

# Demonstration of the eHR Viewer

Unveiling the eHR Seminar

9<sup>th</sup> Mar 2016

# Clinical Workflow

- During the course of clinical work, a lot of data is generated
- Need to collect this data, and allow users to view it as historical data

# Clinical Workflow II

- Ordering Tests (Laboratory / Radiology / etc)
- Test results
- Diagnoses
- Prescribing medication
- Dispensing medication
- Procedure records
- Important things about the patient (identity, allergy, etc)
- Clinical summaries (response to treatment, etc)

# Making Stored Data Accessible

## Data Compliance Levels

- Level I: Unstructured
- Level II: Structured, local terminology table
- Level III: Structured, internationally recognized terminology table

# International Taxonomy of Clinical Systems

- eMR: systems for entering data
  - (“CMS”) Clinical Management System
- ePR: systems for reviewing data
- eHR: centralized platform for reviewing cross-enterprise data

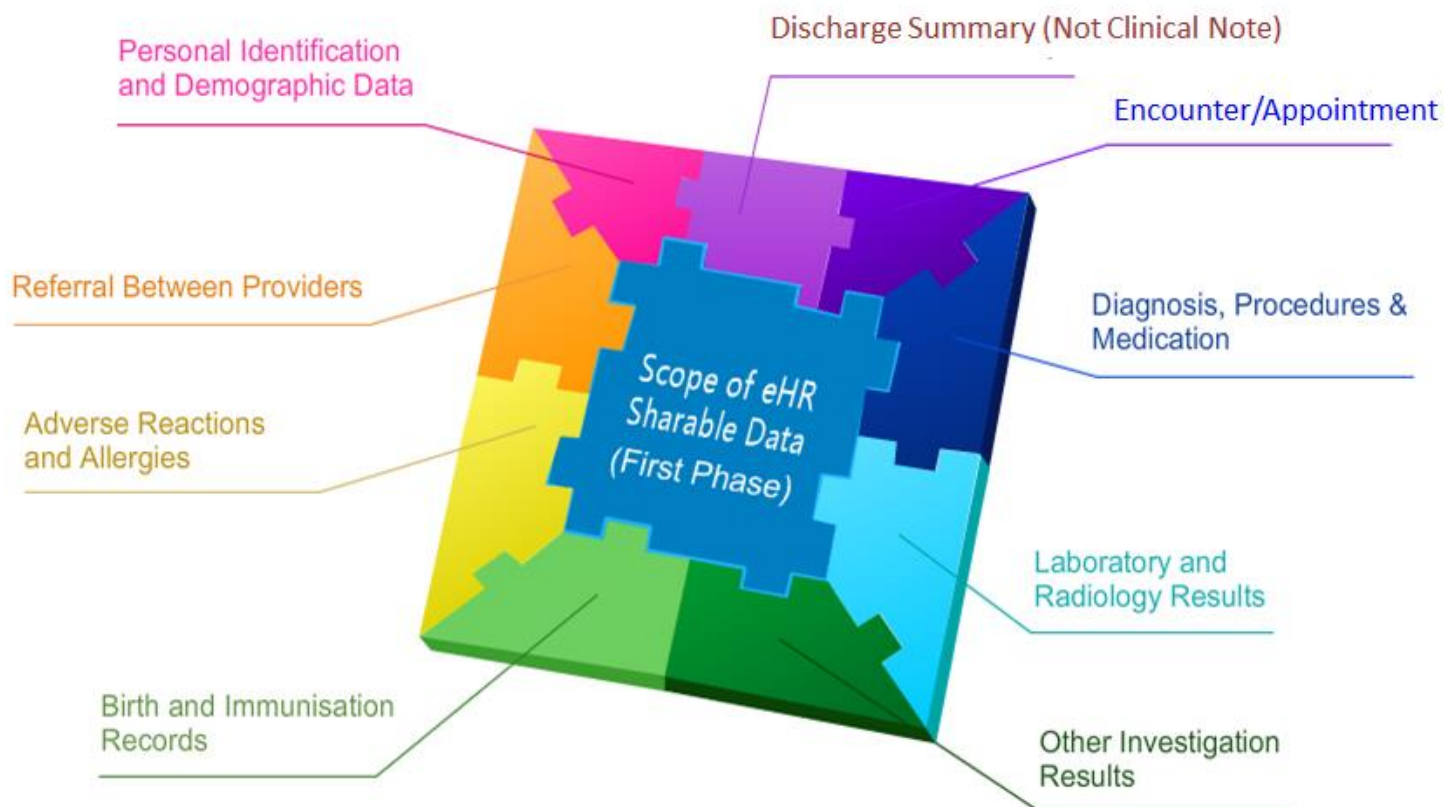


In Hong Kong's eHR Sharing System  
(eHRSS),

the front-end GUI

***“eHR Viewer”***

# Scope of eHRSS Sharable Data



# eHR Logon page



User Name  
用戶名稱

Enter User name



## Important Reminder

1. All eHR healthcare recipient information is strictly confidential
2. Use only for authorised purposes
3. All access to eHR Viewer is logged
4. Please logout immediately after use
5. Please ensure you have verified the content before you sign the computer printouts
6. Please change your password on a regular basis

## 重要提示

1. 病人資料必須保密
2. 只允許授權的操作
3. 所有對醫健通檢視系統的操作均會被記錄
4. 使用網站服務後，請立即登出系統
5. 簽署文件前，請先細心核對內容
6. 請定期更新用戶密碼





# Enter password & token passcode



The image shows a login interface for the '醫健通 ehealth' system. On the left is the logo with the Chinese characters '醫健通' and 'ehealth' in blue, and '香港特別行政區政府 HKSAR GOVT' below it. On the right, there are two input fields: 'Password' and 'Token Passcode'. The 'Token Passcode' field has a green arrow button to its right. The background features a blurred image of a stethoscope and a colorful city skyline at the bottom.

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Password

Token Passcode  

# eHR landing page

The screenshot displays the eHR landing page interface. At the top, a navigation bar includes a home icon, the '醫健通 ehealth' logo, and tabs for 'Clinical', 'Administration', 'Emergency Access', 'Standards', and 'Information'. The user is logged in as 'UPPPNURSE011' with a 'Logout' link. The main content area is divided into two columns. The left column features 'Quick Links - Clinical' with a link to 'eHR Viewer', and 'Quick Links - Administration' with links for 'User Account' and 'Update Own Account'. The right column contains sections for 'Logon History' (showing a successful login on 05-Oct-2015), 'System News' (including a 'Welcome to eHRSS' message), 'User Documents' (with a link for 'Terms of Use for HKCTT'), 'Release Note' (with a link for 'Release Note of HKCTT'), and 'Manual & User Guide' (with a link for 'User Guide for eHR Viewer'). An orange callout box with the text 'Click to open eHR Viewer' points to the 'eHR Viewer' link. A large, diagonal 'SAMPLE' watermark is overlaid across the center of the page.

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UPPPNURSE011 UPPPNURSE011 (Logout)

**Quick Links - Clinical**

**Clinical**

- [eHR Viewer](#)

**Quick Links - Administration**

**Administration**

- [User Account](#)
- [Update Own Account](#)

**Logon History**

Last logon was **successful** on 05-Oct-2015 15:51:09

**System News**

**Maintenance**

- 03-Nov-2014 Welcome to eHRSS

**User Documents**

**Notice to Users**

- [Terms of Use for HKCTT](#)

**Release Note**

- [Release Note of HKCTT](#)

**Manual & User Guide**

- [User Guide for eHR Viewer](#)

**SAMPLE**

Click to open eHR Viewer

# Select patient

Please select patient

醫健通 health

All Local Non-Local Help

Problem / Diagnosis Details

Date Description

Allergy & Adverse Drug Reaction Details

Allergen Allergy Information

Laboratory Details

Date

Encounter Details

Start Date Specialty Institution

Medication

ADR Information

**Patient Selection Panel**

Fill in **ONE** of the following items

☒ ID Doc Type HKID Card

ID Doc No. ( )

☐ eHR No.

☐ Smart ID Encounter record will be created for eHR patient

Submit Cancel

SAMPLE

# Summary page

**Patient's particular**

陳大文 CHAN, TAI MAN  
HKIC No. : Q000511(4)    DOB : 28-Feb-1960    Age : 55 years    Sex : M    Details ▶

Allergy & ADR    Select Patient    Close Record

醫健通 ehealth

All Local Non-Local    All/Local/Non-local filter    Allergy & Adverse Drug Reaction    Details ▶

5 domains shown in Summary page

Quick    Allow user to have a quick review of patient's records

**Navigation Tree**

Simple filtering of patient's record  
Only shows what patient has

- ▼ Clinical Note & Summary
  - Clinical Note & Summary
  - Birth Record
- ▶ Encounter / Appointment
- ▼ Problem & Procedure
  - Problem / Diagnosis
  - Procedure
- ▼ Medication
  - Prescribing History
  - Dispensing History
- ▼ Laboratory Record
  - Chemical Pathology
  - Microbiology & Virology
  - Toxicology
- ▼ Radiology Record
  - General Radiology
  - Ultrasonography
  - Computed Tomography
- ▶ Immunisation Record

Encounter / Appointment    Details ▶

Start Date	Specialty	Referral
19-Jun-2015	Medicine / Internal medicine	PWH
15-Jan-2015	Medicine / Internal medicine	PWH
28-Oct-2014	Medicine / Internal medicine	PWH
14-Oct-2014	Medicine / Internal medicine	PWH
01-Oct-2014	General Surgery	PWH
20-Jun-2014	Medicine / Internal medicine	PWH

>>More

Medication    Details ▶





Date	Medication
19-Jun-2015	ETOPROLOL
	ZESTRIC
	GLICLAZIDE
	METFORMIN HCL

>>More

Click [Details] or >>More to go to Detail page of the selected domain

# Allergy & ADR Record

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▼ Clinical Note & Encounter / Ap

▼ Problem & Procedure

▼ Medication

▼ Laboratory Record

▼ Radiology Record

Allergy & ADR

Patient's all Allergy and ADR information is displayed. Default View

Allergen	Allergy Information	Date	Institution
▼ TETRACYCLINE			
TETRACYCLINE	Suspected, Rash	18-Jan-2012	PWH
TETRACYCLINE	Certain, Eczema	11-Jun-2011	QEH
ASPIRIN	Certain, Ra	10-Mar-2010	PWH

ADR Causative Agent	ADR Information	Date	Institution
HYDROCHLORIDE	Mild, Hypokalemia	20-Jun-2014	PWH

OK

Return



# Problem / Diagnosis

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All Local Non-Local Help

Home Calendar Dx Medication Laboratory Record

- ▼ Clinical Note & Summary
  - Clinical Note & Summary
- ▶ Encounter / Appointment
- ▼ Problem & Procedure
  - Problem / Diagnosis**
  - Procedure
- ▼ Medication
  - Prescribing History
  - Dispensing History
- ▼ Laboratory Record


### Problem / Diagnosis

Default View ▼


Date	Description	Institution
19-Jun-2015	Diabetes mellitus	PWH
19-Jun-2015	Hypertension	PWH
01-Oct-2014	Appendicitis	PWH
23-Mar-2009	Acute gastritis	QEH
07-Jun-2008	Bronchitis	QEH

SAMPLE

Date	Description	Institution
19-Jun-2015	Diabetes mellitus	PWH
19-Jun-2015	Hypertension	PWH
01-Oct-2014	Appendicitis	PWH
23-Mar-2009	Acute gastritis	QEH
07-Jun-2008	Bronchitis	QEH










# Problem / Diagnosis



All Local Non-Local

Help



▼ Clinical Note & Summary

Clinical Note & Summary

► Encounter / Appointment

▼ Problem & Procedure

Problem / Diagnosis

Procedure

▼ Medication

Prescribing History

Dispensing History

▼ Laboratory Record

Chemical Pathology

Microbiology & Virology

Toxicology

▼ Radiology Record

General Radiology

Ultrasonography

Computed Tomography

Problem / Diagnosis Details

Return

Date	Diagnosis Description	Institution
Diabetes mellitus		
19-Jun-2015	Diabetes mellitus	PWH
15-Jan-2015	Diabetes mellitus	PWH
20-Jun-2014	Diabetes mellitus	PWH
16-Jan-2014	Diabetes mellitus	PWH
21-Jun-2013	Diabetes mellitus	PWH
17-Jan-2013	Diabetes mellitus	PWH
22-Jun-2012	Diabetes mellitus	PWH
18-Jan-2012	Diabetes mellitus	PWH

# Procedure

陳大文 CHAN, TAI MAN  
HKIC No. : Q000511(4) DOB : 28-Feb-1960 Age : 55 years Sex : M Details ▶

Allergy & ADR Select Patient Close Record

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All Local Non-Local Help

▼ Clinical Note & Summary  
Clinical Note & Summary  
▶ Encounter / Appointment  
▼ Problem & Procedure  
Problem / Diagnosis  
Procedure  
▼ Medication

Procedure


Default View ▼









Date	Description	Institution
01-Oct-2014	Laparoscopic appendicectomy	PWH
23-Mar-2009	Oesophagogastroduodenoscopy with biopsy	QEH
07-Jun-2008	Bronchoscopy	QEH

Date	Description	Institution
01-Oct-2014	Laparoscopic appendicectomy	PWH
23-Mar-2009	Oesophagogastroduodenoscopy with biopsy	QEH
07-Jun-2008	Bronchoscopy	QEH

Ultrasonography  
Computed Tomography

# Encounter / Appointment


All Local Non-Local
Help

- Clinical Note & Summary
  - Clinical Note & Summary
- Encounter / Appointment
- Problem & Procedure
  - Problem / Diagnosis
  - Procedure
- Medication
  - Prescribing History
  - Dispensing History
- Laboratory Record
  - Chemical Pathology
  - Microbiology & Virology
  - Toxicology
- Radiology Record
  - General Radiology
  - Ultrasonography
  - Computed Tomography

## Encounter / Appointment

Default View

Start Date	End Date	Specialty	Institution	Type	Status
19-Jun-2015		Internal Medicine	PWH	Outpatient	Attended
15-Jan-2015		Internal Medicine	PWH	Outpatient	Attended
28-Oct-2014		Internal Medicine	PWH	Outpatient	Attended
14-Oct-2014		Internal Medicine	PWH	Outpatient	Attended
07-Oct-2014	07-Oct-2014	General Surgery	PWH	Inpatient	Attended
20-Jun-2014		Internal Medicine	PWH	Outpatient	Attended
16-Jan-2014		Internal Medicine	PWH	Outpatient	Attended
21-Jun-2013		Internal Medicine	PWH	Outpatient	Attended
17-Jan-2013		Internal Medicine	PWH	Outpatient	Attended
22-Jun-2012		Internal Medicine	PWH	Outpatient	Attended
18-Jan-2012		Internal Medicine	PWH	Outpatient	Attended
23-Mar-2009	26-Mar-2009	Internal Medicine	QEH	Inpatient	Attended
01-Jun-2008	10-Jun-2008	Internal Medicine	QEH	Inpatient	Attended

# Discharge Summary


**Clinical Note & Summary**  
Type: All  
Period: All  
Default View  
Discharge Summary  
Other record  
01-Oct-2014 to 07-Oct-2014  
PWH  
Discharge Summary  
Other record  
23-Mar-2009 to 26-Mar-2009  
QEH  
Discharge Summary  
Other record  
07-Jun-2008 to 10-Jun-2008  
QEH







**eHR Document Viewer**  

Prince of Wales Hospital 威爾斯親王醫院		Discharge summary	
Discharge Date: 07-Oct-2014		Admission Date: 01-Oct-2014	
<b>Diagnosis:</b>			
Principal:	<u>Description</u> Appendicitis		
<b>Procedure:</b>			
Principal:	<u>Description</u> Laparoscopic appendectomy	<u>Procedure date</u> 01-Oct-2014	<u>Clinician Name</u> Dr. Chan
<b>Discharge Note:</b> Complained of right lower quadrant pain x 1 day BP/ stable No fever No vomiting no diarrhea GCS 15/15 RUQ T+ G+ R- PR nad  WCC 30 Emergency OT x Lap Append on 1 Oct 2014 <b>Plan of Management:</b> Discharge home on D7 Off stitches 7/7 FU 3/52			



# Laboratory Record


All Local Non-Local
Help


- ▼ Clinical Note & Summary
  - Clinical Note & Summary
- Encounter / Appointment
- ▼ Problem & Procedure
  - Problem / Diagnosis
  - Procedure
- ▼ Medication
  - Prescribing History
  - Dispensing History
- ▼ Laboratory Record
  - Chemical Pathology**
  - Microbiology & Virology
  - Toxicology
- ▼ Radiology Record
  - General Radiology
  - Ultrasonography
  - Computed Tomography







## Laboratory Record

Date View
Document View
Chemical Pathology
Last 2 years
Default View

Date	Profile Description	Institution
19-Jun-2015	CBP	PWH
19-Jun-2015	LFT, RFT, Glucose, Lipid	PWH
15-Jan-2015	CBP	PWH
15-Jan-2015	LFT, RFT, Glucose, Lipid	PWH
28-Oct-2014	CBP	PWH
28-Oct-2014	LFT, RFT, Glucose, Lipid	PWH
14-Oct-2014	CBP	PWH
14-Oct-2014	LFT, RFT, Glucose, Lipid	PWH
01-Oct-2014	CBP	PWH
01-Oct-2014	LFT, RFT, Glucose, Lipid	PWH
20-Jun-2014	CBP	PWH
20-Jun-2014	LFT, RFT, Glucose, Lipid	PWH
16-Jan-2014	CBP	PWH
16-Jan-2014	LFT, RFT, Glucose, Lipid	PWH
21-Jun-2014	CBP	PWH
21-Jun-2014	LFT, RFT, Glucose, Lipid	PWH
17-Jan-2013	CBP	PWH
17-Jan-2013	LFT, RFT, Glucose, Lipid	PWH
22-Jun-2012	CBP	PWH
22-Jun-2012	LFT, RFT, Glucose, Lipid	PWH
18-Jan-2012	CBP	PWH
18-Jan-2012	LFT, RFT, Glucose, Lipid	PWH

# Laboratory Record


All Local Non-Local
Help

- Clinical Note & Summary
  - Clinical Note & Summary
- Encounter / Appointment
- Problem & Procedure
  - Problem / Diagnosis
  - Procedure
- Medication
  - Prescribing History
  - Dispensing History
- Laboratory Record
  - Chemical Pathology
  - Microbiology & Virology
  - Toxicology
- Radiology Record
  - General Radiology
  - Ultrasonography
  - Computed Tomography

## Laboratory Record

Date View
Document View
Chemical Pathology
Period: All
Default View

Date	Profile Description	Institution
19-Jun-2015	CBP	PWH
19-Jun-2015	LFT, RFT, Glucose, Lipid	PWH
15-Jan-2015	CBP	PWH
15-Jan-2015	LFT, RFT, Glucose, Lipid	PWH

## Laboratory Cumulative Result(s)

Cumulative Period: All
Page 1 of 3

Institution	PWH	PWH	PWH	PWH	PWH	PWH
Date	19-Jun-2015 09:15	15-Jan-2015 09:50	28-Oct-2014 10:07	14-Oct-2014 09:44	01-Oct-2014 09:56	20-Jun-2014 09:51
PDF Report						
Haemoglobin, Blood	10.8 L ↓	10.8 L ↓	11.1 L ↓	11.5 L ↓	12.6 L ↓	13.4
Leukocytes, Blood	13.4 H ↑	14.3 H ↑	15.5 H ↑	10.2 H ↑	6.2	5.7
Platelets, Blood	507 H ↑	538 H ↑	542 H ↑	494 H ↑	427 H ↑	341
Erythrocyte mean corpuscular volume (MCV)	89	89.2	91.4	93.1	93.6	91.4
Erythrocyte mean corpuscular haemoglobin (MCH)	27.7	28.9	29.8	30.8	32.2	30.5
Erythrocyte mean corpuscular haemoglobin concentration (MCHC)	31.1 L ↓	32.4	32.6	33	34.4	33.3
Erythrocytes, Blood	3.90 L ↓	3.74 L ↓	3.73 L ↓	3.74 L ↓	3.92 L ↓	4.4
Hematocrit (HCT), Blood	0.347 L ↓	0.334 L ↓	0.340 L ↓	0.349 L ↓	0.367 L ↓	0.402
Erythrocyte distribution width (RDW)	17.5 H ↑	15.7 H ↑	15.1 H ↑	14.1 H ↑	14.3 H ↑	15.9 H ↑

# Laboratory Record

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Home

Documents

▼ Clinical

Clinical

► Encounter

▼ Problem

Problem

Procedure

▼ Medication

Prescription

Dispensation

▼ Laboratory

Che

Micro

Toxicology

▼ Radiology

Genetics

Ultrasound

Com

Laboratory Details

×

Attending Institution

PWH

Requesting Institution

PWH

Performing Institution

PWH

Reference Date

19-Jun-2015 15:15

view

▼

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▼

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▼

Test Name	Content	Reference Range	Comment
HGB	9.5 L g/dL ↓	12.4 - 17.1	
WBC	15.4 H x10 <sup>9</sup> /L ↑	3.9 - 9.2	
PLT	570 H x10 <sup>9</sup> /L ↑	143 - 370	
MCV	87.5 fL	82.0 - 107.0	
MCH	26.9 pg ↓	27.0 - 32.0	
MCHC	30.7 g/dL ↓	32.0 - 35.0	
RBC	3.92 L x10 <sup>12</sup> /L ↓	4.30 - 5.90	
HCT	0.309 L/L ↓	0.400 - 0.510	
RDW	17.8 H ↑	11.0 - 14.0	
MPV	8.8 fL	7.0 - 10.0	
Neutrophil	9.6 H x10 <sup>9</sup> /L ↑	1.7 - 5.8	
% Neutrophil	62.7 %	42.0 - 74.0	

Ok

Hematocrit (HCT), Blood

0.309 L ↓

0.324 L ↓

0.347 L ↓

0.334 L ↓

0.340 L ↓

0.349 L ↓

Erythrocyte distribution width (RDW)

17.8 H ↑

16.6 H ↑


17.5 H ↑

15.7 H ↑

15.1 H ↑








14.1 H ↑

# Radiology Record



All Local Non-Local

Help

Clinical Note & Summary

Encounter / Appointment

Problem & Procedure

Medication

Laboratory Record

**Radiology Record**












General Radiology

Ultrasonography

Computed Tomography

Radiology Record

Date View Document View
Modality: All
Period: All
Default View

Exam Date	Modality		Examination	Performed At
19-Jun-2015	XRAY	 T	Chest	PWH
15-Jan-2015	XRAY	 T	Chest	PWH
28-Oct-2014	US	 T	USG Renal	PWH
14-Oct-2014	US	 T	USG Renal	PWH
01-Oct-2014	US	 T	USG Renal	PWH
20-Jun-2014	US	 T	USG Renal	PWH
16-Jan-2014	XRAY	 T	Chest	PWH
21-Jun-2013	XRAY	 T	Chest	PWH
14-Jun-2013	XRAY	 T	Chest	PWH
22-Jun-2012	XRAY	 T	Chest	PWH
10-Jun-2012	XRAY	 T	Chest	PWH

# Radiology Record

eHR Document Viewer

陳大文 CHAN, TAI MAN

Page 1 of 1

100%

For clinical use only and not for distribution

**Prince of Wales Hospital 威爾斯親王醫院**

**Xray report**

Name: Chan Tai Man Sex: M Date of Birth: 28-Feb-1960

Type of document: HKID Document Number: Q000511(4)

Test Name: Chest Xray Report date: 19 Jan 2015

**Report:**

CXR

CLINICAL DATA: TB contact.


FINDINGS:








Lung fields clear. Cardiac outline normal.

(Above clinical information is automatically retrieved from GCRS.)



# Prescribing & Dispensing History


All Local Non-Local
Help

▼ Clinical Note & Summary

Clinical Note & Summary

► Encounter / Appointment

▼ Problem & Procedure

Problem / Diagnosis

Procedure

▼ Medication

Prescribing History

Dispensing History

▼ Laboratory Record

Chemical Pathology

Microbiology & Virology

Toxicology

▼ Radiology Record

General Radiology

Ultrasonography

Computed Tomography

Prescribing History

Last 2 years ▼

Default View ▼

Date ▼	Medication	Institution ▼
19-Jun-2015	<ul style="list-style-type: none"> <li>BETALOC (METOPROLOL) tablet Oral: 100mg BD for 6 months</li> <li>LISINAPRIL (ZESTRIC) tablet Oral: 40mg daily for 6 months</li> <li>DIAMICRON MR (GLICLAZIDE) modified release tablet Oral: 60mg OM for 6 months</li> <li>GLUCOPHAGE (METFORMIN HCL) tablet Oral: 500mg BD for 6 months</li> </ul>	PWH
15-Jan-2015	<ul style="list-style-type: none"> <li>BETALOC (METOPROLOL) tablet Oral: 100mg BD for 6 months</li> <li>LISINAPRIL (ZESTRIC) tablet Oral: 40mg daily for 6 months</li> <li>DIAMICRON MR (GLICLAZIDE) modified release tablet Oral: 60mg OM for 6 months</li> <li>GLUCOPHAGE (METFORMIN HCL) tablet Oral: 500mg BD for 6 months</li> </ul>	PWH
20-Jun-2014	<ul style="list-style-type: none"> <li>BETALOC (METOPROLOL) tablet Oral: 100mg BD for 6 months</li> <li>LISINAPRIL (ZESTRIC) tablet Oral: 40mg daily for 6 months</li> <li>DIAMICRON MR (GLICLAZIDE) modified release tablet Oral: 60mg OM for 6 months</li> <li>GLUCOPHAGE (METFORMIN HCL) tablet Oral: 500mg BD for 6 months</li> </ul>	PWH



Thank You