Personal Health Record (PHR) Scope, Function, and Issues



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Driving Forces

Healthy People 2020 (HP 2020) Health Communications objectives

Certification Committee for Health Information Technology (CCHIT)

Meaningful Use

Executive order for transparency

Healthy People 2020



- HC/HIT HP2020–5: (Developmental) Increase the proportion of online health information seekers who report easily accessing health information.
- HC/HIT HP2020–7: (Developmental) Increase the proportion of persons who use electronic personal health management tools.
 - 1 Increase the proportion of persons who use the Internet to keep track of personal health information, such as care received, test results, or upcoming medical appointments.
 - 2 Increase the proportion of persons who use the Internet to communicate with their provider.
- HC/HIT HP2020–8: (Developmental) Increase the proportion of patients whose doctor recommends personalized health information resources to help them manage their health.
- HC/HIT HP2020–12: (Developmental) Increase the proportion of providers and governmental health agencies that use advanced connectivity to optimize electronic health information exchange to improve individual and population health.

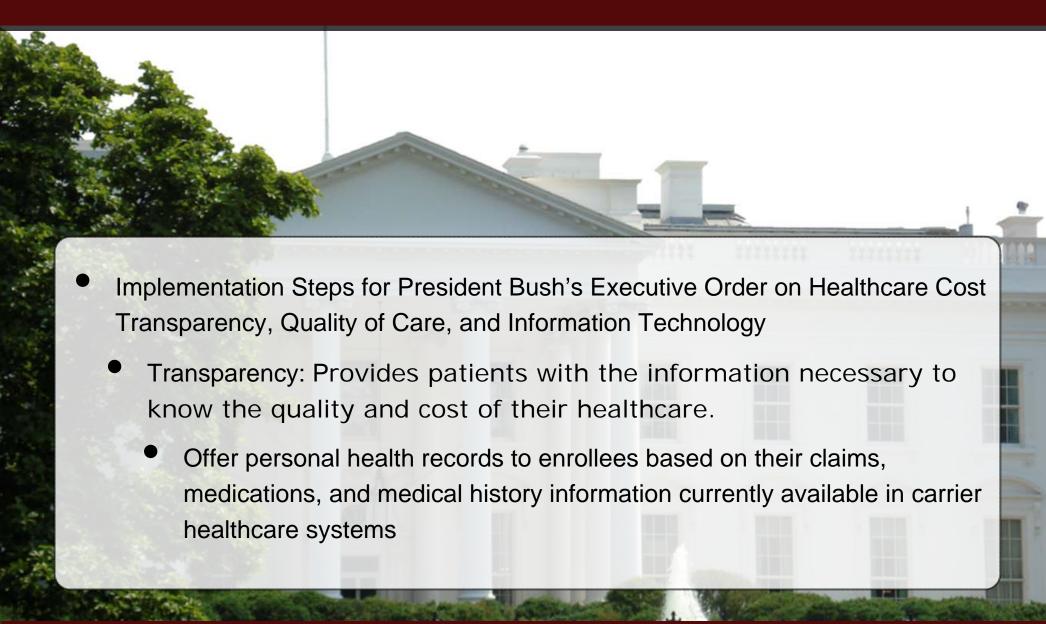
CCHIT



CCHIT

- Independent organization that is recognized by the federal government as an official certification body for electronic health records (EHRs) with the mission to accelerate the adoption of health information technology (HIT).
- Provides oversight to the EHR. The Indian Health Service (IHS) must be able to demonstrate how a patient can obtain online access to their clinical information including, at a minimum, laboratory test results, problem list, medication list, medication allergy list, immunizations, and procedures.

Executive Order: Transparency



Meaningful Use of EHR

"Meaningful use" is the name of a new initiative to improve the health of the nation. The Meaningful Use project was assigned to the Office of the National Coordinator (ONC) and the Centers for Medicare and Medicaid Services (CMS) through the American Recovery and Reinvestment Act of 2009 (ARRA). The ONC is creating criteria for what an EHR should be able to do. CMS is creating guidelines on how EHRs should be used by healthcare providers and hospitals to improve the quality, safety, and efficiency of the healthcare system. To achieve meaningful use, healthcare providers and hospitals must meet the criteria created by the ONC and CMS.

The IHS has a meaningful use coordinator: Stephanie Klepacki.

Meaningful Use of EHR

Care Goals	2011 Objectives Goal is to electronically capture in coded format and to report health information and to use that information to track key clinical conditions	2011 Measures	2013 Objectives Goal is to guide and support care processes and care coordination	2013 Measures	2015 Objectives Goal is to achieve and improve performance and support care processes and on key health system outcomes	2015 Measures
Provide patients	Provide patients with	% of all patients with	Offer secure patient-	Additional patient	Access for all	NPP quality
and families with	electronic copy of- or electronic	access to personal health	provider messaging	access and experience	patients to PHR	measures related to
access to data,	access to- clinical information	information electronically [OP,	capability [OP]	reports using NQF-	populated in real time	patient and family
knowledge, and tools	(including lab results, problem list,	IP]		endorsed HIT-enabled	with data from EHR	engagement [OP, IP]
to make informed	medication lists, allergies) per		Provide access to	quality measures [OP,	[OP, IP]	
decisions and to	patient preference (e.g., through	% of all patients with	patient-specific educational	IP]		% of patients with
manage their health	PHR) [OP, IP]	access to patient-specific	resources in common	A	Patients have	full access to PHR
	0	educational resources [OP, IP]	primary languages [OP, IP]	% of patients with	access to self-	populated in real time
	Provide access to patient-	% of encounters for which	Record patient	access to secure	management tools	with EHR data [OP, IP]
	specific educational resources	clinical summaries were	preferences (e.g., preferred	patient messaging	[OP]	
	[OP, IP]	provided [OP, IP]	communication media,	[OP]	Electronic	
	Provide clinical summaries for	,,,,,	advance directive, health	% of educational	reporting on	
	patients for each encounter [OP,		care proxies, treatment	content in common	experience of care	
	IP]		options) [OP, IP]	primary languages	[OP, IP]	
	-		' ' ' '	[OP, IP]	' ' '	
			Documentation of			
			family medical history [OP,	% of all patients		
			IP]	with preferences		
			Unload data from home	recorded [OP]		
			Upload data from home	0/ -64		
			monitoring devices [OP]	% of transitions		
				were summary care		
				record is shared [OP,		
				IP]		
				Implemented		

Meaningful Use Of EHR

2013 Objectives Care Goals 2011 Objectives 2011 Measures 2013 Measures 2015 Objectives 2015 Measures Goal is to electronically capture in coded Goal is to guide and support care Goal is to achieve and format and to report health information processes and care coordination improve performance and and to use that information to track key support care processes and clinical conditions on key health system outcomes aron auality W of all nationts with Offer course nationt Additional patient Provide patients Provide patients with and families with electronic copy of- or electronic ated to Provide patients with electronic copy access to- clinical information access to data, mily knowledge, and tools (including lab results, problem list, [OP, IP] to make informed medication lists, allergies) per of or electronic access to clinical ents with decisions and to patient preference (e.g., through PHR PHR) [OP, IP] manage their health real time information (including lab results, Provide access to patient-[OP, IP] specific educational resources problem list, medication lists, [OP, IP] Provide clinical summaries for allergies) per patient preference (e.g. patients for each encounter [OP. IP] Through PHR) [OP,IP] with preferences recorded [OP] Upload data from home monitoring devices [OP] % of transitions were summary care record is shared [OP, IP1

Implemented

Meaningful Use of EHR

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access to data,	access to- cli			₄ NQF-	populated in real time	patient and family
knowledge, and tools	(including la	ce for all no	tionto to	# -enabled	with data from EHR	engagement [OP, IP]
to make informed	medication ACCC	ss for all pa	illerits to	ures [OP,	[OP, IP]	
decisions and to	natient pref	the state of the s				% of patients with
manage their health	PHR) [OP, II PHR	populated i	ın real time	9	Patients have	full access to PHR
		A STATE OF THE STA			access to self-	populated in real time
	Provide with	data from E	HD IOD II	D1 ^{yre}	management tools	with EHR data [OP, IP]
	specific edu VVILII	uala IIOIII L	i iix [Or, ii	aging	[OP]	
	[OP, IP]				Electronic	
	Provide clinical summaries f	or .	advance directive, health	% of educational	reporting on	
	patients for each encounter [OP	"	care proxies, treatment	content in common	experience of care	
	IP]		options) [OP, IP]	primary languages	[OP, IP]	
	,		options, (or , ii)	[OP, IP]	[01,11]	
			Documentation of	[01,11]		
			family medical history [OP,	% of all patients		
			IP]	with preferences		
				recorded [OP]		
			Upload data from home			
			monitoring devices [OP]	% of transitions		
				were summary care		
				record is shared [OP,		
				IP]		
				Implemented		

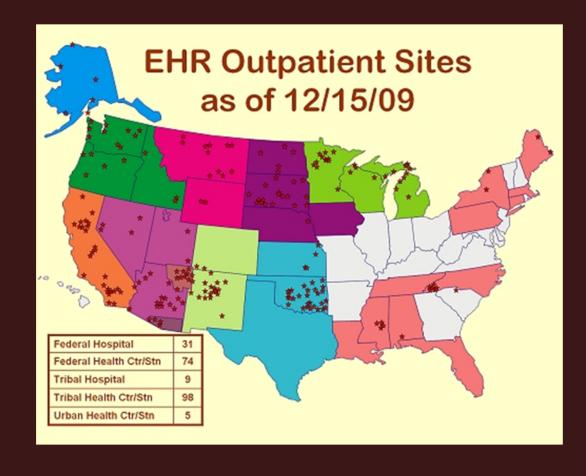
Meaningful Use of EHR

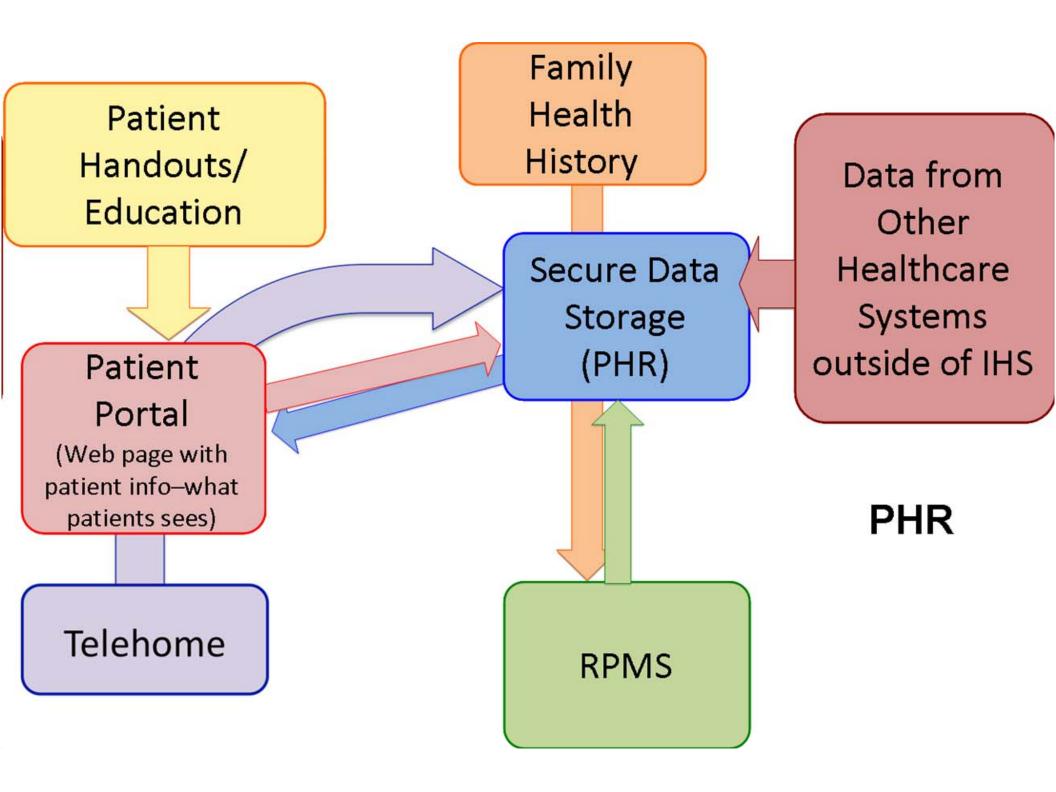
- By FY11, view data:
- Medications
- Allergies
- Laboratory Results
- Discharge Summaries
- Problem List
- Procedure Information

- By FY13:
 - Reporting
 - Patient Preferences
 - Secure Messaging
 - Device Data Upload information from glucometer, etc.
 - Family Health History
 - Languages

Increase use of HIT to improve individual and population health.

- EHR Outpatient Sites
 - Federal Hospitals: 31
 - Federal Health Centers/Stations: 74
 - Tribal Hospitals: 9
 - Tribal Health Centers/Stations: 98
 - Urban Health Centers/Stations: 5
- EHR Inpatient Sites
 - Federal Hospitals: 7
 - Tribal Hospitals: 3
- EHR VistA Imaging Sites
 - Federal Hospitals: 11
 - Federal Health Centers/Stations: 24
 - Tribal Hospitals: 6
 - Tribal Health Centers/Stations: 12
- EHR Alaska Village Clinic Sites
 - Village Clinics: 4





Envisioned Features of PHR

- Priorities are based upon feasibility, cost, and integration with other initiatives.
- Priority of features is subject to change over time.
 - New projects (examples: Facebook project with a Tribe; refill medications online; pharmacy mail order program)
 - Funding sources: (Examples: ARRA (2 years) will need to find new funding, but Office of Information (OIT) will receive funding because of meaningful use
 - Driving forces: (Example: If meaningful use changes)
 - Stakeholder needs

Envisioned Features—PHR Highest Priority

- Provide electronic patient IHS medical information to our patients
- CCHIT criteria due in Oct 2010 (IHS must pass a certification test by 10/2010)
- Meaningful use criteria due in FY11 (IHS must meet the criteria from chart on Slide # 7)
- Patient-specific education resources—link to get patient education materials (i.e., Patient Handout Web site)
- Integrate with National Health Information Network (NHIN)
- Accommodate interfaces with other tools
- Security and Privacy
- Comply with Section 508

Envisioned Features—PHR Medium Priority

- Reporting
- Patient Education Resources
- Secure Messaging
- Device Data Upload—information from blood pressure cuff or glucometer
- Multilingual
- Appointment Scheduling
- Telehome: expanding calling from "home" home telephone, cell phone, home computer, etc.
- Community and Population Health Initiatives—notify community of outbreaks of illness in your community

Envisioned Features—PHR Lower Priority

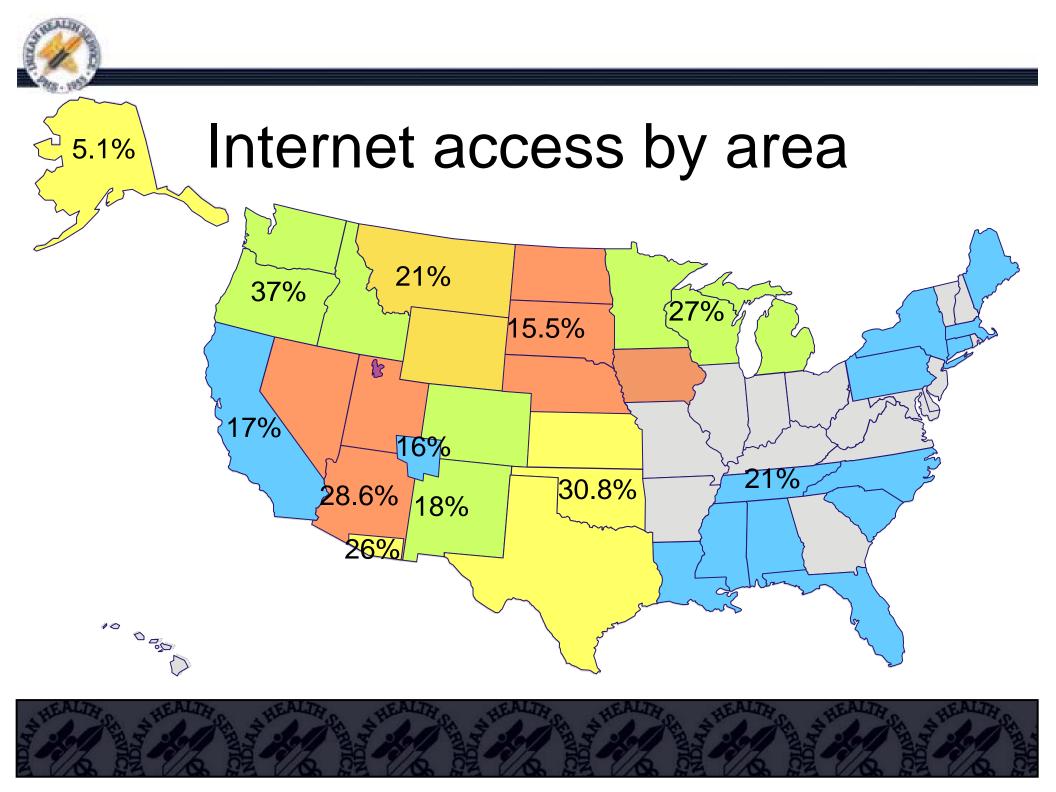
- Delegate PHR account to confidantes—patient gives permission for husband/wife to access health information
- Push PHR data to Health Information Exchange (HIE)
- Push PHR data to Resource and Patient Management System (RPMS)
- Patient logs and journals
- Mobile version (viewing PHR from your cell phone)
- Map to HealthVault
- Interface with social networking sites—Not Facebook, but Support groups for arthritis, diabetes, etc.

Current Status

- Working with OIT to determine the best solution for moving information from RPMS to a secure database
- What about Microsoft Healthvault?
 - Plans are to enable patients to pull IHS information into Healthvault, but it will not be the primary data repository for IHS.
 - Healthvault cannot perform all of the functions that are envisioned for the PHR.

Patient Registration Internet Access Questions

```
CIHA HOSPITAL
IHS REGISTRATION EDITOR (page 1)
                  (upd:MAR 17, 2010)
                                    HRN: I
______
    ELIGIBILITY STATUS: CHS & DIRECT
      DATE OF BIRTH: 03/22/1947
PLACE OF BIRTH [CITY] : ALBUQUERQUE 4.ST : NC
          SEX: MALE
6. SOCIAL SECURITY NUMBER: 000000003 (Not yet verified by the SSA)
     MARITAL STATUS: MARRIED
    CURRENT COMMUNITY: SNOWBIRD
9. STREET ADDRESS [LINE 1]: snowbird dr
10.STREET ADDRESS [LINE 2] :
11.STREET ADDRESS [LINE 3]:
12.
          CITY: snowbird 13.ST: NC 14. ZIP CODE: 28779
     LOCATION OF HOME: LOCATION OF HOME CONTAINS DATA
16.PHONE NUMBER [RESIDENCE]: 828-497-2465 17.WORK PHONE: 828-497-9163
       OTHER PHONE : cell 828-735-5555
18.
           INTERNET ACCESS: YES WHERE: WORK (upd DEC 10,2009)
 19.
       EMAIL ADDRESS: DEMOPATIENT@GMAIL.COM
CHANGE which item? (1-20) NONE//:
```



Patient Registration E-Mail Address

IHS REGISTRATI	ON EDITOR (page 1)	CIHA HOSPITAL	
DEMO,PATIENT	(upd:MAR 17, 2010)	HRN:I	
	Y STATUS : CHS & DIRECT		
3. PLACE OF BI	PF BIRTH : 03/22/1947 RTH [CITY] : ALBUQUERQUE EX : MALE	4.ST : NC	
6. SOCIAL SECU	JRITY NUMBER : 000000003(No L STATUS : MARRIED	yet verified by the SSA)	
	COMMUNITY : SNOWBIRD		
9. STREET ADDR 10.STREET ADD	RESS [LINE 1] : snowbird dr RESS [LINE 2] :		
11.STREET ADD	RESS [LINE 3] : CITY : snowbird	ZIP CODE : 28779	
15. LOCATIO	ON OF HOME : LOCATION OF	HOME CONTAINS DATA	
	1BER [RESIDENCE] : 828-497-246 R PHONE : cell 828-735-5555	5 17.WORK PHONE : 828-497-9	163
19. INTERN	EMAIL ADDR		ENT@GMAIL.COM
CHANGE which i	item? (1-20) NONE//:		

- To ensure privacy, a request submitted to add a fourth question: "Is it okay if we send you e-mails at this e-mail address?"
 - The intent is to share generic health education documents.
 - No Personal Health Information (PHI) is to be shared across nonsecure E-mail.
 - This will be addressed by secure messaging through the PHR project.
- E-mail address is required for CCHIT certification.
 - CCHIT will also looks to see if an E-mail is added for the father and mother of minor patients.

- Developing a system that will create a match between the patient and their RPMS account.
- Patients will need to sign up for a PHR account in person.
- The registrar (whomever the person assigned to give the patient access to their account) will use the PHR and potentially the Master Person Index (MPI) to assign the patient the appropriate account.

MPI: a tool that will link your chart from Cherokee with your chart from Billings with your chart from Oklahoma (if you have charts anywhere else). This will let clinicians see your health information from multiple IHS sites.

PHR will match as many data elements as possible, including E-mail address.

2A

Manage Applications | Medity Account | Legeut

Manage Applications

This page enables you to locate PHR applications to access medical records and simultaneously to locate matching IHS patient records. Enter identifying data from the person and his ther identification in the search box below and click the "Search" button. If you wish to use additional data to search, select the "Advanced Search" tab.

QUICK SEARCH	ADVANCED SEARCH		lisplayed here are subject to sending on conversations with jate
SEARCH			
HRN:		PHR User Name:	
Last Name:		First Name:	
Middle Name			
Gender:	- Select -	Date of Birth	
Zip / Postal Code			This is an example of
		Search Cancel	future enhancements
		10.00	to the Patient
			Registration package

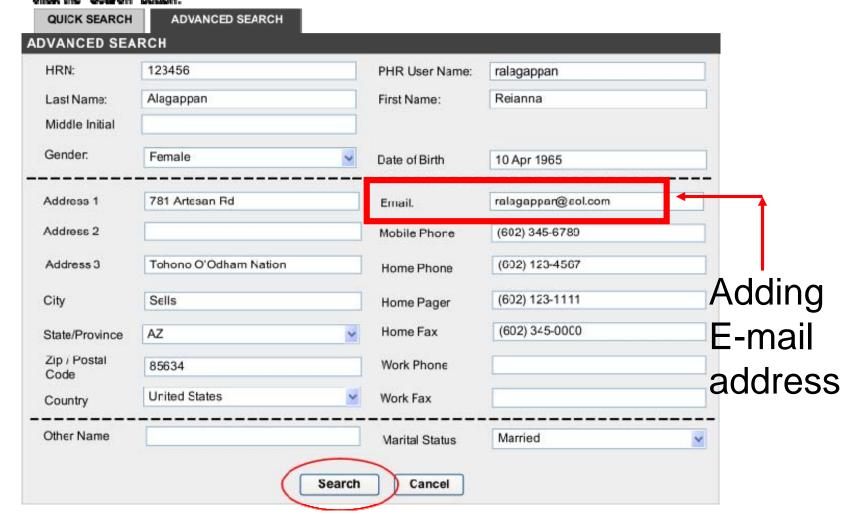
If Registrar does a quick search and then clicks "Advanced Search", the System will pull over any data into advanced Search page

28

| Heme | Manage Applications | Madify Account | Legent | Is Rimpotent to know which fields pull back which records(e.g. PHR, RPMS))

| Manage Applications | Errors Displayed Fore

This page enables you to locate PHR applications to access medical records and simultaneously to locate matching IH8 patient records. Enter identifying data from the person and his /her identification in the search box below and eliek the "Search" button.



Heme | Manage Applications | Modify Account | Logout

Manage Applications Errore Displayed Here

On the left table select the PHR Account that matches the person and their identification. On the right table, select the IHS medical record that matches the PHR Account. Click the person's name to view all data on record for the person. When your search does not find the correct records – in either table – then add more data about the person to the advanced search below. Click the "Compare" button to double - check that you have selected the correct matching PHR and IHS records.

		PHR AC	CCOUNTS						IHS F	PATIENTS	
HRN	Name	PHR Name	Date Of Birth	Address	Select		Probability of Match	HRN	Name	Date Of Birth	Address
123456	Alagappan, Reianna Mrs.	ralagappan	04/10/1965	781 Artesan Rd Tohono O'dham Nation 85634	•		99%	123456	Alagappan, Reianna Mrs,	04/10/1965	781 Artesan Rd Tohono O'dham Nation 85634
123456	Alagappan, Rachel	rmalagappan	05/15/1985	781 Artesan Rd Tohono O'dham Nation 85634	0		82%	123456	Alagappan, Rachel	05/15/1985	781 Artesan Rd Tohono O'dham Nation 85634
1 23456	Alagappan, R.	rralagappan	11/21/1987	781 Artesan Rd Tohono O'dham Nation 85634	0		75%	123456	Alagappan, R.	11/21/1987	781 Artesan Rd Tohono O'dham Nation 85634
		K SEARCH GED SEARC		ED SEARCH	Compare	D	Cance		the user will	wan I to add i on The advar	san dulniu mnichu More Luvirsh dvila Moed Luvirsh Vnii Ma
	HRN:	_	23456			Di	HR User N	amer	ralagappan		
		No.	Magappan		_		rst Name:	arries.	Reianna		-
		e Initial	мадарран		-	FI	rst Name.		Relatitid		
	Gend	_	Female		~	Da	ate of Birth	[10 Apr 1965		
	Addre	ss 1	781 Artesan F	₹d		Е	mail:		ralagappan@	aol.com	
	Addre	ss 2				М	obile Phor	ne	(602) 345-67	89	
	Addre	ess 3	Tohono O'Od	ham Nation		н	ome Phon		(602) 123-45	67	
		_	Sells						(602) 123-11	44	
	City	-					ome Page	r			
	State/	Province	ΑZ		~	Н	ome Fax		(602) 345-00	00	
	Zip / F Code		85634			W	ork Phone				
	Count	try	United States		~	W	ork Fax			ure sementen	
	Other	Name					larital Statu	ıs	Married		_
					Search		Cance	1			

Example of future Patient Registration screen showing patient identification is verified.

Process PHR Application Tueeday, Alarch 09, 2010

2D

Home | Manage Applications | Modify Account | Logout

Manage Applications

Confirm Match

If the two adjected records match, record the type of verification below and link the two records , which will give the patient secress to his/her IHS Medical information via PHR. If the two records do not match, then click "Cancel" to return to the gravious screen.

Probability of Match: 99%

	Proces
PHR ACCOUNT	
Name:	Mrs. Reianna Alagappan
HRN:	123456
Gender	Female
Date of Birth	10 Apr 1965
Address 1	781 Artesan Rd
Address 2	
Address 3	Tohono O'Odham Nation
City	Sells
State/Province	AZ
Zip / Postal Code	85634
Country	United States
Email:	ralagappan@aol.com
Marital Status	Married
Home Phone	(602) 123-4567
Home Pager	(602) 123-1111
Home Fax	(602) 345-0000
Mobile Phone	(602) 345-6789
Work Phone	
Work Fax	
Other Name	
Current Occupation	

PATIENT IHS MED	DICAL RECORD
Name:	Mrs. Reianna Alagappan
HRN:	123456
Gender	Female
Date of Birth	10 Apr 1965
Address 1	781 Artesan Rd
Address 2	
Address 3	Tohono O'Odham Nation
City	Sells
State/Province	AZ
Zip / Postal Code	85634
Country	United States
Email:	ralagappan@aol.com
Marital Status	Married
Home Phone	(602) 123-4567
Home Pager	(602) 123-1111
Home Fax	(602) 345-0000
Mobile Phone	(602) 345-6789
Work Phone	
Work Fax	
Other Name	
Current Occupation	

Example of a future Patient Record Verification.

VERIFY IDENTIFICATION:

System will deplay error if field incomplate

1 Type of Credential:







Link batton until ID

- Upon eliak, eystem will: " change étabas to "Approved"

- * Send note to patient registry to Add a Local System record
 * Create a local patient record associated with EUID
 * Put PHR on IHS Patient treating facility list and distributes list to every facility on treating facility list

Process PHR Application

Tuesday, March 09, 2010

	Ma	anage Applications		
The Pa	tient's PHR account has be	een successfully linked to	o the IHS Medical record	d
This page enable	es you to locate PHR applicati	ons to access medical rec	ords and simultaneously t	o locate match
IHS patient reco	rds. Enter identifying data fro	m the person and his /her i	identification in the search	box below and
click the "Searc	h" button. If you wish to use a	idditional data to search,s	select the "Advanced Sear	rch" tab.
QUICK SEARCH	ADVANCED SEARCH			
ICK SEARCH				
ION OLANOII		_		
HRN:				
Last Name:		First Name:		
Gender:	- Select -	Date of Birth		
Gerider.		Date of Birti		
City		State/Province		~
Zip / Postal		0	- Select -	~
		Country	- Select -	~
Code				

Using EHR to Improve Individual and Population Health

How many I/T/U clinics use EHR? They will have to be specifically targeted.

Meaningful use does not intend to increase the number of clinics using EHR; it wants to increase the meaningful use of existing EHRs.

Can those who use EHR share information with each other or with other agencies?

What about sharing direct IHS/Tribal/Urban (I/T/U) EHR data with Medicaid/Medicare or private insurance for third-party billing? (i.e. if the patient is referred outside of the I/T/U clinic, does the outside hospital or clinic have access to the I/T/U EHR?)



Using EHR to Improve Individual and Population Health

Do we want to make policies that force I/T/U clinic databases to share contact information (like E-mails or addresses) so clinics can contact community members who may be at special rise for pandemics? Patient choice—to sign confidentiality.

These policies could also enable the clinics to target diabetics or renal patients and send specific information such as a foot clinic without getting in trouble for violating patient confidentiality.

How does Health Insurance Portability and Accountability Act (HIPPA) affect the meaningful use of EHR? How will I/T/U clinics electronically exchange patient information?



Using EHR to Improve Individual and Population Health

These are all policy related questions. The IHS, the Tribes, and the urban clinics will need to write policies that are compliant with HIPPA. The idea of improving the prevention efforts and the care for chronic disease is extraordinary. Putting this new technology to use will greatly enhance the medical professional's access to the community and individual well-being. The I/T/ U will only need to work hard to come up with satisfactory policies.

Next Steps

- Pilot site identified—Tuscon Area
- Hopefully by December 2010

Conclusion: Electronic Communication with the patient is coming.