs facilitate an electronic connection between health care providers.
- > An HIE can help reduce the incidence of duplicative tests and procedures.

Health Information Exchange and your patients

According to eHealth Initiative's 2006 survey, patients overwhelmed by the security features, their rights to privacy and consent.

Patients have the right to consent:

- > Each patient can decide whether he or she wants to share their health care information with others.
- > Patients are more likely to agree to share their information if they are given the opportunity to do so during the clinical encounter.
- > Health care providers should make sure their patients understand their rights, especially in the event of an emergency.

There are many regional HIE initiatives in New York City and the surrounding area. For more information about these efforts, please visit www.nyhie.org.

Improve Quality of Care Through Health Information Exchange
For more information, visit www.nyhie.org



¿Qué son los Registros Electrónicos de Salud?

Un Registro Electrónico de Salud, (**Electronic Health Record-EHR**, por sus siglas en inglés), es toda la información sobre su salud en la computadora de su proveedor de atención médica. Todo lo que se acostumbraba escribir, ahora se registra en un EHR.

Durante los próximos años muchos médicos en la ciudad de Nueva York comenzarán a usar computadoras en sus consultorios para mantener su información médica, tal como:

- > Notas sobre sus exámenes médicos
- > Lista de sus alergias
- > Lista de sus recetas
- > Indicaciones personalizadas
- > Resultados de sus rayos X
- > Pruebas de laboratorio

Toda su información médica en un solo lugar – en su EHR.

Esto ayuda a que su proveedor de atención médica recuerde todo lo que necesita para mantenerle saludable, por ejemplo, cuando necesita una vacuna o una mamografía. También de forma más rápida y fácil puede programar una cita, su cuenta médica, obtener un referido y solicitar la repetición de una receta.

Los Registros Electrónicos de Salud mantienen sus datos médicos seguros y confidenciales (privados). Usted decide quién puede ver esta información.

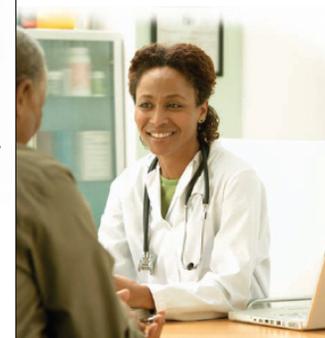
- > Los EHR se mantienen "protegidos" y solamente se pueden ver utilizando una contraseña especial. Esto ayuda a mantener privada la información sobre su salud.
- > Los EHR tienen muchos niveles de seguridad. Solamente ciertas personas – como su proveedor de atención médica – pueden ver toda la información sobre su salud. El personal puede ver solamente ciertos datos como su nombre, fecha de nacimiento y dirección.
- > Ya sea que su proveedor de atención médica use o no los EHR, usted firmará un formulario de consentimiento si quiere compartir su información. Pídale una copia de su proveedor de atención médica, y una explicación de para qué sirve.
- > Se pueden anotar en su registro notas confidenciales que solamente su proveedor de atención médica puede ver. Usted puede decir, "No deseo que ninguna otra persona, aparte de usted, pueda ver esta información. Por favor mantenga esta información en forma segura, de tal manera que solamente usted pueda leerla."

Los EHR ayudan a su proveedor de atención médica a cuidar mejor su salud.



Los Registros Electrónicos de Salud le ayudan a usted a participar activamente en el cuidado de su salud.

- > Pida ver la pantalla de la computadora. "¿Puedo observar lo que está haciendo?"
- > Pida que le impriman datos que le puedan servir. Se puede imprimir de los EHR un resumen de su visita médica, así como también un horario de visitas preventivas recomendadas, tales como vacunarse contra la gripe, hacerse una prueba de colesterol o una mamografía.
- > Proporcione siempre datos completos a los proveedores de atención médica y su personal. Esto puede salvar su vida.
- > Si va a la sala de emergencia, dígame al personal que su médico usa un EHR. Puede decir, "Mi médico tiene un EHR. Comuníquese con él o ella para obtener mis datos médicos."



Medicaid Med Hx Pilot

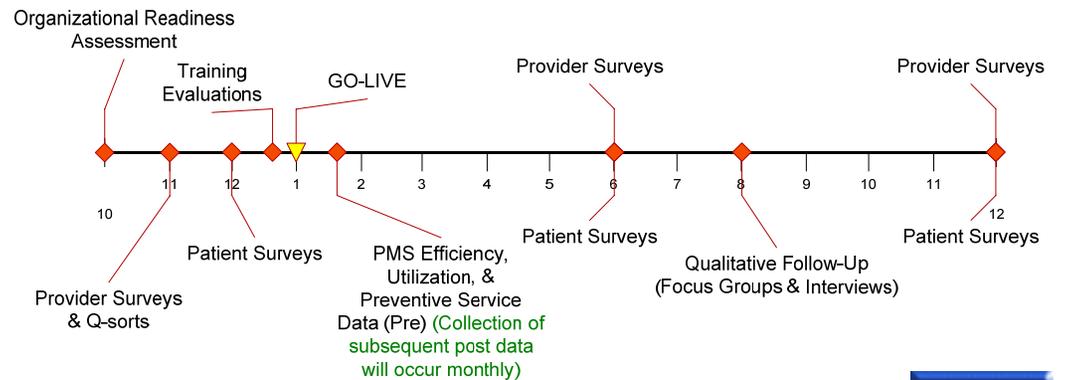
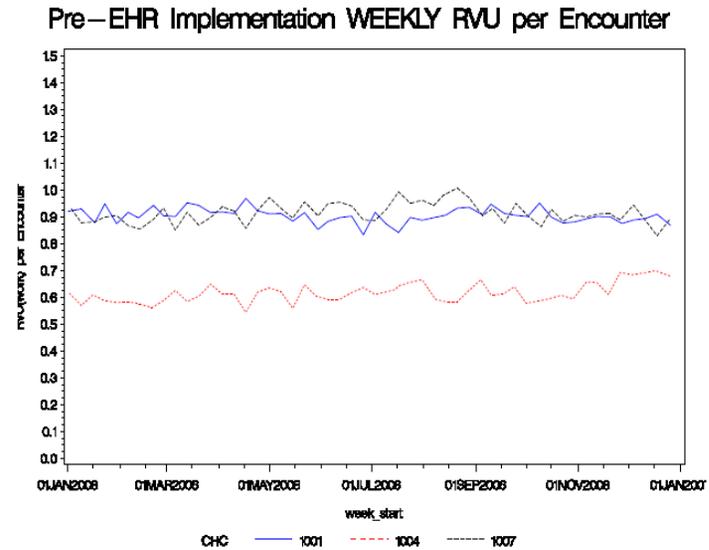
- Enable real-time eligibility, formulary and medication history queries (RxHub standards)
- Allows treating physicians to access to their respective Medicaid patients' medication history at the point of care
- Eliminates steps from the practice workflow by linking Medicaid eligibility checking directly into eClinicalWorks' practice management

EHR-Enabled Quality Improvement

- Working with practices to maximize the quality gains possible with EHRs
- Practice redesign, workflow changes, staff retraining
- Improved patient communications, efficiency, patient recall and proactive care
- “Patient-Centered Medical Home”

Evaluation

- Assess impact on quality, efficiency, and patient satisfaction



Key PCIP Goals for 2008

- Extend EHRs and quality improvement to over 1,000 providers, improve care for over 1 MM patients
- Incorporate prevention into all EHRs
- Use clinical data to monitor quality of care, and recognize high quality providers

Key PCIP Challenges to Address in 2008

- Infrastructure support
 - Lack of resources hinders effective adoption, increases support requirements
- Reliable broadband internet access
 - Practices can't get timely, affordable service
- Reimbursement reform
 - Increased recognition and payment for prevention