

Partners Healthcare

Automating the Transition of Care

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March 29, 2007

Partners Overview: Who We Are

Major Teaching Hospitals

- Brigham and Women's/Faulkner Hospitals
- Massachusetts General Hospital

Community Hospitals

- North Shore Medical Center
- Newton-Wellesley Hospital

Mental Health and Non-Acute Care

- McLean Hospital
- Spaulding Rehabilitation Hospital
- Shaughnessy Kaplan Rehabilitation Hospital
- Rehabilitation Hospital of the Cape and Islands
- Partners Home Care
- Boston Center, North End, Clark House

Who We Are

Physician Practices and Network

- Partners Community HealthCare, Inc.

Physician Organizations

- Massachusetts General Physicians Organization
- Brigham & Women's Physicians Organization

Community Health Centers

- Brookside Community Health Center
- Charlestown HealthCare Center
- Chelsea HealthCare Center
- MGH Back Bay HealthCare Center
- North End Health Center
- Revere HealthCare Center
- Southern Jamaica Plain Health Center

Our Employees

- **We have 53,000 employees, providing more jobs than any other non government employer in Massachusetts**
- **Of these:**
 - **18,000 are physicians, nurses and direct caregivers**
 - **13,000 are workers supporting the direct caregivers**
 - **5,000 are involved primarily in medical research**

4NEXT Goals

- **Goal:**
Software tool to help facilitate patient's discharge and transition into a non-acute setting
- **Focus:**
 - Originally: Case Managers
 - Currently: Case Managers and Liaisons
 - Future: Case Managers, Liaisons and Staff Nurse
- **ROI:**
 - Originally: Shorten LOS in acute hospitals
 - Currently: Reduce risk of confidentiality breaches

Gold standard for referral

Contribute to National Patient Safety and JCAHO

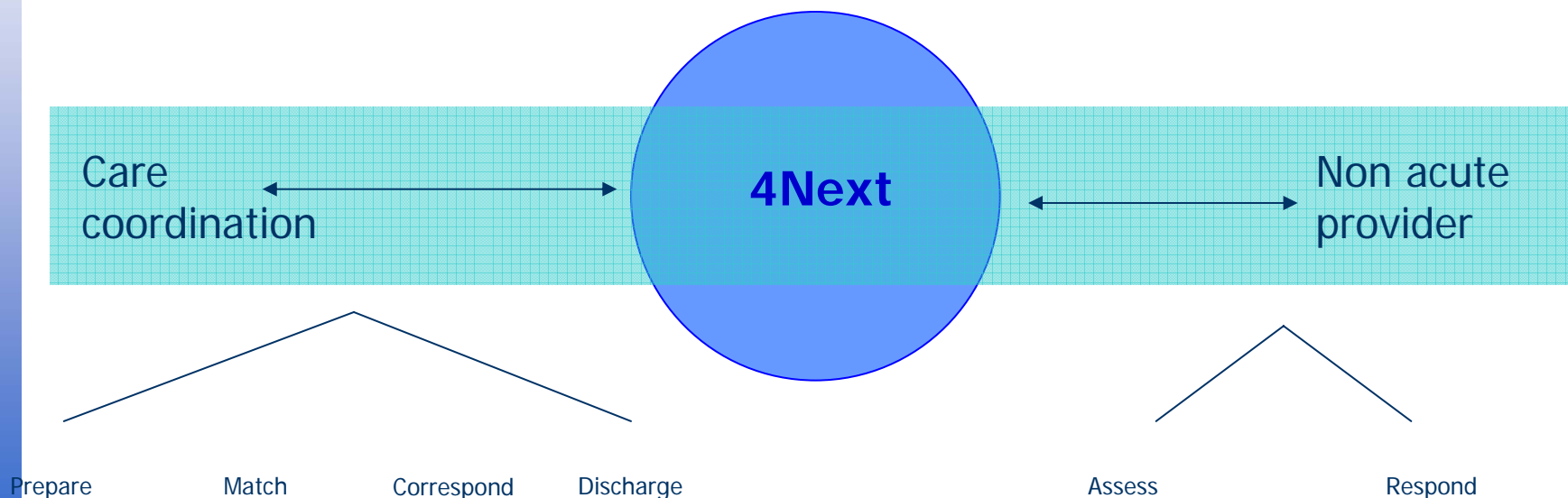
4NEXT Goals

- **Web-based software product that easily finds appropriate “next” level of care for our patients**
- **Improve patient safety by communicating the critical, minimum level of clinical information**
 - **HIPAA Compliant**
- **Assemble patient information and communicate with multiple providers simultaneously**
- **Provide a standard presentation across/from the Partners enterprise**

4Next Business Flow

To provide timely web-based information to clinicians in order to facilitate a smooth discharge and transition into a non-acute setting

- Identifying appropriate non acute providers
- Facilitating communication
- Sharing clinical information



Search and Sort (Phase I)

- **Database from CMS, JCAHO and Partners survey (within New England)**
 - **Over 39,611 active non-acute providers**
 - **Over 2,159 non-acute providers in New England**
 - **55% have returned Partners more detailed survey of programs and services**
 - **Surveys are on-line for providers to update**
- **Currently used by all acute hospitals at Partners**
- **Currently 10,000 hits per month**

Search and Sort

4Next, Acute - All Settings Search - Microsoft Internet Explorer provided by Partners HealthCare System

4next

HOME SEARCH CASES MANAGEMENT REPORTS

Logout | Contact Us | Help
SAWYER, ROBERT E - BWH
Wednesday, November 01, 2006 QA

Search by:

- Name
- All Settings
- Home Care
- Inpatient
- Med Suppliers
- Hospice
- Bed Availability
- Glossary

General Preference Search

City: City Lookup

State: MA-Massachusetts Zip: within 0 miles

Payers Accepted: None Specified

On-site Interpreter: None Specified ☐ Include Telephone Interpreter Service

Diet Choice: None Specified

☐ Clinical Programs/Services

☐ Clinical Capabilities

Find Provider Clear

Transition of Care (TOC Phase II)

- Utilize Search & Sort to select potential non-acute providers
- View, add and attach electronic and paper clinical information
- Transmit on-line or fax to potential providers simultaneously
- Document two-way real time communication of the patient referral
- Track history

Statistics:

- 12,000 referrals in 2005
- 18,719 FY 2006
- 80% user growth
 - Now over 700 users
- Over 10,000 website hits/month

Transition of Care

4Next - Prepare Case - Microsoft Internet Explorer provided by Partners HealthCare System

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DOROSHENKO, VICTORIA - BWH
Monday, April 10, 2006 9A

HOME SEARCH CASES MANAGEMENT

Oetest, George | M | 10/1/1921 | 11489887

PREPARE MATCH CORRESPOND FINALIZE SUMMARY

Initial Request

Facesheet Last Updated: 4/7/2006 3:45 PM

Patient Name:	Oetest, George Herbert walker	Date of Birth:	10/01/1921	Gender:	M
Medical Record #:	11489887	SSN#:			
Billing Address:	02115				
Patient Home Phone:	617-123-4568				
Primary Language:	ENGLISH	Religion:			
Next of Kin/ Contact:		Phone:			
Emergency Contact:	TEST,	Phone:			
Payor #1:	EMPLOYEE	Policy #:			
Payor #2:		Policy #:			
Payor #3:		Policy #:			

Primary Care Physician Information (PCP)

PCP Name:	TEICH, JONATHAN MARC, M.D., PH.D.	PCP Phone:	617-732-5640
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Acute Admit and Discharge Info

Admission Date:		Admitting Dx:	
Discharge Date:		Attending MD:	
Patient Location:	OPD	Hospital Service:	

Referral

Allergies

Medications

Precautions

Assessment

History & Physical

Laboratory

Operative Notes

PT/OT/ST Notes

Care Coord. Notes

Discharge Docs

Discharge Info

Attachments

Attachments (0)

Create InFax Cover

Print Options

Medication List

Initial Request

Facesheet

Referral

Allergies

Medications

Precautions

Assessment

History & Physical

Laboratory

Operative Notes

PT/OT/ST Notes

Care Coord. Notes

Discharge Docs

Discharge Info

Attachments

Attachments (0)

Create InFax Cover

Print Options

Medications

(electronically populated - real time)

ACETAMINOPHEN (TYLENOL 650 MG SUPP)
650 MG RECTAL
EVERY 4 HOURS
(PRN)

PRN: FEVER/PAIN
Ordered by: KAREN M. KIM, M.D.
Ordered Number: 04662321
Start: 01/16/2006

ENOXAPARIN SODIUM (LOVENOX 40 MG/0.4 ML SYRINGE)
40 MG SUBCUTANEOUS
DAILY
(SCH)

PRN:
Ordered by: KAREN M. KIM, M.D.
Ordered Number: 04662322
Start: 01/16/2006

Comments

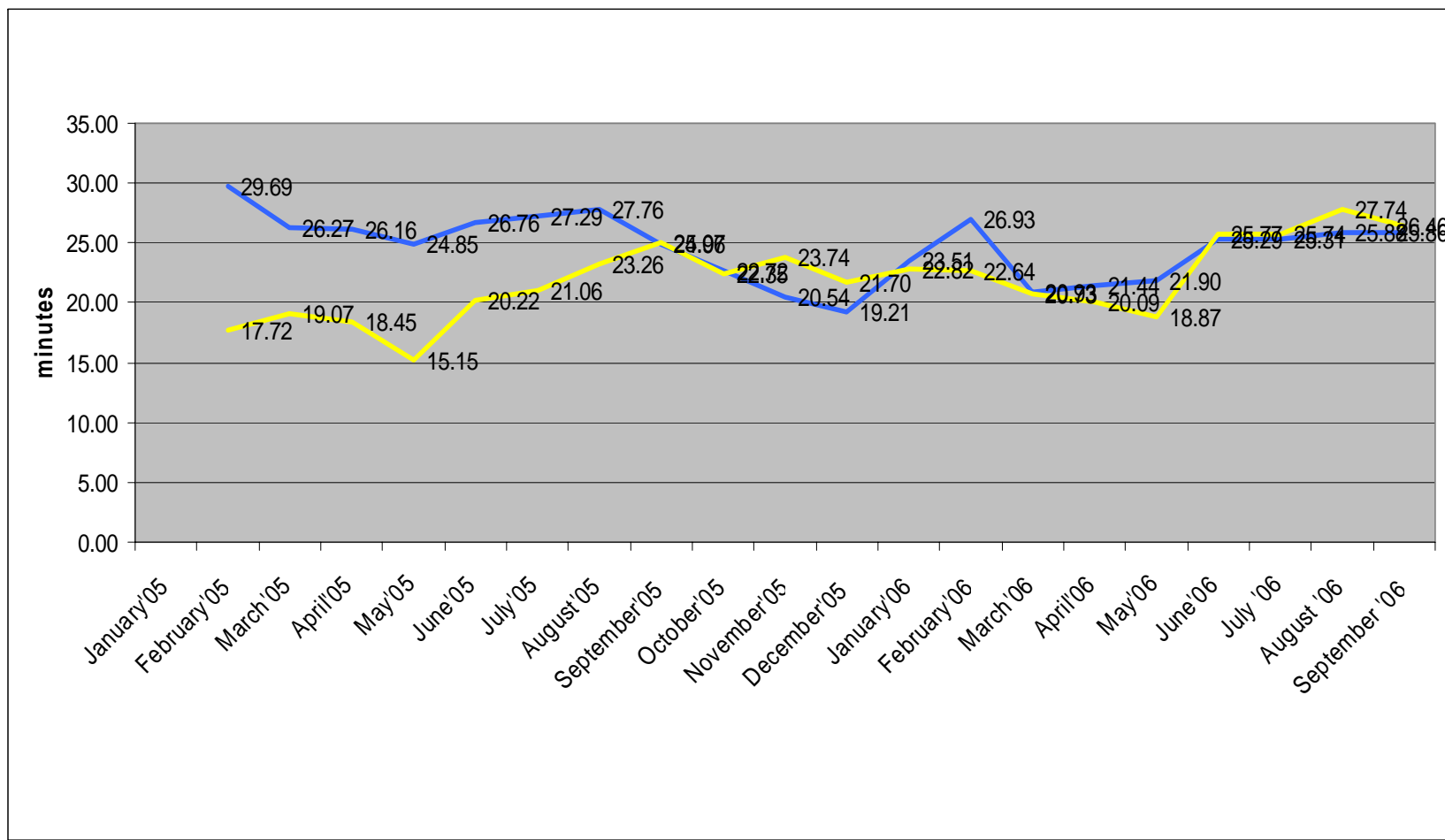
Last Updated:

Edit

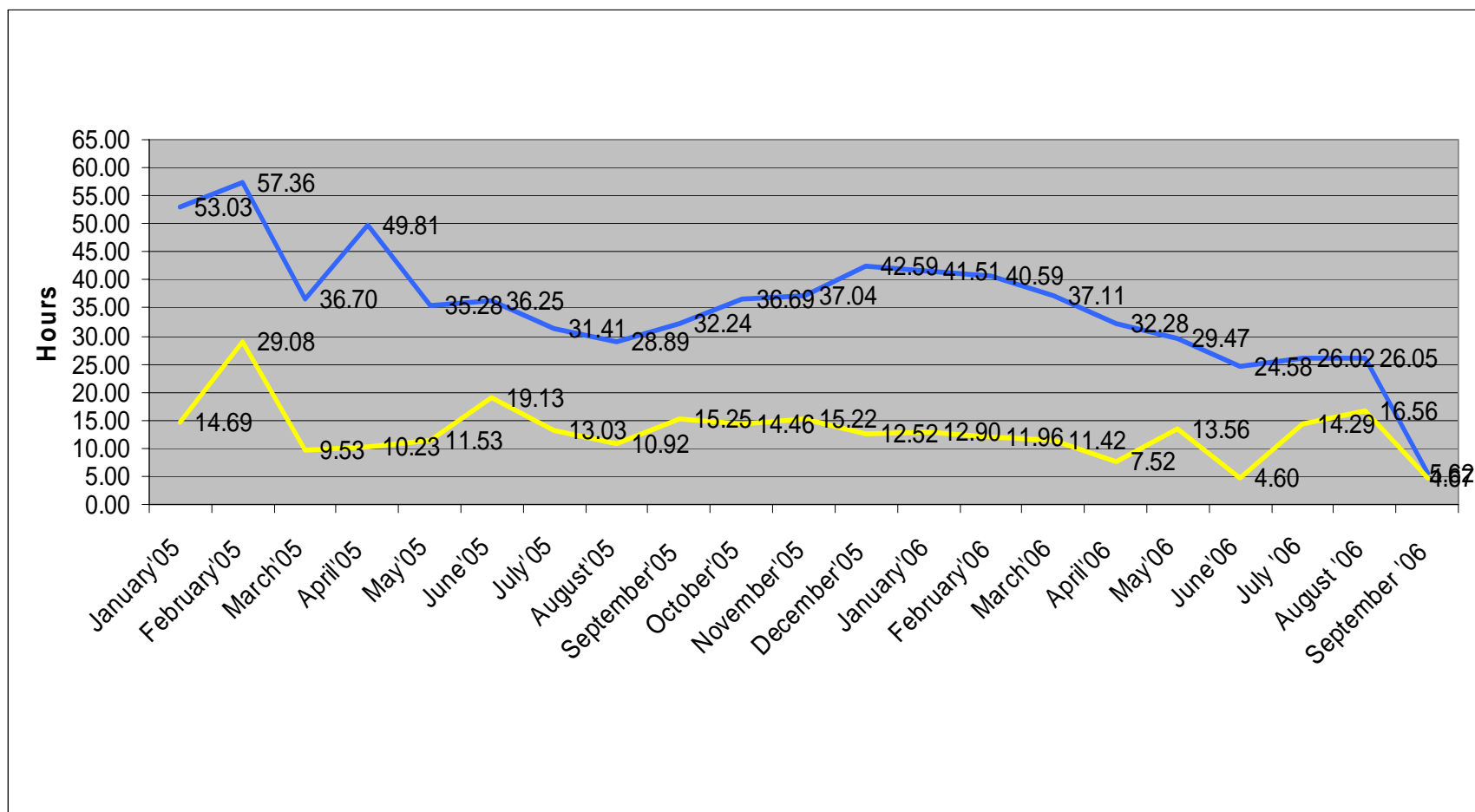
High Performance Medicine

<i>7 Essential Data Elements</i>	<i>Status</i>
Pre-admission medications	Complete
Allergies	Complete
<ul style="list-style-type: none">●Physician Contact●Procedures●Diagnoses●Follow up Plan	Complete
Anticoagulation	Complete

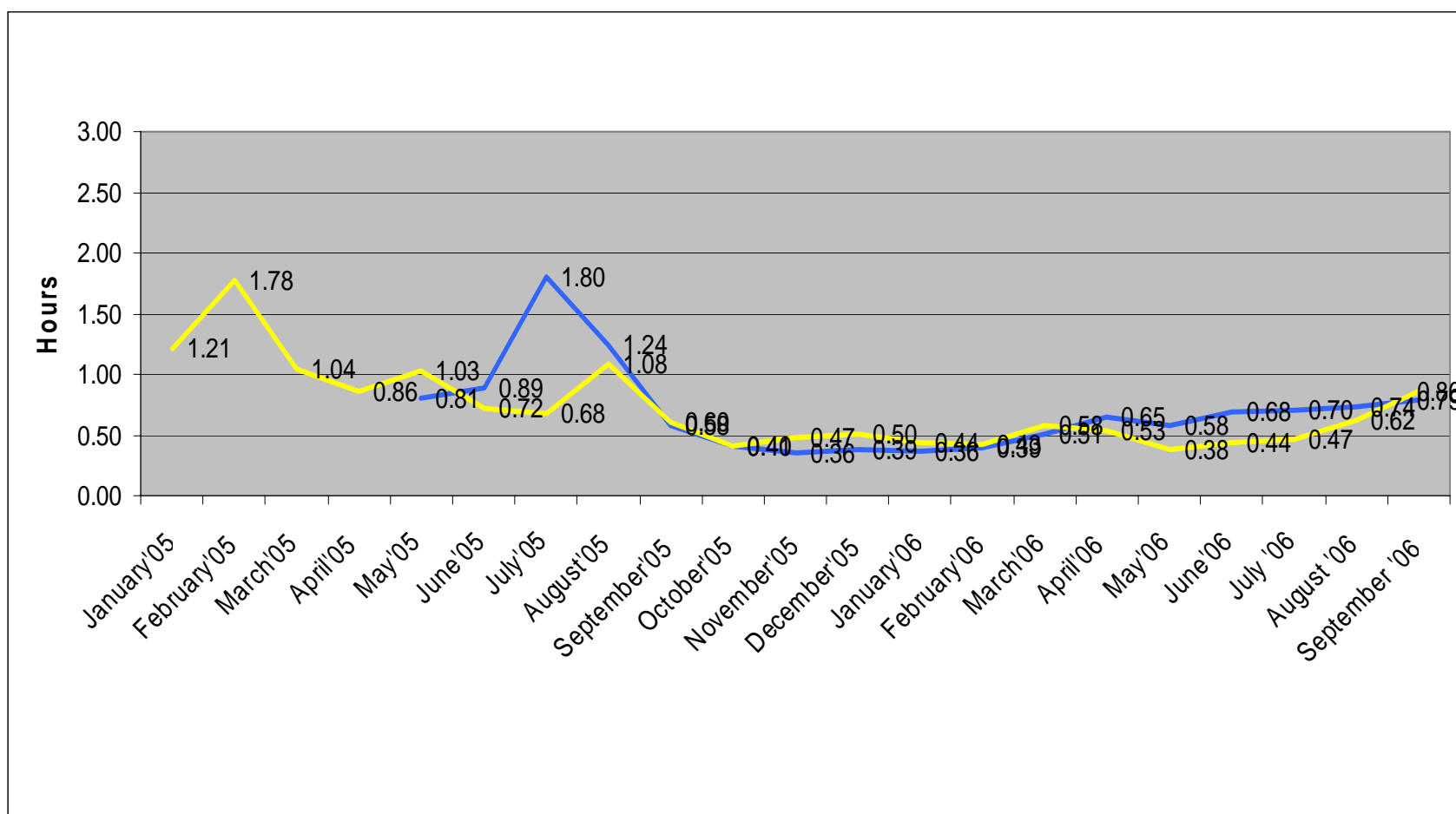
Case Prep Time Large Acute Facilities



Accept Time Large Acute Facilities



Accept time: Cases going to Homecare



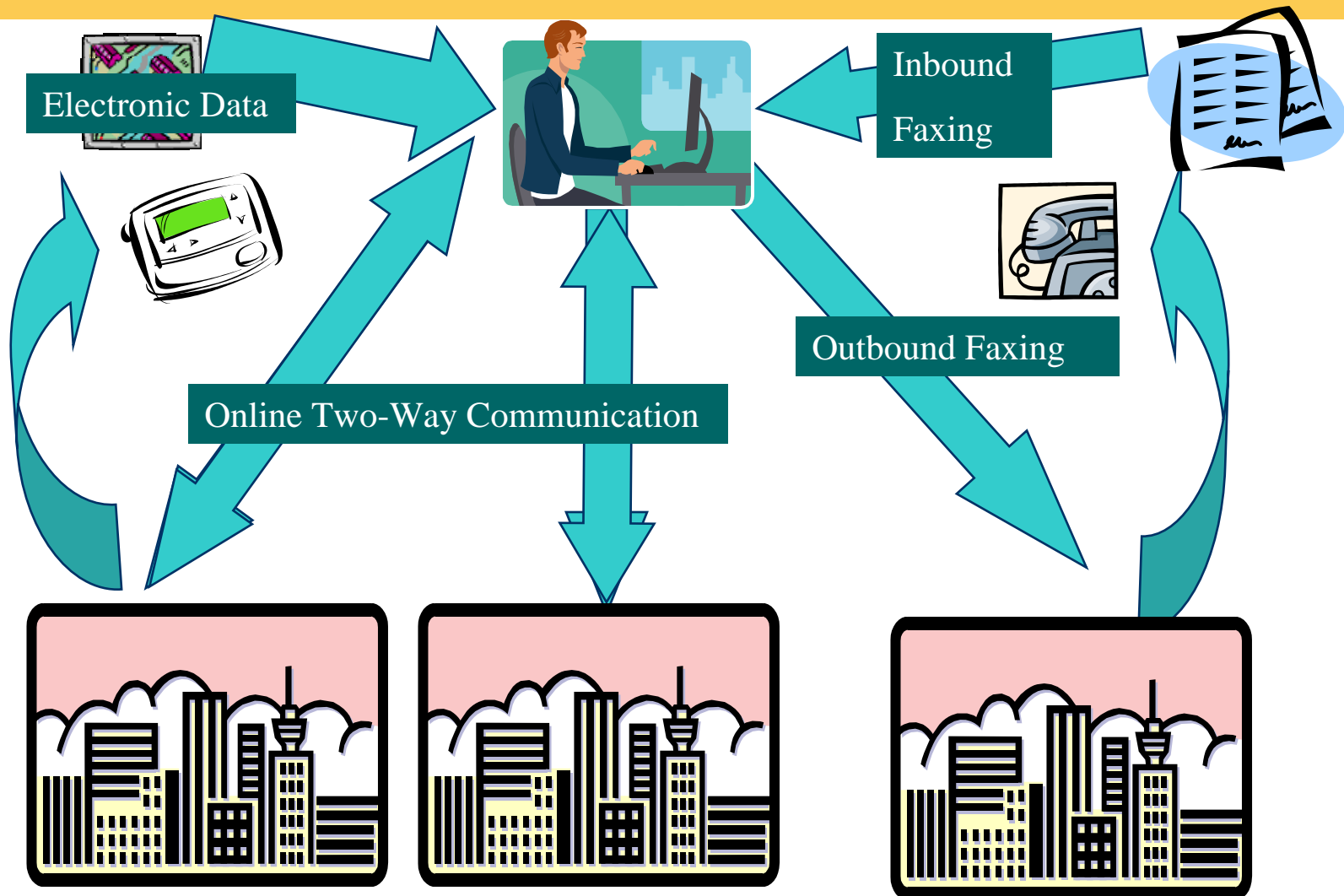
Today's Challenges

- **4NEXT necessitates changes in Care Coordination and Nursing work processes for greatest efficiency**
- **Requires new work process vs. retrofit; may have HR considerations**
- **Shifts existing relationships with outside facilities with unknown impact**
- **Best Practice Mandate**
- **Push vs Pull**
- **Ease Creates New Challenges**

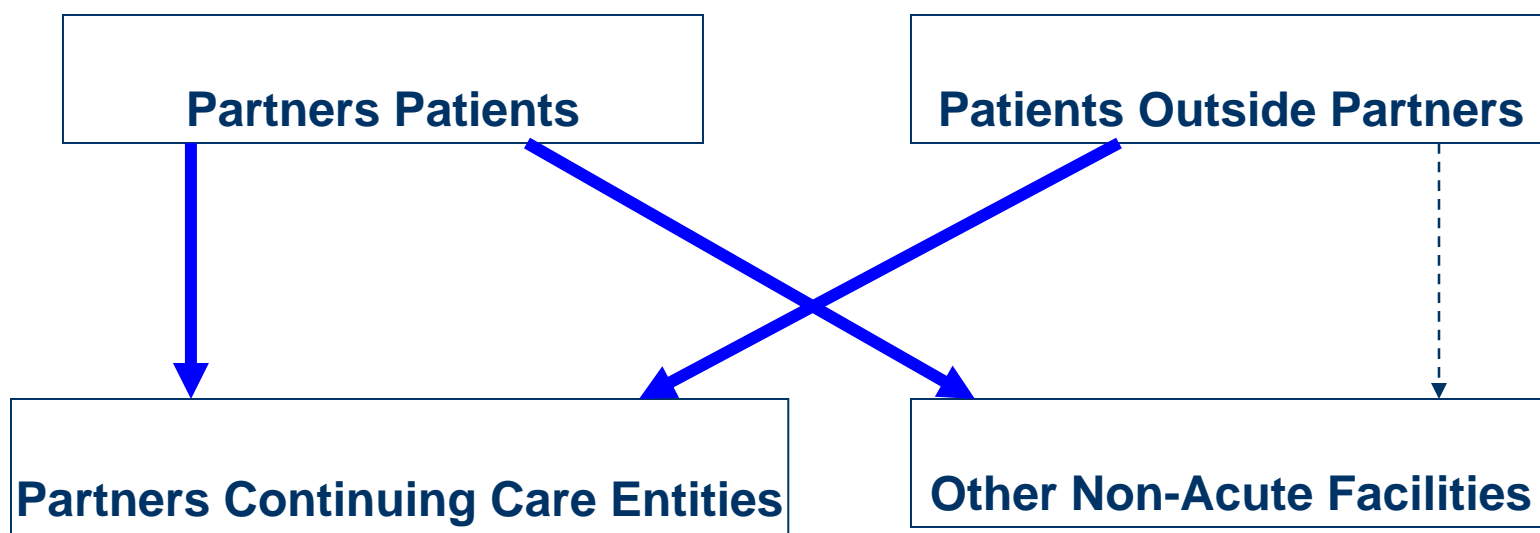
Non-Acute Referral Before 4Next TOC



Non-Acute Referrals with 4Next TOC



Future Scope: 4NexTrac



4NexTrac – Non-Acute Referral Tracking and Management Module within 4NEXT that will capture 100% of Non-Acute Referrals from Partners institutions and other sources to provide a better understanding of referral and admission trends.

Dashboard to Prioritize Work

Case List

View by List: Total: 26

	Patient Info	Insurance	City, State	From	SOC/ROC	Services	Progress	Status
1	Claus, Santa (M) DOB: 1/1/1950	Medicare A	Home-Medford, MA	MGH	9/15/2006	RN	INS	
	Claus, Santa (M) DOB: 1/1/1950	Medicaid	Service-Waltham, MA	BWH	9/15/2006	RN, HHA		
	Claus, Santa (M) DOB: 1/1/1950	HMO Blue	Home-Boston, MA	BIDMC	RCC 9/15/2006	RN, PT, OT, HHA	INS, CLN, ORD, AUTH	
	Claus, Santa (M) DOB: 1/1/1950	Harvard Vangaurd	Home-Watertown, MA	NWH	ROC 9/15/2006	RN, MEAL, PT		
	Claus, Santa (M) DOB: 1/1/1950	HMO Blue	Service-Bedford, MA	SLM	9/15/2006	RN, RESP	AUTH, CLN	
	Claus, Santa (M) DOB: 1/1/1950	Blue Cross MA	Home-Brookline, MA	MD Office	9/15/2006	PT, OT	CLN	

Start of Care Date is Past Due
 Start of Care Date is Today
 Start of Care Date is Tomorrow
 Start of Care Date is 2 days from Now
 Start of Care Date is 3 days from Now
 Start of Care Date is 4 or more days from Now

For Home Care

New Features

Columns

Filters

Dashboard to Prioritize Work

4Next, Non-Acute - Cases - Microsoft Internet Explorer provided by Partners HealthCare System

File Edit View Favorites Tools Help

Address <https://4nextqa.partners.org/Cases.aspx>

4next Non-Acute **Spaulding Rehabilitation Hospital** Sawyer, Robert - 8/29/2006

Change Site | Logout | Contact Us | Help | QA

Cases My Info Provider Survey

Case List

View by List: All Cases Date Selection Update Filter Hide finished cases Total: 26

	Patient Info	Insurance	From	Disch Date	Program	Progress	Status
1	Claus, Santa (M) DOB: 1/1/1950	Medicare A	MGH	Act. 9/15/2006	CHF	INS	
	Claus, Santa (M) DOB: 1/1/1950	Medicaid	BWH	Est. 9/15/2006	STROKE		
	Claus, Santa (M) DOB: 1/1/1950	HMO Blue	BIDMC	Est 9/15/2006	Multi-Trauma	INS, CLN, ORD, AUTH	
	Claus, Santa (M) DOB: 1/1/1950	Harvard Vanguard	NWH	Est 9/15/2006			
	Claus, Santa (M) DOB: 1/1/1950	HMO Blue	SLM	9/15/2006		AUTH, CLN	
	Claus, Santa (M) DOB: 1/1/1950	Blue Cross MA	MD Office	9/15/2006	AIDS	CLN	

Expected/Actual Discharge Date is Past Due
 Expected/Actual Discharge Date is Today
 Expected Discharge Date is Tomorrow
 Expected Discharge Date is 2 days from now
 Expected Discharge Date is 3 days from now
 Expected Discharge Date is 4 or more days from now
 Screening/Resee Date is Today
 Screening/Resee Date is Past Due
 Screening/Resee Date is Tomorrow

For Facilities

New Features

Columns

Filters

Manage Referral

Used by
Intake and
Admitting to
insure
everyone
knows what's
been done

4Next, Non-Acute - Patient Information - Microsoft Internet Explorer provided by Partners HealthCare System

Address: https://4nextqa.partners.org/PatientInformation.aspx?arguments_tag=&caseid=79461

4next PARTNERS HOME CARE Gupta, Madhurima - 12/1/2006
Change Site | Logout | Contact Us | Help | QA

Cases My info Provider Survey

Balkus, Walter Case List | Update My List ()

SEX: M DOB: 1/17/1918 (88 y) SSN: 016-07-6429 SLM, MRN: 00118382 MEDICARE A IP, # 016076429A

View Messages Compose Message Patient Information Transaction History Contact

Manage referral Facesheet Allergies Precautions Laboratory Operative notes Discharge Info Print options

Insurance Verified ☒ Yes ☐ No Last Updated: MGupta @ 12/18/06 @ 2:30pm

Orders received ☐ Yes ☒ No

Clinically Cleared ☐ Yes ☒ No

Managed Care Auth Complete ☐ Yes ☒ No ☐ N/A

Patient on Medhold/Delay ☐ Yes ☒ No

Site Notes

SAVE CANCEL SEND to REG/ADT

Start | Inbox - Microsof... | Issue: 35990 T... | NA Referral man... | Microsoft Visio | 4Next, Non-AC... | Trusted sites | 10:42 AM

New Function- Interface

ADM.SRH (A/TEST.5.5.MIS/SRH 143) - BOB SAWYER

Inpatient Admission Schedule/Edit Long Form Page 1

Patient NEW

Name ZZSAWYER, TESTFOURNEXTTWO Birthdate 01/01/70 Age 36 Sex M

Maiden and/or Other Names

Mother's Name

Street 1 MAIN STREET

Street

City WELLESLEY HILLS

State MA ZIP Code 02481

Home Ph (781)416-8716

Other Ph

Soc Sec#

Email

Use Email

Alt Address N

Reason For Visit

Visit Diagnosis 1

2

Requested Accom S Reservation Taken

Adm Priority EL On Date 12/29/06 At Time 1022

Admission Date 02/01/07

Comment

Unit #

Demo Recall

Last Discharge

Prim Care Phys

Admitting Phys

Service NEW NEW

BERT E SAWYER

HIPAA HIPAA Privacy

Provider/Loc'n Insurances

Other Name

Name DRC 01/05/07

000361

Referral Date 01/05/07 Time 1109

Part of Care 02/01/07 (projected)

Referral Source H.BIDMC Type ACU

Admit Source H.BIDMC Type ACU

Enter/Edit

Employer

Guarantor

Next of Kin

Person to Notify

Care Giver

Directions

Street

City WELLESLEY HILLS State MA Zip 02481

Phone (781)416-8716

E-mail

Service Address

Street

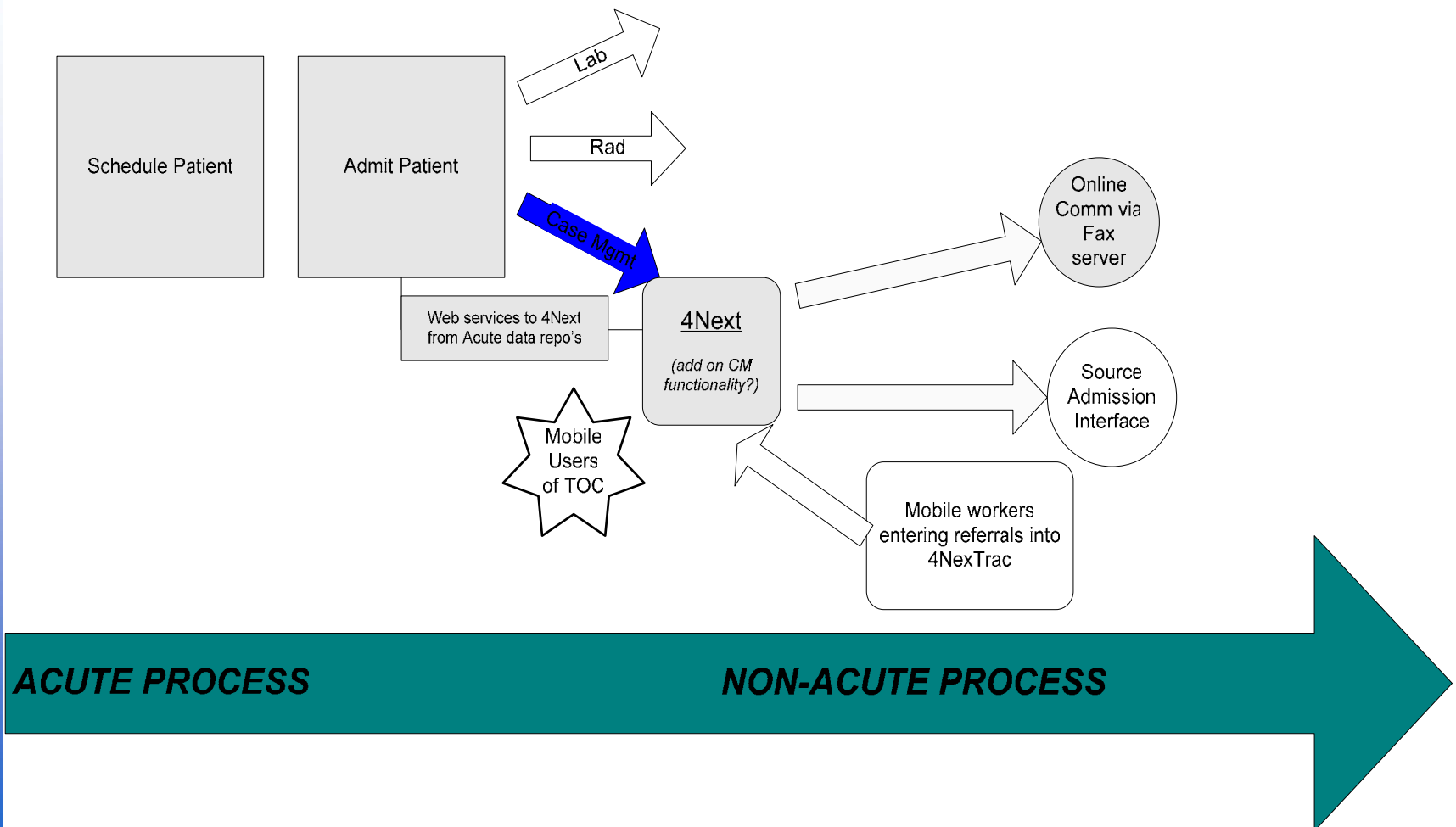
Street

City State Zip

County MSA Code CBSA Code

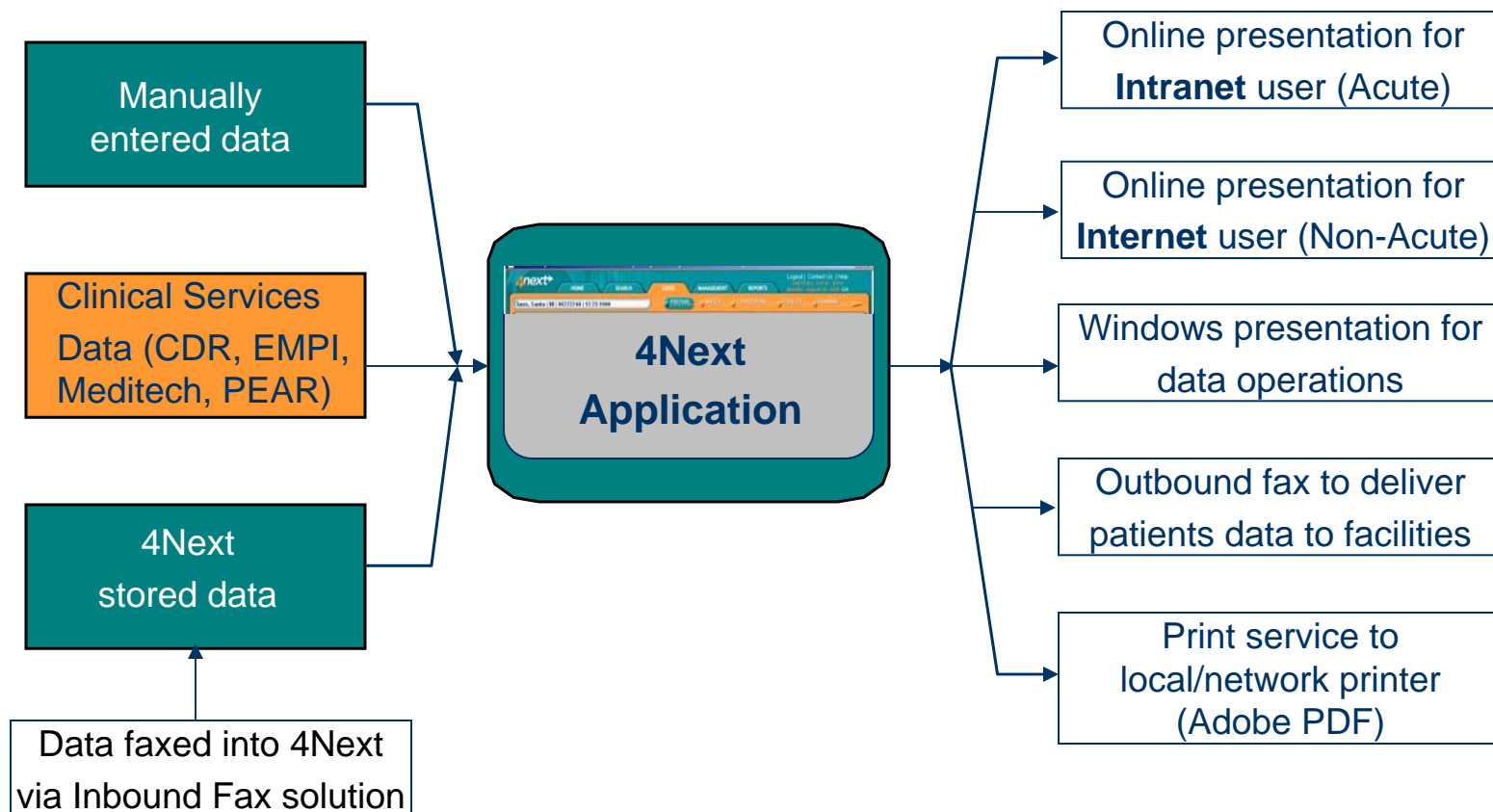
Phone

Opportunities

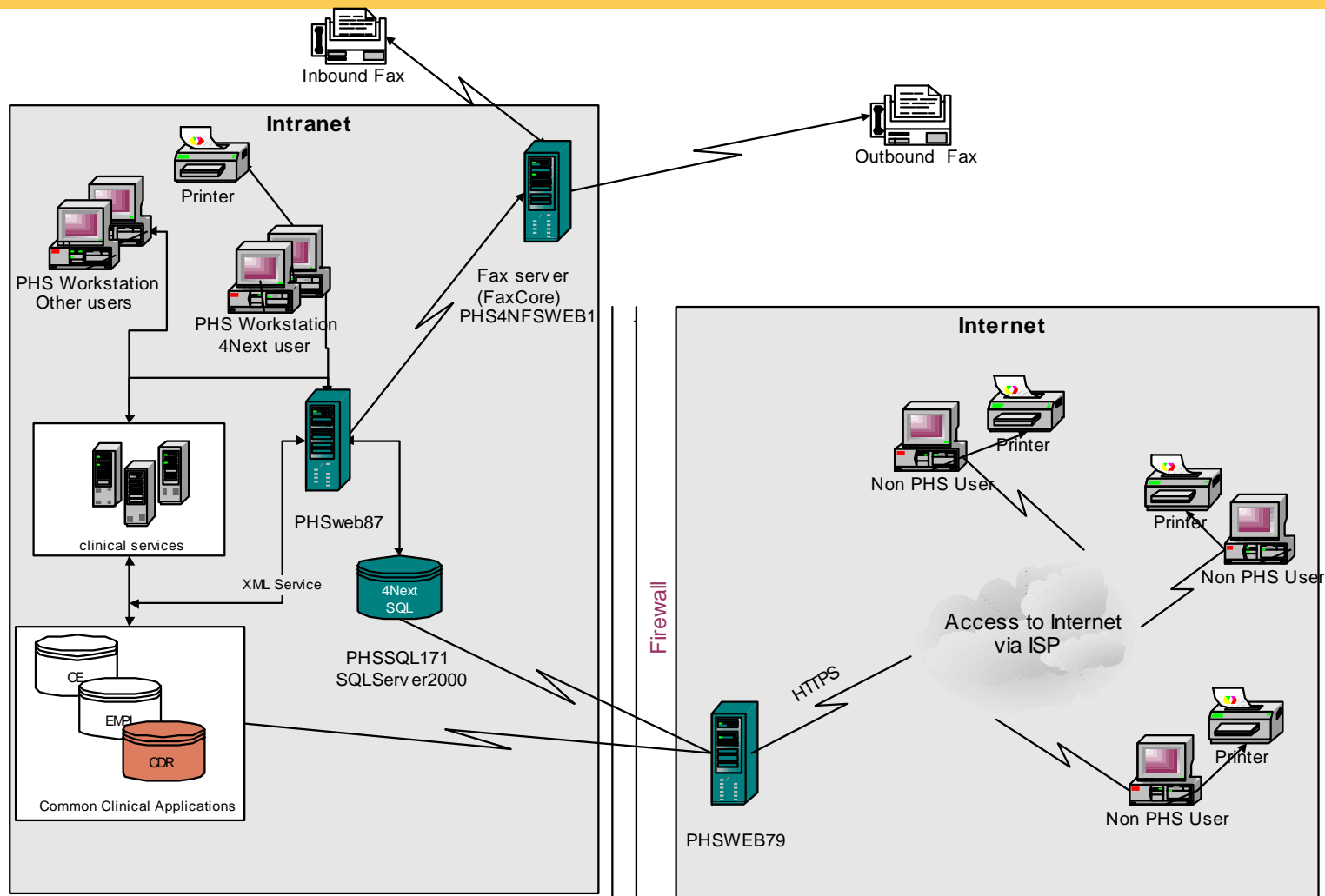


4Next Architecture

Patient's Data in 4Next



Infrastructure Diagram



Architecture

		PRODUCTION	TEST	DEVELOPMENT	TRAINING
DATABASE		PHSSQL171 FourNext	PHSSQL173 FourNextNetQA	PHSSQL173 FourNextNetDev	PHSSQL173 FourNextNetTR
FAX SERVER		PHS4NFSWEB3	PHS4NFSWEB1	PHS4NFSWEB1	PHS4NFSWEB3
WEB SERVER	ACUTE	phsweb87	Phsweb71	Local host	Phsweb71
	NON- ACUTE	Phsweb16	phsweb79	Local host	phsweb79
WEB ADDRESS	ACUTE	4nextacute.partners.org	4nextacuteqa.partners.org	Local host	4nextacute4r.partners.org
	NON- ACUTE	4next.partners.org	4nextqa.partners.org	Local host	4nexttr.partners.org

Inbound Fax Number: 617-643-8311

N:\NAC\4Next\PHASE 2\Core Concepts & History\4NEXT Schema Phase2.doc

How will the future look?

