

# Patient Engagement and Health IT



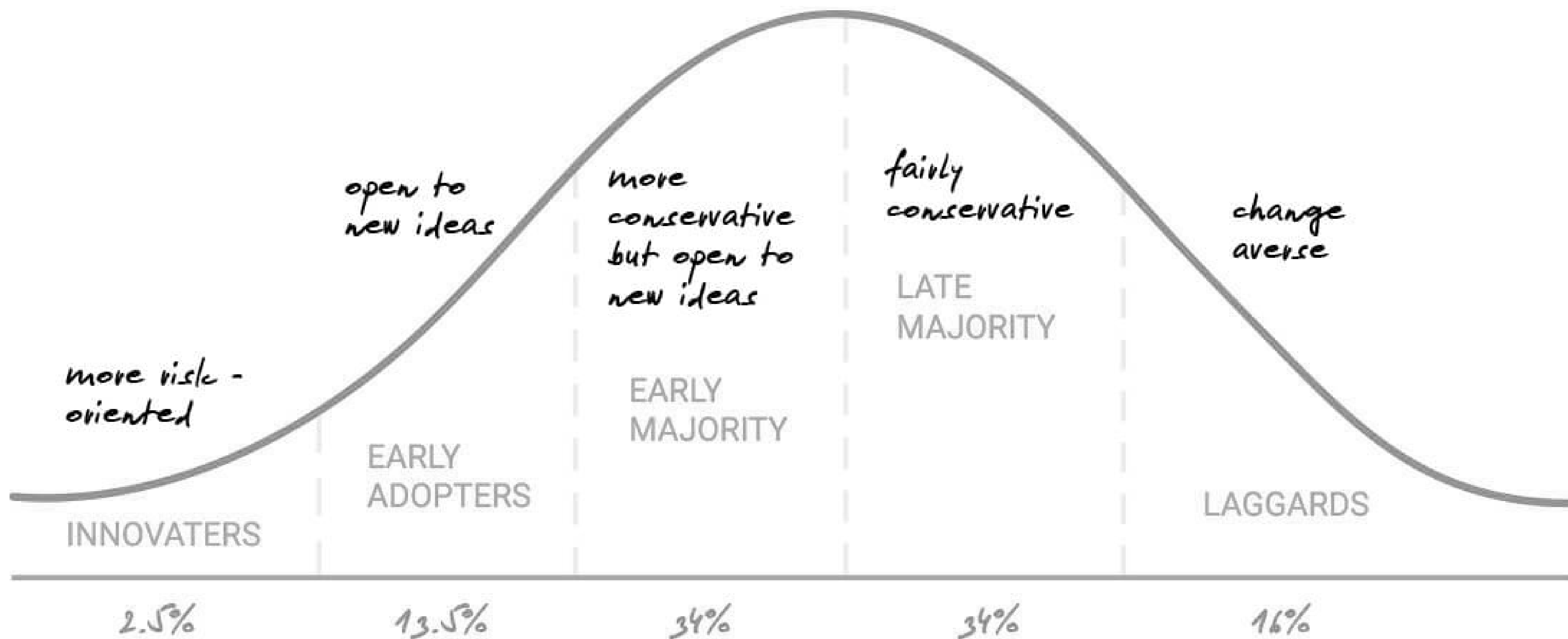
CAPT Christopher Lamer, PharmD, MHS, BCPS, CDE

# Patient Engagement

- “A concept that combines a patient's knowledge, skills, ability and willingness to manage his own health and care with interventions designed to increase activation and promote positive patient behavior”

# Adult Learning Theory

- Are self-directed
- Encourage collaboration
- Utilize personal knowledge and life experiences
- Slower learning but more integrative knowledge
- Less open-minded, resistant to change
- Highlight practicality
- Are goal oriented
- Are relevancy oriented



## TECHNOLOGY ADOPTION LIFE CYCLE

- 4.7 billion: daily Google searches
- 1 in 20 Google searches is for health-related information
- 80 percent of Internet users seek online health information
- 77 percent of patients used a search prior to booking an appointment
- 66 percent of Internet users look online for information about a specific disease or medical problem
- 44 percent of Internet users look online for information about doctors or other health professionals

# Digital Divide



More Information

Greater Access

Awareness

More Control

Easier

Learning Curve

Cost

Security and Privacy



# Patient Engagement Initiatives:

- Social networks, used by 44 percent of respondents.
- Patient portals, used by 79 percent of respondents at scale or on a pilot basis;
- Secure email, used by 68 percent of respondents;
- Online/mobile scheduling (including reminders), used by 49 percent of respondents;
- Patient-generated data, such as within an EHR, used by 47 percent of respondents

# Social Media



Indian Health Service Health Professions Recruitment

@IndianHealthServiceHealthProfessionsRecruitment

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Our Mission: To promote the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level

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Where will your health care be?  
00:38 · 1.4K Views

Medical & Health in Rockville, Maryland

5.0 ★★★★★

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The Indian Health Service (IHS), an agency within the US Department of Health and Human Services (HHS), is an innovative... See more

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# Patient Portals



Indian Health Service

Personal Health Record



## What is the Personal Health Record?

The Indian Health Service Personal Health Record (PHR) can help you access your health information. You can track medications and lab results, contact your health care provider, and much more - all from the privacy of your personal computer and mobile device.

## Who can use the Personal Health Record?

Any patient within the Indian Health System can register to use the PHR. As part of the registration process, patients must verify their identity at an Indian Health Service, tribal, or urban health care facility.



## When should I use the Personal Health Record?

The PHR is a tool that provides you with timely access to your health information. It is not a substitute for meeting with your health provider. If you are experiencing a medical emergency, call 911 or go immediately to the closest emergency room.

Register to use PHR

## PHR Login

\* Indicates Required Field.

Username\*

Password\*

Login

[Forgot Username or Password?](#)

## PHR Maintenance

The PHR is updated on Thursdays between 10 pm and 11 pm Eastern Time (9pm-10pm CT, 8pm-9pm MT, 7pm-8pm PT). You may not be able to log into your PHR during this time. We apologize for any problem this may cause. Thank you for your patience. If you have questions, please contact your healthcare facility.

# Verify Information



MARY GRANT

My health information from: 2013 DEMO HOSPITAL: Last Updated: June 20, 2014, 13:26:10, CST

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The information on this page is from your IHS medical record at this facility. You can update this information by completing the Request for Correction/Amendment of Protected Health Information (PHI) Form. Note that any changes you request will only be made to your record at this facility and not to any other facilities where you may receive medical care.

## About Me

Birthday: March 21, 1987  
Age: 27

Race: American Indian or Alaska Native, Asian, White  
Ethnicity: Not Hispanic or Latino  
Preferred Language: English  
Gender: Female

## Contact Information

Address: 456 ANYWHERE AVE  
PORTLAND, OR 97005

Preferred Email: GRANT.MARY@FREEEMAIL.NET  
Preferred Phone: Tel: 1-555-555-1000  
Preferred Method of Contact: e-mail

## Smoking Status

Never smoker (Never Smoked)

# Be Informed



MARY GRANT

My health information from: 2013 DEMO HOSPITAL: Last Updated: March 25, 2015, 11:47:43, CST

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## Appointments List

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## Upcoming Tests

Date	Test
6/8/2015	URINALYSIS- OIT
6/8/2015	LIPID PANEL - OIT [24331-1]
6/8/2015	HA1c w/eAG
6/8/2015	GLUCOSE [2339-0]
5/29/2015	CBC W/AUTO DIFF- OIT [57021-8]

## Upcoming Appointments

Visit Date and Time	Specialist	Location
6/15/2015	SEVEN,HENRY L MD	90001 1ST AVE, WASHINGTON, DISTRICT OF COLUMBIA 20000
4/2/2015	SEVEN,HENRY L MD	90001 1ST AVE, WASHINGTON, DISTRICT OF COLUMBIA 20000

## Past and Future Referrals

Date Time	Specialist	Location and Reason for Referral
4/2/2015	2013 DEMO CLINIC	201 Demo Ave NE, Albuquerque, NM 87109, (505)555-5555; Depressive disorder
12/5/2014	JONES,BARNEY	3522 N. 3RD AVENUE, PHOENIX, AZ 85013, 602-266-8463; Hypothyroidism
5/30/2014	ALBUQUERQUE HOSPITAL	801 Vassar Drive NE, Albuquerque, NM 87106, (505)248-4065; Cardiac chest pain

# Manage Medications

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## Medications

The information below contains a list of the medications that you are currently taking. Click on the Medication History tab to view a historical record. Use the My Messages page to send a secure message to request a Medication refill

Active Medications

Medication History

Click once on a medication from the list below for instructions about how to use that medication (if available). Click again to make the drop box disappear, or click on the more info link for more information, such as possible side effects.

Medication Name	Prescription Number	Dose	Refills	Status	More Information
SODIUM BICARBONATE 650MG TAB	7374	650 (mg)	0 refills remaining	active	More Info

TAKE ONE (1) TABLET BY MOUTH FOUR TIMES A DAY  
Filled On:  
Good Until:

FINASTERIDE 5MG TAB	7371	10 (mg)	0 refills remaining	active	More Info
FLUOXETINE 20MG CAP*	990	40 (mg)	3 refills remaining	active	More Info

# Learn about Health Problems

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## My Health Issues

Health issues that have been identified during your visit(s) to this facility are listed below.

Click here to get additional information about the health issues displayed

For more information about your health issues, click on an issue in the list below and then click on the more info link.

Issue	Date	More Info
Sinus headache   Sinus Headache	06/19/2014	More Info
Cardiac chest pain	05/14/2014	More Info
Goals: Walk 15 minutes a day and lose 15 pounds. Plan of Care Change diet, quit drinking alchol, exercise daily, and lose weight.		
Diabetic retinopathy   Diabetic retinopathy	04/29/2014	More Info
Neoplasm of accessory sinus	10/02/2012	More Info
Left maxillary sinus mass	10/02/2012	More Info
Sinusitis	09/20/2012	More Info



# Trusted Sources of Information

 U.S. National Library of Medicine

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## Glyburide

**Glycolide**  
pronounced as (glye' byoor ide)

Why is this medication prescribed?	What side effects should I watch for?
How should this medicine be used?	What should I do if I miss a dose?
Other uses for this medicine	In case of emergency
What special precautions should I follow?	What other information should I know?
What special dietary instructions should I follow?	Brand names
What should I do if I forget a dose?	

### Why is this medication prescribed?

<p>Glyburide is used along with diet and exercise, and sometimes with other medications, to help the body does not use insulin normally and, therefore, cannot control the amount of sugar in the blood. Medications called sulfonylureas. Glyburide lowers blood sugar by causing the pancreas to produce more insulin (needed to break down sugar in the body) and helping the body use insulin efficiently. This is not the case in people whose bodies produce insulin naturally. Glyburide is not used to treat type 1 diabetes because it does not produce insulin and, therefore, cannot control the amount of sugar in the blood) or diabetes mellitus (which occurs if high blood sugar is not treated).</p>	<ul style="list-style-type: none"> <li>▪ Symptoms</li> <li>▪ Diagnosis and Tests</li> <li>▪ Prevention and Risk Factors</li> <li>▪ Treatments and Therapies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Genetics</li> </ul>
	<p><b>Research</b></p> <ul style="list-style-type: none"> <li>▪ Statistics and Research</li> <li>▪ Clinical Trials</li> </ul>	<p><b>Resources</b></p> <ul style="list-style-type: none"> <li>▪ Find an Expert</li> </ul>

Over time, people who have diabetes and high blood sugar can develop serious or life-threatening disease, stroke, kidney problems, nerve damage, and eye problems. Taking medication(s exercise, quitting smoking), and regularly checking your blood sugar may help to manage therapy may also decrease your chances of having a heart attack, stroke, or other diabetes failure, nerve damage (numb, cold legs or feet; decreased sexual ability in men and women of vision, or gum disease. Your doctor and other healthcare providers will talk to you about

**Summary**

Diabetes means your blood glucose, or blood sugar, levels are too high. With type 2 diabetes the more common type, your body does not make or use insulin well. Insulin is a hormone

• Patient Handouts

### How should this medicine be used?

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## Diabetes Type 2

Also called: Type 2 Diabetes

On this page		
<b>Basics</b> <ul style="list-style-type: none"><li>▪ Summary</li><li>▪ Start Here</li><li>▪ Latest News</li><li>▪ Symptoms</li><li>▪ Diagnosis and Tests</li><li>▪ Prevention and Risk Factors</li><li>▪ Treatments and Therapies</li></ul>	<b>Learn More</b> <ul style="list-style-type: none"><li>▪ Living With</li><li>▪ Related Issues</li><li>▪ Specifics</li><li>▪ Genetics</li></ul>	<b>See, Play and Learn</b> <ul style="list-style-type: none"><li>▪ Health Check Tools</li><li>▪ Videos and Tutorials</li></ul>
<b>Research</b> <ul style="list-style-type: none"><li>▪ Statistics and Research</li><li>▪ Clinical Trials</li><li>▪ Journal Articles</li></ul>	<b>Resources</b> <ul style="list-style-type: none"><li>▪ Find an Expert</li></ul>	<b>For You</b> <ul style="list-style-type: none"><li>▪ Men</li><li>▪ Women</li><li>▪ Seniors</li><li>▪ Patient Handouts</li></ul>

## Summary

Diabetes means your blood glucose, or blood sugar, levels are too high. With type 2 diabetes, the more common type, your body does not make or use insulin well. Insulin is a hormone that helps glucose get into your cells to give them energy. Without insulin, too much glucose stays in your blood. Over time, high blood glucose can lead to serious problems with your heart, eyes, kidneys, nerves, and gums and teeth.

You have a higher risk of type 2 diabetes if you are older, obese, have a family history of diabetes, or do not exercise. Having prediabetes also increases your risk. Prediabetes means that your blood sugar is higher than normal but not high enough to be called diabetes.

The symptoms of type 2 diabetes appear slowly. Some people do not notice symptoms at all.

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## Creatinine blood test

The creatinine blood test measures the level of creatinine in the blood. This test is done to see how well your kidneys are working.

Creatinine can also be measured with a urine test.

### How the Test is Performed

A blood sample is needed.

## How to Prepare for the Test

The health care provider may tell you to temporarily stop taking certain medicines that can affect the test. These medicines include:

- Cimetidine, famotidine, and ranitidine
- Certain antibiotics, such as trimethoprim

Tell your provider about all the medicines you take.

### How the Test will Feel

When the needle is inserted to draw blood, some people feel moderate pain. Others feel only a prick or stinging sensation. Afterward, there may be some throbbing or slight bruising. This soon goes away.

### Why the Test is Performed

Creatinine is a chemical waste product of creatine. Creatine is a chemical made by the body and is used to supply energy mainly to muscles.

This test is done to see how well your kidneys work. Creatinine is removed from the body

Related MedlinePlus Health Topics

Creatinine

Images

Acute nephritic syndrome

Acute tubular necrosis

Alport syndrome

Atheroembolic renal disease

Diabetes and kidney disease

Digitalis toxicity


Eclampsia

Ectopic Cushing syndrome

Glomerulonephritis

Goodpasture syndrome

# Access Info when You Need It



CHRISTOPHER LAMER

My health information from: CIHA HOSPITAL: Last Updated: May 7, 2016, 21:41:17 -0400

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Immunization History

The vaccinations you have received at this facility are listed below.

Immunization Record	Date and Time	Status
Tdap	06/25/2010, 12:04 -0400	Completed
Novel influenza-H1N1-09	11/24/2009, 13:36, EST	Completed
INFLUENZA, SPLIT [TIVhx] (INCL PURIFIED)	08/27/2009, 11:13 -0400	Completed
INFLUENZA, SPLIT [TIVhx] (INCL PURIFIED)	10/28/2008, 11:23 -0400	Completed
HEP A, ADULT	03/28/2005, 12 -0400	Completed
IPV	09/14/2004, 12 -0400	Completed
HEP A, ADULT	09/14/2004, 12 -0400	Completed
POLIO, NOS	09/14/2004, 12 -0400	Completed
TD (ADULT)	03/31/2000, 09 -0400	Completed
HEP B,ADULT	02/03/1998, 12, EST	Completed
HEP B,ADULT	08/27/1997, 12 -0400	Completed
HEP B,ADULT	07/21/1997, 12 -0400	Completed
MMR	05/17/1983, 12 -0400	Completed
POLIO, NOS	04/01/1976, 12 -0400	Completed
POLIO, NOS	11/01/1975, 12 -0400	Completed
POLIO, NOS	01/14/1972, 12, EST	Completed
MMR	01/14/1972, 12, EST	Completed
POLIO, NOS	07/09/1971, 12 -0400	Completed
POLIO, NOS	05/28/1971, 12 -0400	Completed
POLIO, NOS	04/23/1971, 12 -0400	Completed
INFLUENZA [TIV], SEASONAL, INJ		Due

# Notes

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## Hospital Admissions

Admission Date	Discharge Date	Admission Diagnosis	Discharge Diagnosis
05/14/2014	05/16/2014	CHEST PAIN NOS	CHEST PAIN NOS

### Discharge Instructions:

You were admitted to Local Community Hospital on 05/14/2014 with chest pain and a diagnosis of Heart Disease. You were discharged from Local Community Hospital on 05/16/2014 with instructions to follow up with Dr. Rodriguez. Should you have any questions prior to discharge, please contact a member of your healthcare team. If you have left the hospital and have any questions, please contact your primary care physician.

#### Instructions:

1. No heavy lifting, straining, or nose blowing
2. If you experience any of the following symptoms, call your primary care physician or return to the Emergency Room:

- Chest pain

- Shortness of breath

- Dizziness or light-headedness

- Intractable nausea or vomiting

- High fever

- Uncontrollable bleeding

- Pain or redness at the site of any previous intravenous catheter

- Any other unusual symptoms

3. Schedule a follow up appointment with your primary care physician in one week



# Blue Button

CHRISTOPHER LAMER

My health information from: CIHA HOSPITAL: Last Updated: May 7, 2016, 21:41:17 -0400

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You can download your information in a file, which is easy to read and print. It will look like the information in the box below. You can view and print it before saving it to your computer. Click the download button to save a copy to your computer. Protect your health information. Download using a computer that you trust. Other people may be able to read your downloaded file. Save it in a safe place. If you are using a public or shared computer, you should delete the file when you are finished.

-----CIHA HOSPITAL Continuity of Care Document from CIHA HOSPITAL-----

\*\*\*\*\*CONFIDENTIAL\*\*\*\*\*

A Blue Button Report (produced by Indian Health Service CCD Generator)

Saturday, May 7, 2016 at 9:41:17 pm

This Blue Button(R) summary is a copy of information which is available in your CIHA HOSPITAL Indian Health Service CCD Generator Personal Health Record (PHR). Your summary contains information that you entered and may include copies of information from other sources, such as your doctor's or your hospital's electronic health record, independent laboratory results, pharmacy records or claims which have been paid by your health plan. This

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Medical image study

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Other ways to add information to HealthVault

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# Effective Communication

- The Joint Commission acknowledges communication breakdowns, between care providers and between providers and their patients is the crux of nearly 3,000 events reported to the Joint Commission and the high-ranking as an underlying medical malpractice cause. Effective communication is the foundation of patient safety and communication must be improved to clarify patient's literacy levels and their personal expectations.

## Good Questions for Your Good Health

# Ask Me 3™

Every time you talk with your doctor, nurse, or pharmacist, ask these questions

1

What is my main problem?

2

What do I need to do?

3

Why is it important for me to do this?

*The more you know about your health, the better*



Ask Me 3™ is an educational program provided by the  
Partnership for  
Clear Health Communication  
at the National Patient Safety Foundation™




[www.npsf.org/askme3](http://www.npsf.org/askme3)

- What is my main problem?
- What do I need to do?
- Why is it important for me to do this?

# Promote Health Communication



# Secure Messaging (DIRECT)




**MARY GRANT**  
My health information from: 2013 DEMO HOSPITAL: Last Updated: June 20, 2014, 13:26:10, CST


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You can send an email message to your health care team. Your email message will be delivered to [demo.lisa@direct.ihs.gov](mailto:demo.lisa@direct.ihs.gov). [demo.lisa@direct.ihs.gov](mailto:demo.lisa@direct.ihs.gov) may share your message with your health care team.  
This e-mail should only be used for health information. Messages may be added to your medical record.  
Do not use e-mail for emergencies. If you are having an emergency, call 911

**Secure Messages**  
Send a secure email message to your health care team

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
☐

John Williams

Other

Thu, 10 Jul 2014 15:29

183K




☐

Ravi Nistala

Message from Patient

Tue, 01 Jul 2014 16:10

1K




☐

Dr. Martin Green

An Important Message from your Healthcar...

Wed, 21 May 2014 11:14

1012B




☐

admin admin

Message from Patient

Fri, 16 May 2014 09:02

1K




☐

admin admin

Message from Patient

Fri, 16 May 2014 09:02

1K




☐

Dr. Martin Green

Other

Thu, 08 May 2014 08:55

999B




☐


Dr. Martin Green


No subject


Thu, 08 May 2014 08:54


997B




 Refresh



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# Telehealth Visits

- 52% of Kaiser appointments were conducted online



# Access to Services

- Appointment scheduling
- Medication refill requests



# Remote Monitoring





# Health IT

