Conversion to Electronic Medical Records: One Program's Perspective

Paul Stabile, PA-C, M.S.

Director of Clinical Care

William F. Ryan Community Health Center Network

August 2010

Disclosures

- Paul Stabile, PA-C
    - Has no financial interest or relationships to disclose.

- HRSA Education Committee Disclosures
    - HRSA Education Committee staff have no financial interest or relationships to disclose.

- CME Staff Disclosures
    - Professional Education Services Group staff have no financial interest or relationships to disclose.

Objectives
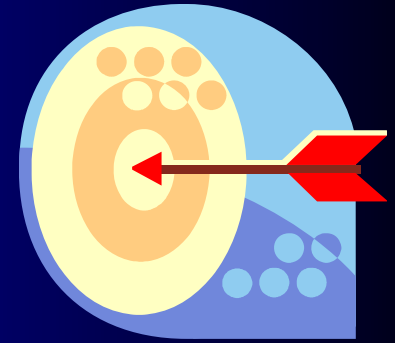
- Identify key issues to address during the vendor selection and pre-implementation phases for a smoother transition

- Recognize vital elements of the EMR "Go-Live" process

- Describe how the EMR is being used post-implementation to track grant deliverables and SMART objectives

- Highlight medical and support service areas of importance that will determine the long term success of an EMR

Points to consider

- One Program's Experience
- Provide a basis for important issues to consider
- Start to know what you "don't know"

Ryan Health Network Facilities

- William F. Ryan CHC:
  - Uptown Manhattan

- Ryan-NENA:
  - Lower East Site

- Ryan Chelsea-Clinton:
  - Midtown

- Thelma C. Adair CHC:
 - Harlem

Other Locations

- School-Based Programs
- Community Health Outreach
- SHOUT – Adolescent Medical Mobile Van
- HIV Outreach Vans
- EMR implementation

included these remote locations

Clinical Services

Full Service Community Health Network

- Adult Primary Care
- Integrated HIV Care
- Residency Programs
- Rapid HIV Testing
- Women's Health
- Pediatrics
- Dental Care
- Radiology
- Support Services
  - Case Management
  - Mental Health
 - Harm Reduction
  - Legal Services
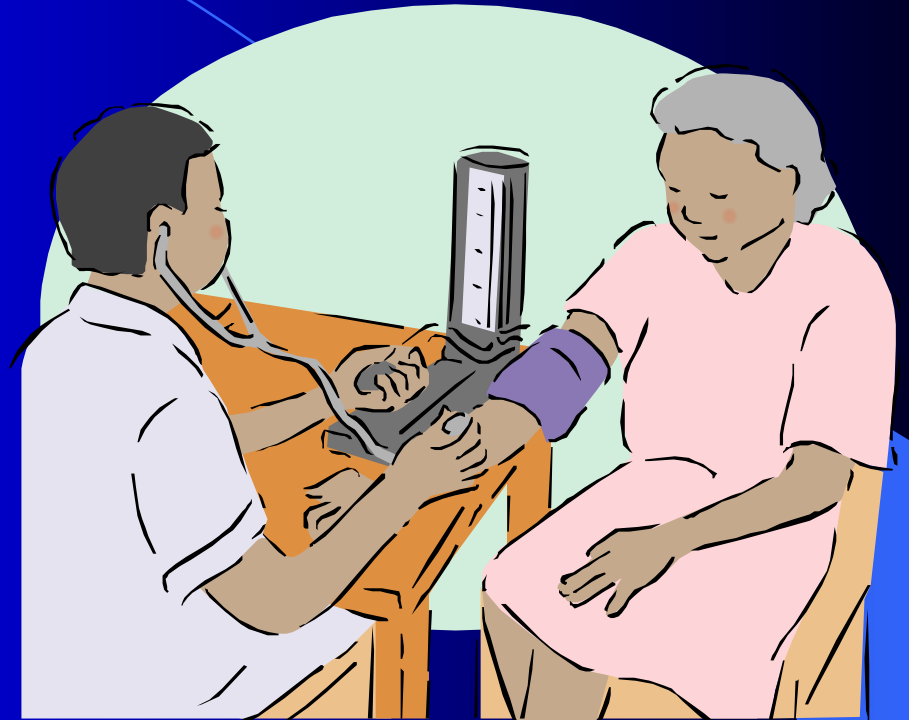
Specialty Care: Allergy, Urology, Dermatology, Neurology, GI, Podiatry, Ophthalmology

Network Patient Information

- 42,740 medical patients received services in 2009

- 9,581 dental patients served

- > 40% of patients below federal poverty line

- > 85% minority populations

HIV Demographics

- 1100 HIV patients received services in the past 12 months

- Average age = 44

- > 40% of patients below federal poverty line

- > 85% minority populations

40%

2%

12%

46%

☐ Black, non Hispanic ☐ Hispanic
☐ White, non Hispanic ☐ Other
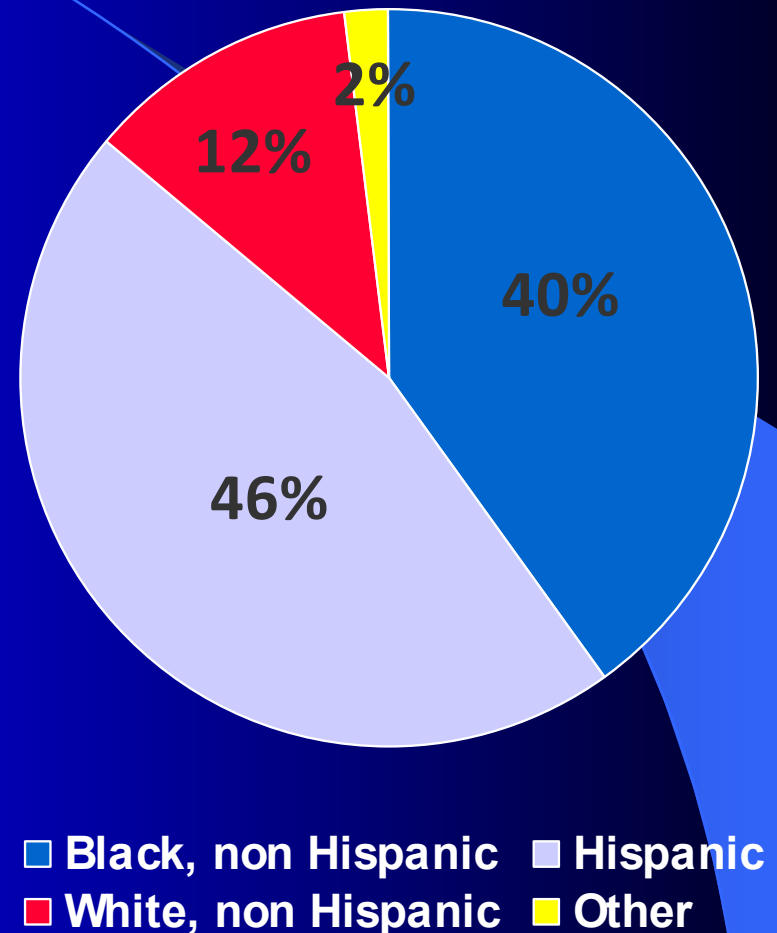
Choosing our product . . .

- EMR Selection Committee
- Consultant – RSM McGladrey
  - Assisted in bid solicitation
  - Narrowed choices
  - 1200 item questionnaire
  - 12 vendors considered ➜ 3 finalists
- Staff demonstrations/surveys
- Site visits
  - Prepare a case scenario
- Main drivers of our decision:
  - Staff surveys
  - Cost
  - Use by other local facilities

How will EMR be used?

- Out-of-the-box vs customizing
- Decision was straight forward:
  - Our processes were so complex that services or data collection could not be maximized without customization

IT Department Development

- Department created for EMR conversion
  - CIO
    - Network implementation of PM and EMR
    - Experience in EMR roll-out
    - Data integrity
  - Director of IT
    - Handled hardware, wiring, connectivity
    - Major collaboration with General Services
  - Help Desk
    - Phone / cell / email access
 - Certified Trainers / Super-Users supplement

HIV Department Involved Early

- Became part of decision-making process
  - EMR Vendor
  - Billing
    - Medicaid and other insurances
    - Grants
  - Workflows
  - Unique services
    - Mobile
  - Template building
- Once the train leaves the station . . .

EMR HIV Subcommittee

- Key staff from each location
- Review of current policy and procedures
- Break-out groups looked at each process, service, and quality indicator
  - HIV Clinical Services
  - Treatment Education
  - Case Management
  - HIV Counseling and Testing
  - Harm Reduction
  - Patient Escort Services
  - And more . . .
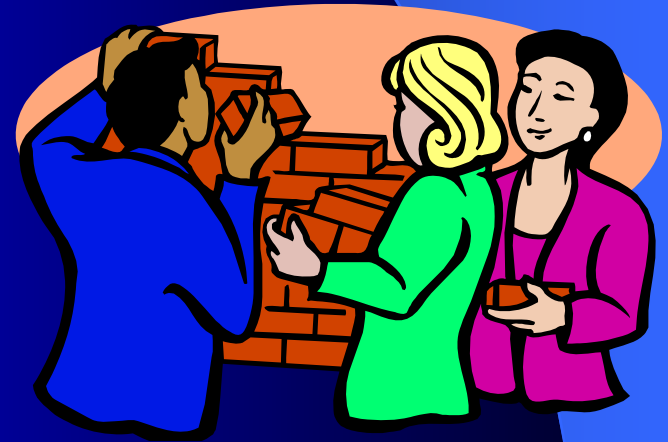
Workflows (hand out)

- Keys to understanding our process
  - Different locations performing same function may have very different workflows
  - Impacts how EMR is configured
  - Follow patient / service / data
  - Visio

HIV Rapid Test Procedure

1. Schedule the patient's HIV Rapid Test Pre-Test appointment.
   a. Open the **Resource Schedule** screen.
   b. Check off your name on the **Resources** List.
   c. Select the date and time of the appointment.
   d. Set the **Facility, Department, Provider, Resource, Start Time, Visit Type, Visit Status** (Check In the patient), and **Reason**.
   e. Enter the **Patient Lookup** Screen by clicking **Sel** to the right of **Patient**.
   f. Search for your patient (Last Name, First Name) in the **Patient Lookup**.

If your patient is already registered:

- Select the patient's name and click **OK**.
- Click the **Info** button, to the right of the patient's name.

If you do not find your patient:

- Select **New** to register the patient.
- Complete the **Patient Information** screen by answering **all** areas marked by a **(*)** and entering any other information available.

Changes to Job Functions

- All staff job functions change as a result of EMR
  - Clinical staff
  - Support staff
  - Administrative and Data Entry
  - Medical Records
  - Laboratory
  - Planning
- Job descriptions revisions
  - Union positions may require review

Training

- Key HIV supervisory staff certified as Trainers
  - Kept HIV department in the loop
  - Developed intra-departmental EMR expertise
  - Cultivated "Super-Users"
    - AmeriCorps VISTA

Training

- It never ends
  - New job function
  - Vigilance required for updates
    - Curriculum
    - Workflows
    - User Manuals
    - New programs will require start-up time to include development of EMR capability
    - Software upgrades!
  - EMR Clinical Education Sub-Committee
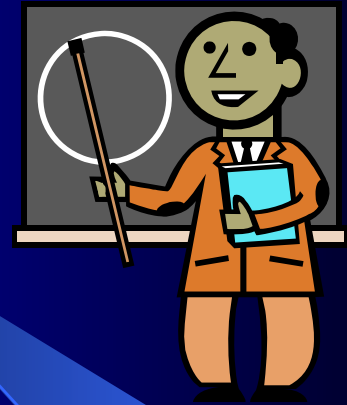
Training

- User's Manual Development
  - Clinical and Practice Management Manuals Developed
  - HIV processes unique
    - Separate documentation created
  - Workflows become key tool

Support Services eCW Manual (hand out)

eCW Training Manual – HIV Support Service Staff (CTR, COBRA, CM, MIC, HR, WIC)

eClinicalWorks

Table of Contents

eCW Manual Preview: Assigning, Reviewing, and Locking Progress Notes (hand out)

## 12. Assigning, Reviewing and Locking Progress Notes:

1. When finished with a Progress Note, you must assign the note to your supervisor for review.
2. Select the small box to the right of **Details**
3. Click **Change Assigned To**.
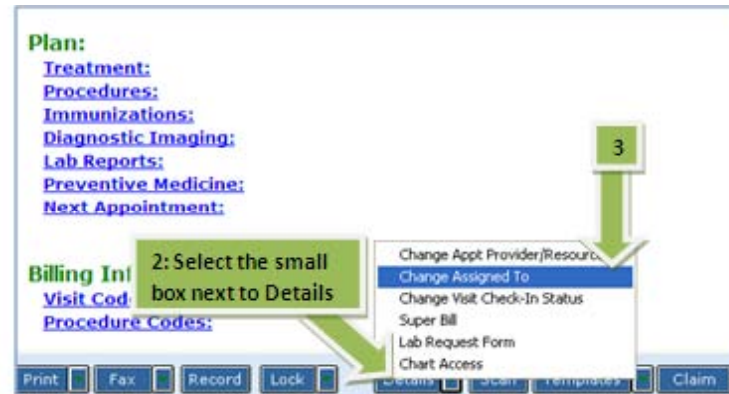
4. Select the "**To**" drop-down menu and your Supervisor's name. Click **OK** when you are finished.
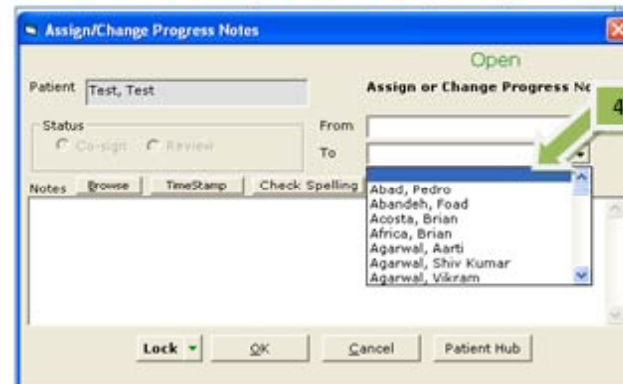
5. Your supervisor will review the information, and if any revisions are necessary, the progress note will be sent back to you. You will see it under the **D** Jellybean. Make the necessary corrections and send back to supervisor. Once finalized, the supervisor will **LOCK** the note, which means it can no longer be modified and the claim will be sent out.
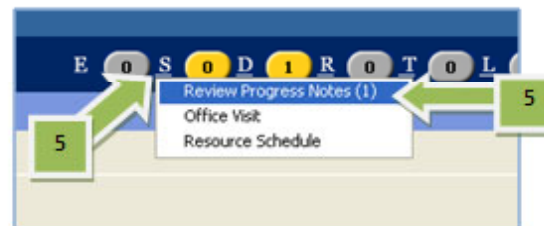
Training

- Training sessions were developed with job functions in mind
    - Clinical: Medical Providers / Nurses
        - Providers: Exam/Assessments/Referrals/Meds/eRx
        - Nurses: Procedures/PPDs/Waived Tests
    - Allied Health: Phlebotomists / Radiology
    - Dental
    - HIV Case Management
    - HIV Counseling and Testing
- In a perfect world, staff trained by function. . .

eCW Clinical Training Outline

- The eCW Training Outline is used to standardize the training process for all new hires
  - Hours 1-4: Introductory session required of all staff
  - Hours 5-8: Additional training session required for:
    - Nurses/Medical Assistants/Phlebotomist/Radiology Technicians
    - Medical Practitioners and Residents
    - Non Medical Staff (i.e. Social Workers)
  - Hours 9-12: Required for Medical Practitioners only
- Following an outline allows trainers to rotate into position whenever needed

Training

- Clinical Training – Efficiencies in process reduced training time from 3 days to 1.5 – 2 days.

- Residency Programs – Only had access to residents for 4 hours!

- Clinical exercise (hand out)

- EMR proficiency test

Training: Moving Forward

- Currently increasing the number of trainers
  - Training a staff member to be a Certified User costs $5K – "Train the trainer"
  - 3 weeks for Clinical Training / 3 weeks for Practice Management
- Staff training occurs for two 2-day periods each month
- HR must coordinate with IT to time start dates
- Mixing of different staff during training is a challenge

Hardware

- Desktop/laptop/tablet
  - Ergonomics will change patient/provider interaction
  - If possible, take some time with IT and General Services staff when making decisions about your departments
- Costs can increase significantly depending on configuration

Patient Education

- Patients informed of transition stages
  - Periodic EMR Newsletters distributed (hand out)
  - Video explanations of EMR played in waiting room
  - Providers discussed transition during appointments
- Patient Feedback
  - Patient Surveys Conducted
  - HIV Consumer Advisory Group discussed EMR pros/cons and addressed patient concerns

Performance Improvement Newsletter (hand out)

Performance Improvement

a Joint Commission Readiness Newsletter

Quality Improvement Department   Issue 12, June 2009

Performance Improvement Plan 2009

The Ryan Network's philosophy is to provide patient-focused quality care in a culturally sensitive manner while maintaining the respect and dignity of each patient.

Electronic Medical Record Update

As the country transitions under a new presidential administration, President Barack Obama has proposed an ambitious five-year goal of digitizing medical records across the health care industry. The goal of this initiative is to improve the quality and efficiency of the nation's medical services. However, prior to this announcement, the Ryan Network had been well underway in laying the groundwork for modernizing its own health information technology environment.

The implementation of Ryan's Electronic Medical Record (EMR) system will provide the Ryan Network the benefit of a streamlined workflow for both clinical and administrative functions. From appointments and billing information

to clinical notes including medication lists, x-rays, consults, laboratory tests, etc., all patient information will be accessible and available in one computer system.

With all of the information centralized, patient care and outcomes will be more easily monitored and analyzed, medical errors will be reduced and patients will have easier access to their medical information. This EMR transition supports Ryan's organization-wide commitment to continual perform-

ance improvement. The Ryan team continues to work towards the 2009 goal of ensuring that the EMR and the users at all sites are capable of meeting the Network's clinical and business outcomes. The three main PI objectives for the year are:
1. Develop a staff training curriculum;
2. Train a core group of certified eClinicalWorks trainers to implement the curriculum; and
3. Assure that the EMR system can accurately collect the data required to populate the Uniform Data System (UDS), the main electronic repository of patient information required by our major funders.

To begin this initiative, the EMR Steering Committee, with input from all departments and staffing levels, selected eClinicalWorks

Cont. on Back Page

System Rollout

- Roll-Out staggered between sites
  - Location with lowest volume as first roll-out
  - Medical Director was a Certified EMR Trainer
  - Practice Management implemented first
  - Each subsequent facility went live 4 – 6 weeks later
  - Clinical Rollout occurred similarly
  - Full roll-out for Clinical and Practice Management in 6 months
- * HIV support services – Case Management and CTR went live fully across the network 2 weeks after final clinical go-live

System Rollout - PM

- Practice Management
  - No reduction in scheduling
  - Lines at registration were long
    - Staff learning curves
    - Register each patient in the system for the first time
      - Did not preload registrations
  - Wait time has been cut in half since implementing EMR, but still slower than past system

System Rollout - EMR

- EMR
  - Reduced clinical schedules during go-live
    - First 2-weeks: 50%
    - Second 2-weeks: 75%
    - 1 month: Full schedule
  - Some staff adapt to EMR quicker than others
    - Tweeters, Facebookers, Gamers
    - What's email?

System Rollout

- Certified Trainers and Super-Users were on-call for several weeks post-go live
- Some staff not trained during scheduled training
  - Vacations, part-time staff, residents
- Rollout staff made a point to be responsive
  - Don't slow down the workflow anymore
  - Most problems were easily resolved
 - Ancillary but important goal was to keep staff engaged in EMR

Paper Chart Issues

- Will you pre-load patient information into the EMR?

- How long will paper charts be delivered to staff after "go-live"?

- How to handle HIV antibody test results?

- What is the process for identifying and scanning important medical information as needed by the clinician?

- What to do with paper originals after it is scanned into the EMR?

Reporting

- How can data be retrieved as required for:
  - Grant deliverables
  - Internal QI indicators
  - HAB Indicators
  - HIVQUAL
  - Tracking performance by grant
  - SMART Objectives
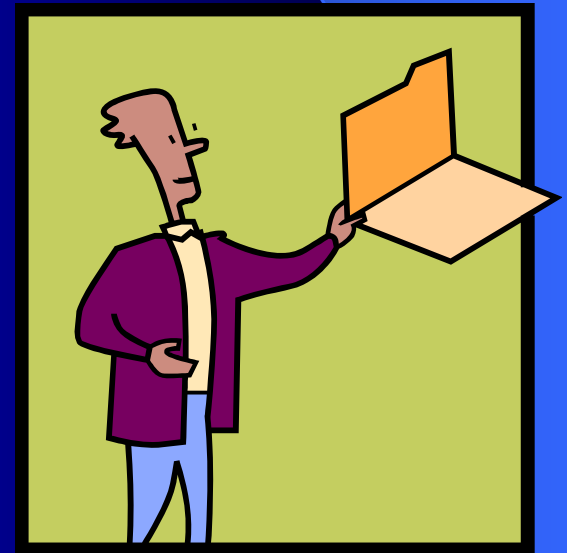
Reporting

- SMART: Specific, Measurable, Achievable, Realistic, Time-Limited
  - Lab, Visit , Procedure data
  - Structured vs. Non-Structured Data
  - Use universe of patients
- Another program needed to report
  - EBO/Crystal Reports
  - Training!!
- *Grants were entered as insurances and staff selected a particular grant when providing a service.
- Consider what is unique about HIV services

Template Development

- Structured forms that provide prompts to clinicians for required services, education etc.

- Basis for many of the specific QI elements in our HIV programs

  - HIV specific clinical visits – physical, monitoring

  - Case Management services – intakes, assessments

  - Followed mapping provided by our funders

- Counseling and Testing

Building Templates

Structured Text

Unstructured Text

Templates Merged into Progress Notes

Patient: Test, Test   **DOB:** 01/01/1960   **Age:** 50 Y   **Sex:** Male
Phone: 212-222-2225 **Primary Insurance:** GP - PC Case Management (AI)
Address: Some Street, Apt 1, New York, NY-10007
Pcp:
Encounter Date: 06/18/2010   **Provider:**

Subjective:

Chief Complaint(s):
- HIV Rapid Test

HPI: ▽

HIV Rapid Test Pre-Test Counseling
    Service Provided   Service Provided: HIV Rapid Test Pre-Test Counseling, Location: Office-Based Visit, -

Required Documents   Test Date: 07/20/2010, Patient Bill of Rights: Given to Patient, Informed Consent (Part B) for HIV Testing: Signed and Scanned to the Counseling and Testing Folder, -

Points To Discuss   Do you think you could hurt yourself and/or your partner in any way? No, Window period discussed? Yes, -

Additional Comments   -
    Patient Demographic: 50 y/o
     Risk Factors: IDU
     Relationship Status: Monogamous

AmeriCorps VISTA

- National service program designed to combat poverty through 'Capacity Building'
  - Volunteers serve for 12 months/modest living stipend
  - Build host organization's infrastructure – members are not allowed to work directly with patients
  - Expanding EHR is a major VISTA objective
  - AmeriCorps is growing rapidly and looking for new host sites
- VISTAs At Ryan: Develop templates & EMR Manuals, Train Staff, Create Data Analysis Reports, etc.
- http://www.americorps.gov/for_individuals/choose/vista.asp

AmeriCorps State & National Program

- National service program designed to help communities overcome a range of challenges
    - AmeriCorps members provide *direct* service to local organizations and community groups
    - Work to strengthen local organizations by addressing unmet needs
    - Volunteers serve for 10-12 months and receive a modest living stipend
    - Part-time positions lasting 3-6 months also available
- * AmeriCorps at Ryan: Teach nutrition classes, provide outreach services, advocate for early child literacy
- http://www.americorps.gov/

Network and Database Security

- The Center's patient information is guarded behind a <u>fire wall</u> and web shield server that prevents outside intrusion
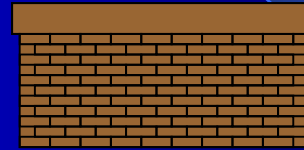
- User passwords are set to expire every 90 days and must be renewed
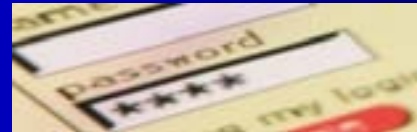
- Data is backed up daily on the server and the Database Manager takes the backup tapes offsite in case a disaster or recovery situation arises

Advantages of EMR

- No more searching for charts
- Every staff member can see chart in real-time
- No lost labs
- Have made great strides in data collection
- Service staff can view their own schedules, make appointments if needed, communicate immediately with other staff
- Documentation at every step
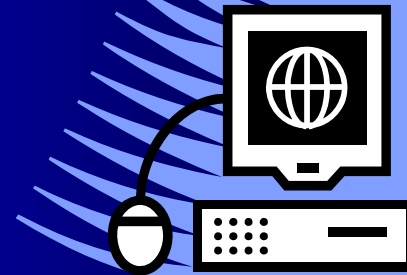
Advantages of EMR (Cont'd)

- Care conferences allow for all staff to view patient record at once
  - Large LCD monitor needed
- Many care plans involving the medical provider can be done remotely
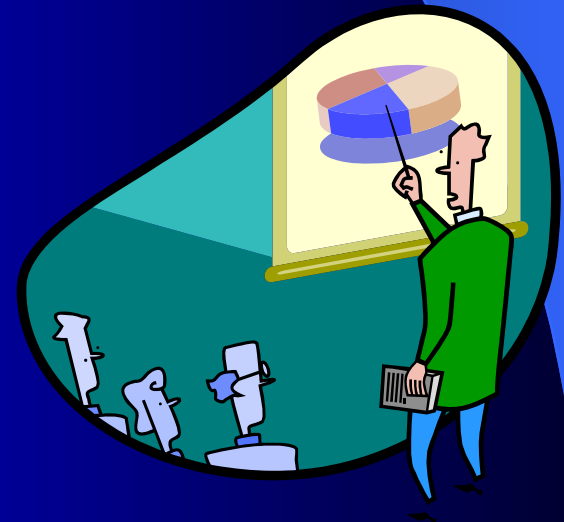
EMR Challenges

- All newly funded programs require development time to set-up EMR system
- Staff member can see chart in real-time
    - Track access
    - Security features
- Workflows can sometimes be confusing
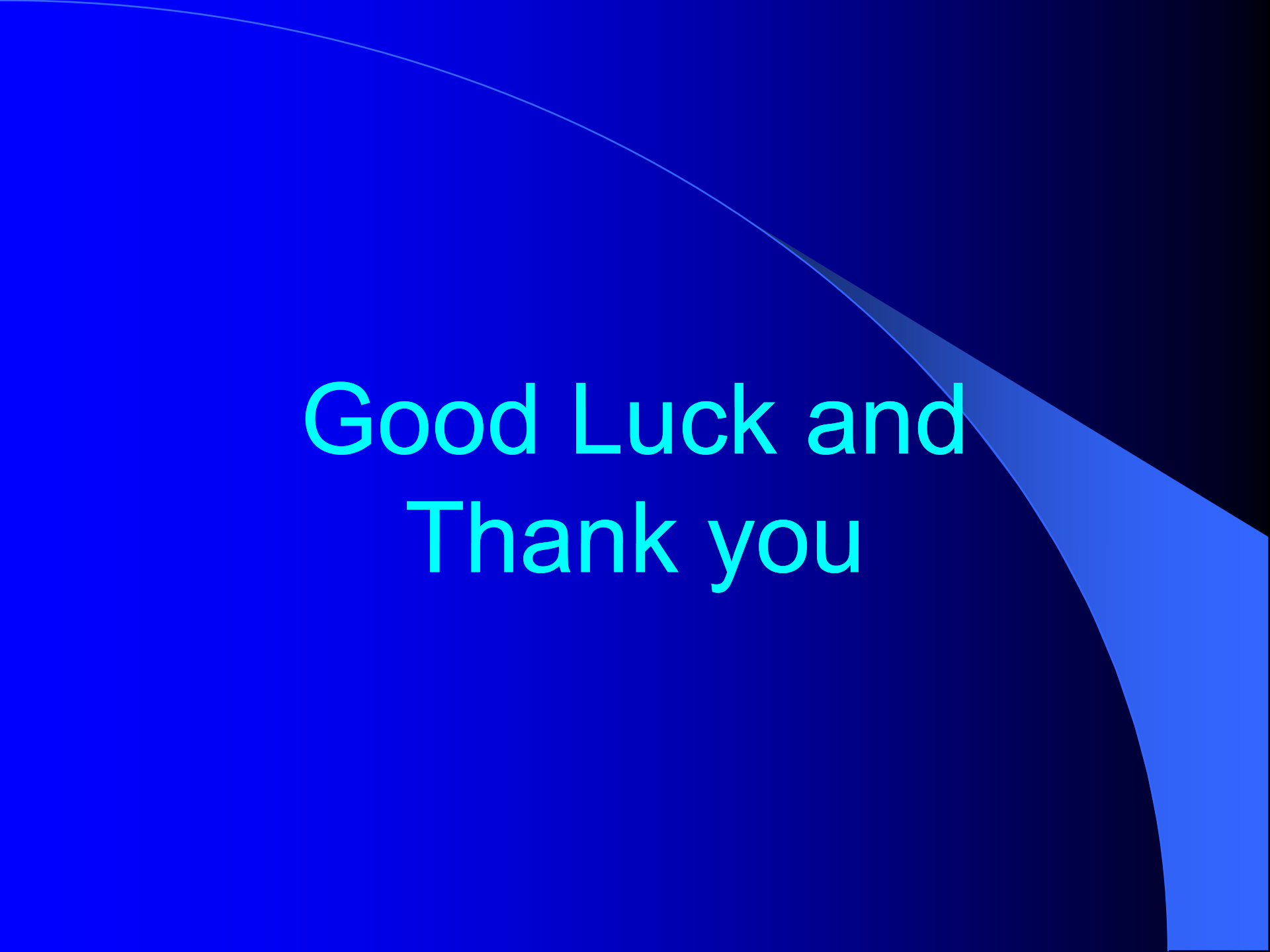- In-boxes can fill up – requires vigilance

EMR Challenges (Cont'd)

- Any changes to the system will either cost time, $$ or require an EMR vendor to implement

- Planning is needed to maintain a "stable" of trainers
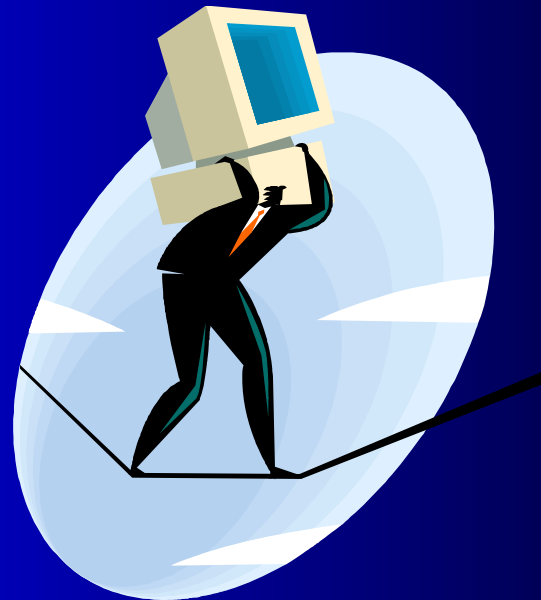
In Closing

- Conversion to an EMR will be one of the most significant projects an agency will undertake
- With significant planning, attention to detail and flexibility conversion can be successful
  - Focus on training, workflows, buy-in
- Data collection and QI can be enhanced but vigilance is needed
- New responsibilities and opportunities

Good Luck and Thank you