



State-of-the-Art Secure Records Exchange

Chicago - April 6, 2009

Recognizing:



Hewlett-Packard



With Additional Support From:



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- Is a Best Practices Guide supplemented by an Implementation Guide
- Describes attributes of PDF specific for the healthcare industry
 - PDF is an ISO-ratified, open, international, published standard, originally created by Adobe Systems, Inc., but now developed and maintained by ISO
 - PDF is freely viewable on almost every laptop / desktop around the world
- Is supported by the internationally-recognized standards development organizations, ASTM and AIIM



- **Is proven to capture and preserve any type of health information, structured or unstructured**
 - Including handwritten notes, laboratory test results, word-processed summary reports, electronic forms, diagnostic images, signal tracings (e.g., ECGs) and more

- **Allows for the exchange of health information via a secure, portable “container” for use by**
 - Patients
 - Physicians
 - Hospitals / Clinics / Medical Offices
 - Ancillary providers
 - Vendors



State-of-the-Art Secure Records Exchange

Physician EHR to Patient PHR

Stasia Kahn, MD - Fox Prairie Medical Group
in collaboration with HealthString, LLC

View, Print, Import

John Odden, Coto Partners - with 3G phone, memory stick & printer
in collaboration with PatCare and Sterling-Wright

Patient Transfer from Emergency Department to Referral Hospital

Tom Lang, MD - MACH 2 Solutions

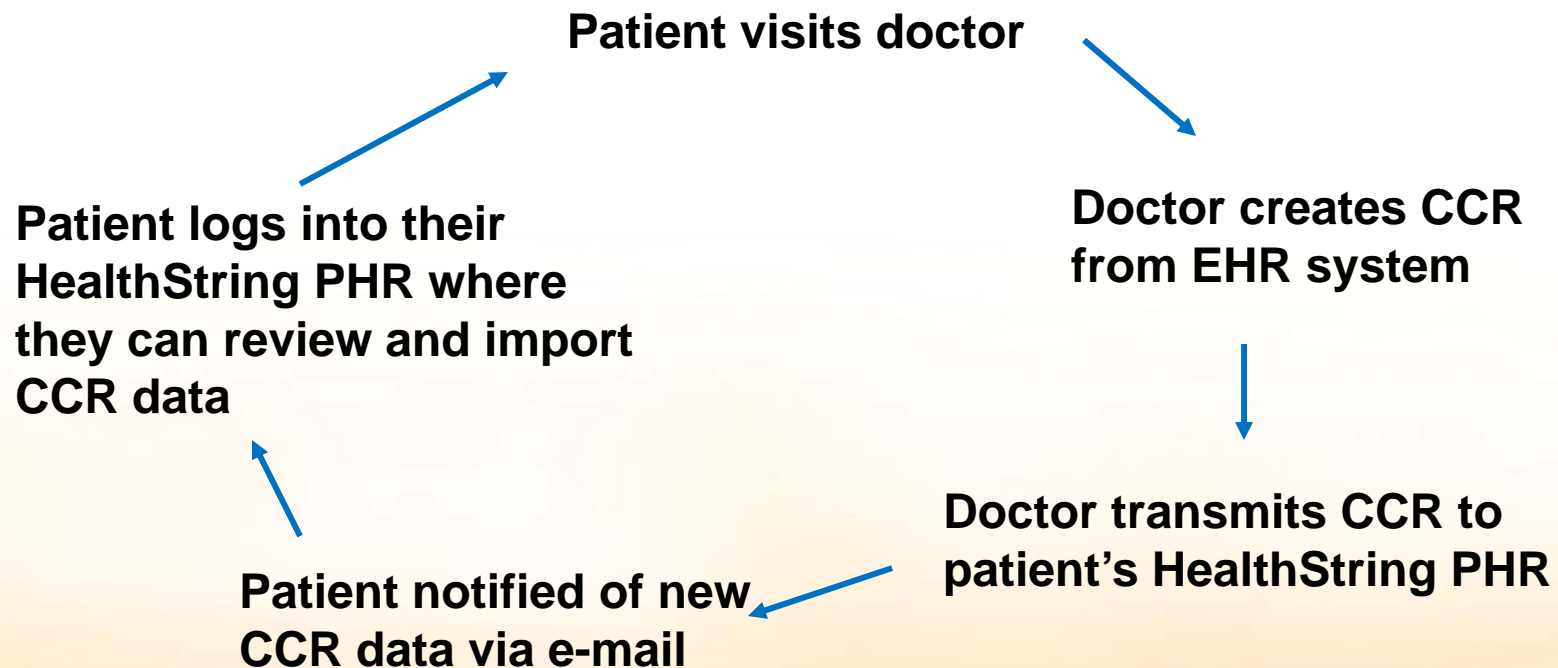
Nurse Practitioner to Patient

Cris Ross, Executive Vice President - MinuteClinic



State-of-the-Art Secure Records Exchange

Transforming Care by Electronically Sharing Health Care Records



State-of-the-Art Secure Records Exchange

Transforming Care by Electronically Sharing Health Care Records

Stasia Kahn, MD - Fox Prairie Medical Group

- VP– Northern Illinois Physicians for Connectivity
- PDF HealthCare Committee member
- Lead author and editor, *A Community View on How Personal Health Records Can Improve Patient Care and Outcomes in Many Healthcare Settings*
- EHR to PHR Record Exchange in collaboration with HealthString, LLC



State-of-the-Art Secure Records Exchange

Transforming Care by Electronically Sharing Health Care Records

HealthString: Patient-centered approach

- Create knowledge by providing access to and control of personal health information
- Motivate behavior change and improve physician-patient encounters
- Patient receives personal CCR from physician to review and add selected data elements to PHR
- Next step: enter information into your HealthString!



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We face an “An Unprecedented Opportunity”



Under the 2009 American Recovery and Reinvestment Act, the HITECH component provides \$36 B over six years for HIE, EHR, et al.

That's millions of \$/Hospital; tens of thousands of \$/Physician.

The money is coming. Shouldn't we simply wait our turn?

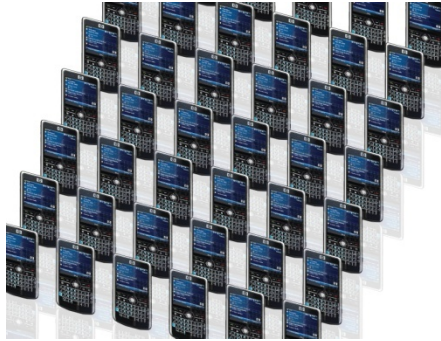
NO! Don't wait! **WHY?** Large grants require Large deployments.

PDF Healthcare dramatically shifts the boundaries in the favor of Providers.

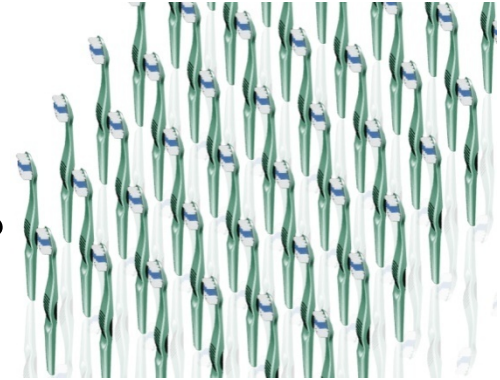
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Coto Partners
“When Boundaries Must Change”

Was that a Mobile Phone?



Did you know that the number of Mobile Phones will soon pass the number of Toothbrushes world-wide?



And a Mobile Phone in the hands of a physician or their patient can speak



that enables connectivity to:

- ✓ Printers
- ✓ Other Mobile Phones (Health Information Exchange)
- ✓ Computers (POMIS, EHR, HIS)
- ✓ And the Web (PHR)

The answer to Large deployments for Large grants is “in our hands.”

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Coto Partners
“When Boundaries Must Change”

A Call to Action

It is common sense to brush our teeth.

It is common sense to enable PDF Healthcare for

✓ Mobile Phones

✓ Netbooks

✓ Portals

to collaborate with EHR, PHR, HIE and the NHIN.

Let's engage 'bridging solutions' like PDF Healthcare while we do the harder work of pervasive EHR and PHR deployment – not to mention fulfilling the NHIN vision...



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Coto Partners
"When Boundaries Must Change"



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Optimizing a Clinical Application for PDF Healthcare

Tom Lang, MD – Practicing ED Physician

- Chief Medical Officer, MACH 2 Solutions
- PDF HealthCare Committee member
- ED to Referral Hospital Patient Transfer in collaboration with SpringCM and Dimensional Insight

Optimizing a Clinical Application for PDF Healthcare

- **Characteristics of an ED Environment**
 - Clinical worker is a "casual" IT user
 - Rural hospitals are often short staffed
 - Rural hospital EDs are often staffed by itinerant workers
 - Often long transfer times (2 hours or more)
 - Often chaotic -- particularly when readying a transfer

Optimizing a Clinical Application for PDF Healthcare

■ Required Characteristics of IT Tools in this Setting

- Simplicity
- Simplicity
- Simplicity
- Usability
- Usability
- Usability



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Nurse Practitioner to Patient

Cris Ross, Executive VP – Product and Information Services
MinuteClinic

- We are not a medical home
 - 500,000 Recent Visits
 - 360,000 Visit Summary Reports
 - 18,000 Practices in 50 States
- We provide a Visit Summary to every patient and their primary care physician, where identified.

Nurse Practitioner to Patient

■ Visit Summary Business Challenge

- Easily interpretable
- Broadly distributed

■ Bridging gap between paper-based and digital healthcare

- Computer-readable with universal, free viewer
- Embedded XML – Continuity of Care Record (CCR)

■ Confluence of CCR and PDF

Nurse Practitioner to Patient

Visit Summary

Patient profile, PCP, visit information

SOAP Record

Subjective information

Objective information

Assessment

Plan

MinuteClinic Clinical Visit Summary
Patient: Fred Flintstone Visit Date: 5/12/2008 8:13 AM

Patient: Fred Flintstone
522 Mountain Drive, Wild Village, MN 55116
Phone: (123) 123-4567
Date of Birth: 1/1/1952 Gender: M

Primary Care Provider:
None

Patient Seen By: Dennis DeBruin, ADMN
Chief Complaint(s): Acute Pharyngitis

Clinic: DO NOT SUBMIT VISITS -DO NOT USE THIS CLINIC
920 Second Ave. S., Suite 400, Minneapolis, MN 55402
Patient Information Line: (888) 389-2727

Subjective Information:
- Smoking Status: Never smoked
- Fever in past 24 hours: Yes
- Symptoms of Pharyngitis: Sore Throat, Vomiting, Hurts to swallow, Cough, Difficulty sleeping
- Pain Reported in History: Yes
- Pain Location: Sinuses
- Pain Scale: 2/5
- Pain Frequency: Constant
- Pain Description: Tightness
- Pain Self-Management: Ibuprofen
- Tx strep past month: No
- Duration of Pharyngitis Symptoms: 3-4 days

Medication Allergies: None Reported
Medical Conditions: None Reported
Factors Impacting Learning: Preferred Learning Style
- No preference
Current Medications: None Reported

Objective Exam:
- Blood Pressure method: Digital
- Blood pressure site: R arm
- Cuff Size: Adult
- Appearance: Acute distress (Agitated)
- TM Left Exam: Abnormal (Mildly injected, Red)
- TM Right Exam: Normal
- Oropharynx: Abnormal (Tonsils absent)
- Lymph Nodes Exam: Abnormal (Anterior cervical nodes enlarged/tender)
- Normal auscultation findings in all 5 lung fields: No
- Auscultation LUL: Normal
- Auscultation LLL: Normal
- Auscultation RUL: Normal
- Auscultation RML: Abnormal (Rales)
- Auscultation RLL: Abnormal
- Patient Follow-up Phone: 5556667788

Vital Signs:
- Blood Pressure: 123 mmHg/81 mm Hg
- Body Temp: 100.4F
- Weight: Over 100 lbs

Lab Tests Performed:
- Strep Test: Negative
- Strep Confirmatory Test: Pending
- Strep Confirmatory Test Type: DNA Probe for beta-hemolytic strep A

Immunizations Performed:
None

Medications Prescribed:
- lidocaine topical (lidocaine topical 2% solution) (Gargle and spit 5-10 mL every 3 - 4 hours as needed for throat pain. Maximum 6 doses/24 hours. PHARMACIST: Dispense lidocaine VISCOUS 2%. Dispense 100 mL)
Refills: 0

Over the Counter Medications:
None

Diagnosis and Assessment:
- Pharyngitis

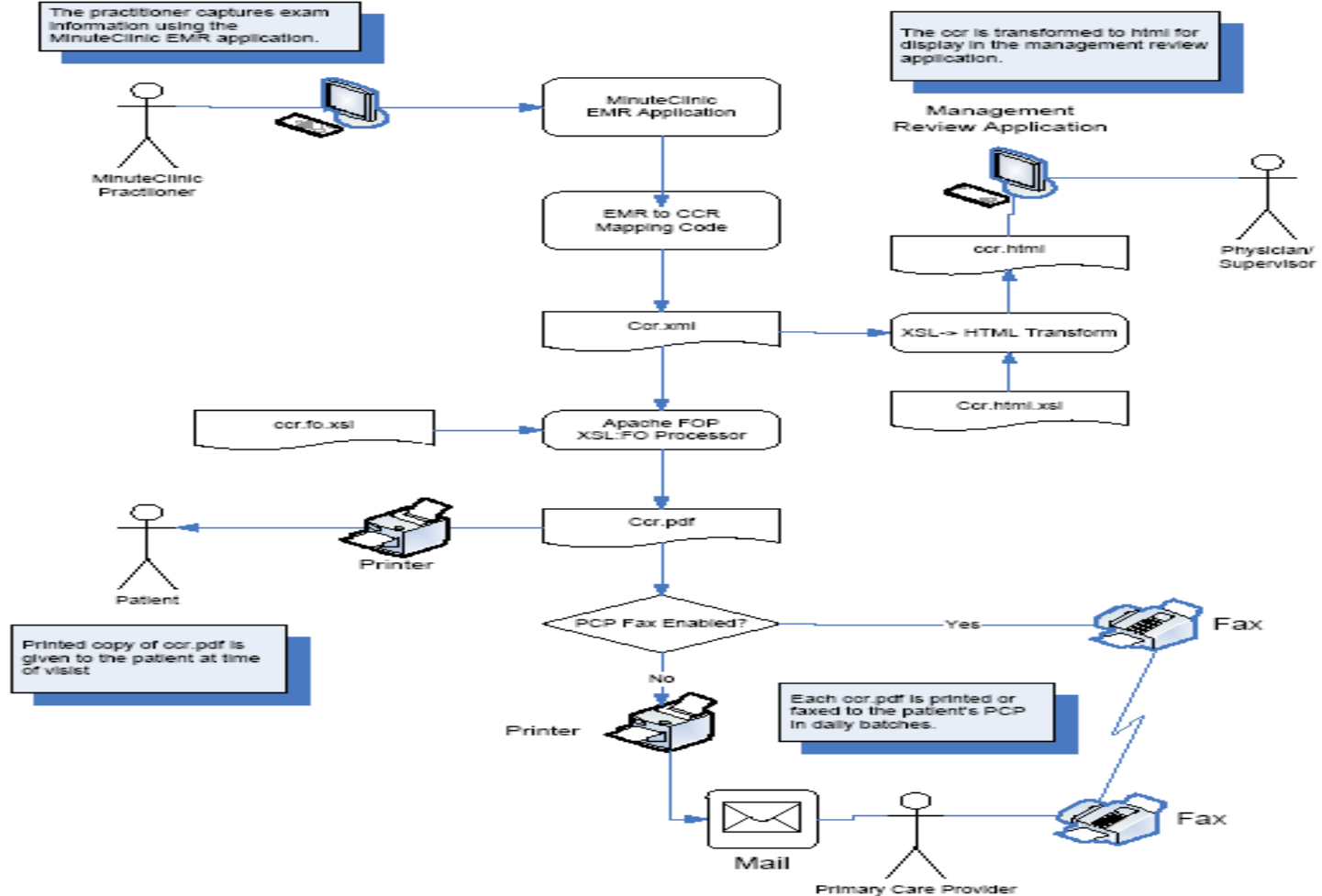
Additional Instruction and Follow-up:
- Follow-up: Follow-up with Primary Care Provider if symptoms worsen or do not improve in 3-5 days or immediately if unable to swallow own saliva, drooling or tonsil deviates uvula.
- The patient was given and expressed an understanding of written and verbal instructions
- Prescriptions sent electronically to: Burch Pharmacy & Gifts Minneapolis, MN (612) 871-1895 (1-1)

Professional services provided by MinuteClinic Diagnostic, P.A.
Administrative services provided by MinuteClinic, Inc. Please contact MinuteClinic at 866-389-ASAP (2727) or customer-care@minuteclinic.com with care or safety concerns. If you feel MinuteClinic has not addressed your concerns, you may contact the Joint Commission at www.jointcommission.org

Visit: 1
Patient: 1
Page: 1

Nurse Practitioner to Patient

MinuteClinic CCR Delivery PDF Healthcare Production

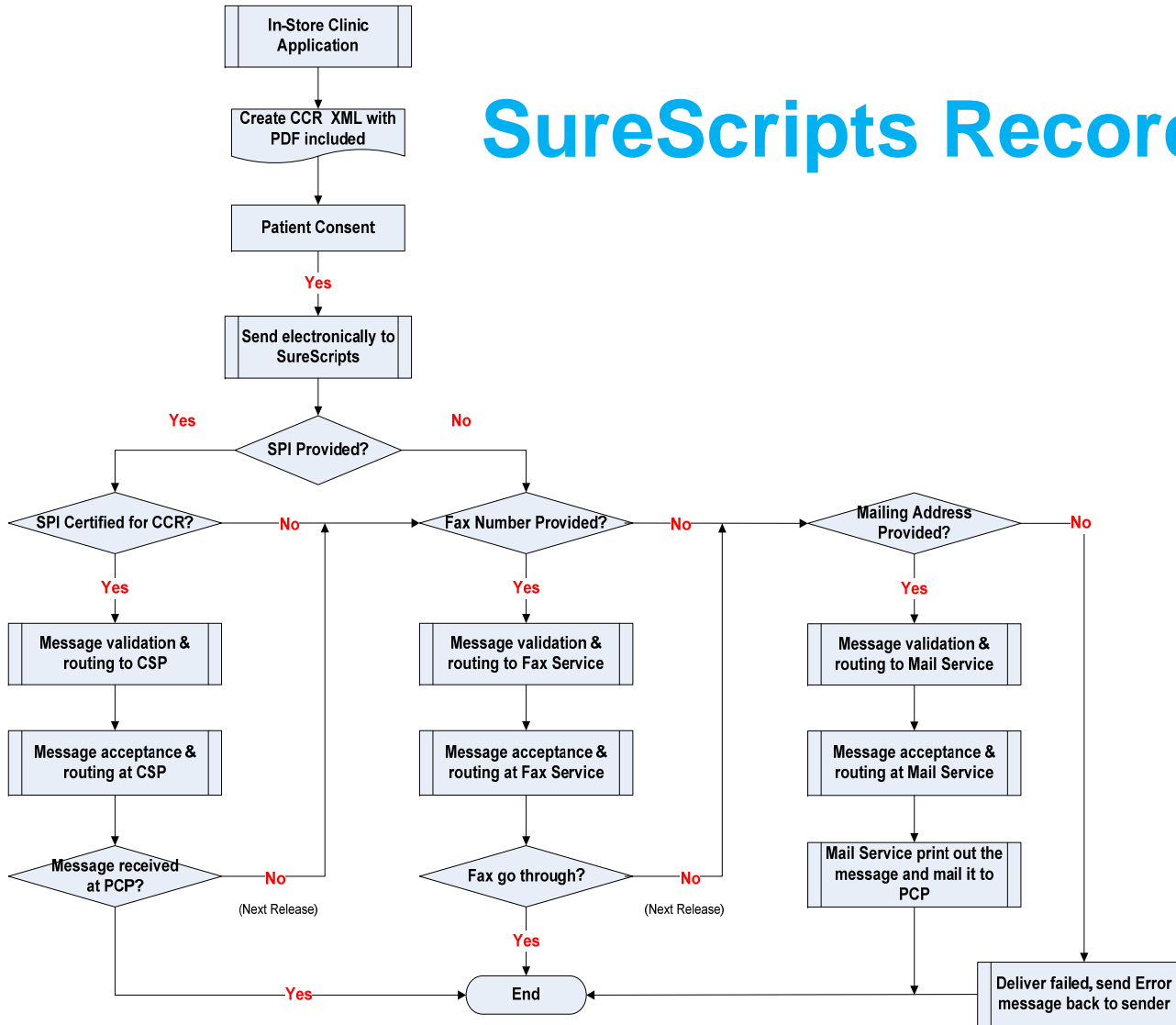


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Nurse Practitioner to Patient

SureScripts Record Exchange



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PDF
Healthcare

Committee Members



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