Integrating your LIS to your Physicians’ EMRs

What Hospital Outreach Programs Need to Know

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What We’ll Talk About

- What is an EMR?
- Physician Adoption of EMRs
- EMR to Lab Integration Opportunities
- The Government Gets Involved
  - EMR Certification through CCHIT
- Ways You Can Prepare For, or Even Influence, EMR Choices.
EMR: The Out Patient Clinical System

Out Patient Clinic
- PMS Administrative
  - Registration
  - Scheduling
  - Billing
- EMR Clinical
  - Patient charts
  - Meds, problems, allergies
  - Results (labs, ECG, Rad.)

Hospital or IDN
- HIS Administrative
  - Registration
  - Scheduling
  - Billing
  - ADT
- CDR Clinical
  - Enterprise-wide repository
  - Generally labs and documents

About EMR Adoption

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<th>EMR Penetration</th>
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Source: CDC, Health Affairs, AC Group, MGMA, SFG Research. Compiled: Susquehanna Financial Group investor report on Allscripts, published 3/22/07

CAGR – 21%
About EMRs: What They Do

Electronic Medical Record
- What was paper, isn’t.
- Anytime access to patient’s charts.
- Clinical workflow mgmt
- Clinical assessment
- Disease management
- Integration to/from:
  - Labs
  - Radiology
  - ECG/Cath
  - Other EMRs
- Outcomes Reporting

How Clinics Adopt EMRs

Usually begin with low impact, high value modules; then “move up”

EMR Implementation Timeline

- Lab results are required in 90% of EMR go-lives
- Lab orders are adopted when general orders are adopted
- CPOE requirement Complete EMR workflow
- Full Encounter Documentation
- Face sheet documentation E&M Compliance
- Billing efficiencies Disease management
- Script legibility Interaction checks Formulary compliance

Office Communication
- View and Sign
- Lab results are required in 90% of EMR go-lives
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Minimal workflow impact
Populates chart with clinical data; lab results and transcription
Chart review from home

Investment (time, tools, etc, …)

EMR Implementation Timeline
Lab Orders In The EMR

- Integrates with overall EMR workflow
- Clinics adopt lab orders when they adopt orders in general (ECG, Radiology, Referrals, ...)
- Orders has two phases
  - Decision (physician)
  - Processing (nurse)

Results: Desktop Notification

- Notification on physician's desktop
- Along-side radiology reports, referrals, ECG results, Secure Email, Charts on hold, ...
- Highlights for “Out of range” results
Results: Discrete Data Import

- Structured Data/Results
- Trending
- Reportable
- Can be exported to a Hospital CDR

Results: Documents Import

- Text Reports
  - Most human “readable”
  - RTF formatting
  - Just like the fax/printer
Results: “Links” Import

- Link to your LIS
- LIS reports
- LIS viewer
- Just another EMR document.

Physician Trends / Requirements

- The EMR Is Their Clinical Desktop
  - All Orders Originate From My EMR
    - Zero Clicks
    - Make it part of my EMR workflow
  - All Results Return To My EMR
    - Match to the right patient
    - Inform the right ordering provider
    - Update my order information.

- Single EMR Library For Lab Ordering
  (more advanced users)
  - Physicians Would Rather Not Need To Know The Lab Service Provider
  - The Nurse/Phlebotomist Needs To Know.
Lab Requirements

- Great Service To The Physician
  - See prior slide
- Support My Operations
  - Complete Order with My Lab Order Codes
  - Validated for Medical Necessity
  - Includes Billing Information (insurance, accounts, ..)
  - Includes AOE answers
  - Electronic (time savings, no key-punch errors)
- The Key is a “Mature” Lab Order

A Mature Lab Order

1. Lab Order Codes
   - ABN Validation (Uses lab’s ABN rules)
2. Provider Names
   - The right “Provider” ID
   - The right test order code
   - The right insurance code
   - The right billing account.
3. Clinic’s mapping tables
4. Order completion
   - Order Entry Questions
     - Requisition printing
     - ABN printing
     - Label printing
5. Lab compendiums
6. Routing Rules (choose the lab)
   - Match to patient chart
   - Auto-Completion
   - Physician desktop notification
   - HL7 Order
   - HL7 compliant ORM
   - Complete order information to lab’s requirements
Rules Based Routing

Industry Trends

- Reference Labs Are Gearing Up
  - Investing in EMR integration
  - They Have a Head Start

  - 32 Vendors Have Been Certified as EMR Vendors Over The Past 12 Months.

- The Government Plays An Active Role
  - Certifying EMR Vendors
  - Driving EMR Standards
  - Funding Pilot EMR Programs (to seed the standards)
**AHIC:**
The hub that drives opportunities for increasing nationwide health information interoperability

- CCHIT focuses on developing a mechanism for certification of healthcare IT products
- HITSP brings together all relevant stakeholders to identify appropriate IT standards
- HISPC addresses variations in business policy and state law that affect privacy and security
- NHIN is focused on interoperability pilots

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**Stark and EMR Certification**

In August 2006, the Department of Health and Human Services (HHS) published rules that provide an exception under the physician self-referral prohibition law (Stark), as well as safe harbor under the anti-kickback act (AKA), for the donation of interoperable EHR technology to physicians and other health care practitioners or entities.

EHR software is “deemed to be interoperable if a certifying body recognized by the Secretary has certified the software no more than 12 months prior to the date it is provided to the physician/recipient”.

CCHIT is an officially recognized certifying body

CCHIT = Certification Committee for Healthcare Information Technology
**CCHIT Requirements: Today**

- For Interoperability, It’s a Low Bar
- 32 EMR vendors have been certified

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**CCHIT Interoperability Requirements**
*(that impact labs)*

2007
- Receive General Text Reports
- Display normal versus abnormal results
- Display flow sheets
- Provider notification
- Order lab diagnostic tests
- Associate a diagnosis with a test
- Test specific AOE prompts
- Transmit the order – on paper.
- Group, or panel ordering

2008
- Receive Microbiology lab results
- Capture co-signatures for orders
- Associated Images with result

2009
- Send a Lab Test Order electronically
- … and more.

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**Missing**
- Electronic Orders
- Auto-update of orders
- Rules based Routing
Another Way To Choose An EMR

Extra Mile
✓ Rules based routing
✓ Image-based reporting

EMR-Lab “Mature” Integration
✓ Merge EMR and lab rules
✓ Closed order-result loop
✓ Billing and clinical “maturity”

KLAS
✓ Consumer report of HCIT
✓ Service Focus: Did they do what they said they’d do?

CCHIT
✓ Basic Order Functionality
✓ Basic Result Functionality
✓ 32 vendors comply today

Things You Can Do...

- Confirm Government (CCHIT) Certification.
- Look Beyond Government Certification
- Team With Your Physician Groups In The EMR Selection Process. Choose One That’s A Win For You Both.
- Leverage Your Departmental Integration Strengths.
Departmental Cooperation

Clinic Benefits
- Integrated Orders (not an afterthought)
- Fully functional results interface.
- Hosted/Subsidized EMR
- Full Hospital Services tied to their EMR results/reports/images: Labs, Imaging, Discharge Summary

Hospitals
- You have an engine – share it.
- You have a competitive bundle of services (labs, radiology, cardiology, ….)
- When one department builds an interface type, tie into it.
- Show the doctors a roadmap; labs now, radiology next…

In Closing…..
Embrace EMR – Lab Integration

- First Mover Advantage.
- Be a Partner on the EMR Selection Committee
- The First Lab in Becomes the Defacto Standard
- If You’re First You’ll Deploy Faster
  - 2nd lab will write translation tables.
  - 2nd lab won’t have the loyalty