

# Using the EHR to Improve Clinical Care

Clinical Decision  
Support Systems and  
Other Tools

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# Objective

1. Discuss the clinical context and framework for HER support tools
2. Review common support tools in the context of clinical needs and workflows
3. Explore at least 2 scenarios related to health informatics, clinical decision support and clinical care

I have no conflicts of interest

## Some Initial Notes

We will use examples from primary care mostly, but these principles and tools apply to other specialties, inpatient, and other care delivery systems as well

We will look at the topic through the lens of an individual provider/clinical team, but also through the lens of the system

We will focus on clinical care, but there is a lot that can be done regarding utilization, efficiency, panel management, etc

The screenshots are from EPIC, however similar types of tools are available in other EHR's

EHRs are constantly evolving, and never perfect (including the tools shown here)

# Problems with EHR

Too many clicks... too many clicks... too many clicks!!!

Too many options for documentation (e.g. smoking, surgical history)

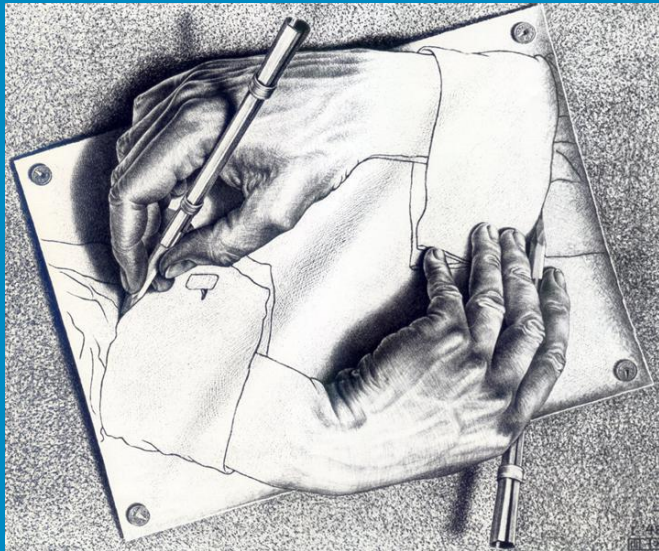
Too many individualizations cause problems

Too much manual input and not enough automation

Inconsistent/variable use from users within a specialty

Inconsistent/variable use from users between specialties and service lines (need system wide stakeholder engagement)

# Are EHR's actually Evil?



Legibility

Standardization

Reminders for due/overdue care

Automation and ease (e.g. standing orders, order sets)

Understanding care provided (data collection, reporting)

Communication and transparency with specialists and patients

Cost-effectiveness (e.g. alternatives)

Safety (e.g. DDI, dosing, abnormal results, SERS)

Utilization and Volume

## Cases for Consideration

A mobile mammogram unit is going to go to 2 Marzes to do screening mammography. You are asked to "support the work."

It is observed that almost all of the children in a specific village are documented as having the same weight. You are asked to "use the EHR to figure it out and fix it."

The Medical Director at your clinic notices that children are not being given the appropriate vaccines at their appointments. You are asked to "use the EHR to figure it out and fix it."

The MoH wants to ensure that physicians are using the most appropriate and cost-effective BP medications. You asked to "use the HER to figure it out and fix it."

The MoH wants to reduce unnecessary antibiotic use (or MDI's) in hospitals and outpatient clinics 

# Healthcare Delivery: Providing Care

To *whom* do we provide care, and *who* provides that care?

*What* care do we provide?

*Where* do we provide that care?

*When* do we provide that care?

*Why* do we provide that care?

*How* do we provide that care\*?

These are extremely important questions because we have to design the EHR to be able to provide many different aspects of care in many different settings, in a safe, effective, and efficient manner



# Who

## By Whom

Doctors, nurses, midwives

Pharmacists, labs, ...

Primary care, Specialists

Hospital care

Emergency Care, including  
ambulances

Radiologists, Lab physicians  
(Analysts, Administrators,  
Finance specialists)

## To Whom

The individual

The community

# What

Counseling and Prevention

Screening

Chronic disease management

Lab testing, Radiology

Procedures and Surgeries

Inpatient care

Emergency Care

Mobile Care

# Where

In...

A health post, a clinic, an emergency room, a hospital

An ambulance

School, mobile unit, patient's home

Person, or by video/televisit

Community center

Lab or radiology center

Pharmacy

# When

Are there guidelines about

- How often that care is provided?
- At what age?
- To what sex?

Is it provided only in specific situations?

- A hospital sepsis protocol does not need to be available to a village nurse
- A pediatric immunization tool does not need to be available to a pathologist

And...

- A cardiologist and a primary care doctor need to be able to easily see information about a patient's heart failure
- The clinical team of a woman presenting for ear pain, who is overdue for breast cancer screening or follow up imaging, should easily see that she is overdue so they can discuss it with her

# Why

Is the care...

A priority, maybe because it is a driver of health outcomes

Common issue or complaint

Dangerous issue or complaint

Quality Measure

# How

Synchronous care (during a visit) – Inreach

Asynchronous care (between visits) - Outreach

- Patient portal, email, SMS, phone calls

Does it require an in person visit? Or a televisit? Or just an order or referral?

In a hospital

In a mobile unit

In an ambulance

# CDS 5 Rights

Getting the right information (the What)

To the right person (the Who)

In the right place (the When)

In the right format (the How)

Through the right channel (the Where)

# EHR Tools

HM Table\*

BPAs\*

Smartsets/Order Sets\*

Smartphrases\*

Problem Lists\*

Reporting Workbench\*

Standing Orders

Patient Lists

Scoring Systems

Patient Navigators

Patient Headers\*

Flowsheets\*

Preference Lists\*

Side Bars\*

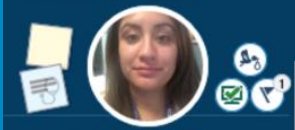
Medication Warnings\*

Print Group Reports

Required Documentation

Smartforms





**Alix M. Yytest**  
 Female, 62 year old, 8/9/1959  
 MRN: 0001167221  
**Preferred Language: Portuguese**  
 Confidential Pt: **Confidential patient**  
 Language of Care: Portuguese [15]  
 ACO Payor: None

Search

COVID Screening Status: Screening Incomplete  
 COVID-19 Vaccine: Unknown

**Simona Kaplan, (T)**  
 PCP - General  
 Primary Cvg: None

**Allergies (4)**  
**Active Therapy Plans**  
 HCP: Yes  
**Code: FULL**

Wt: 56.7 kg (125 lb) > 180 days  
 BP: 112/80 > 1 day

SINCE LAST FAMILY MEDICINE VISIT  
 PHARMACOTHER, Unknown  
 No results

**CARE GAPS**  
 OPTHALMOLOGY EVERY YE...  
 DENTAL EVERY YEAR  
 COVID-19 Vaccine (1)  
 LIPID SCREENING  
 12 more care gaps

**PROBLEM LIST (4)**  
 Complete immobility due to severe physical disability or frailty (HCC)  
 Moderate asthma

Chart Review Health Maintenance Problem List Demographics Medications Review Flowsheets Growth Chart Snapshot BIDMC Link Patient Chart Advisories

**Chart Review**  
 Encounters Labs Imaging Notes Proc Cardio/Pulm/Neuro GI Proc Other Referrals Meds Episodes Letters Media Misc Rpts Snapshot LDAs Peri Op Legal Anesthesia

Historical Scans Text Search Preview Refresh (4:23 AM) Select All Deselect All Review Selected Synopsis Lifetime Flowsheet Route Load Remaining Add to Bookmarks Encounter

Filters  Default filter  Me  Family Medicine  CHA Primary Care - R...  Admissions

To save time, not all records have been loaded and sorted. [Load All Records Now](#) [Hide](#)


When	Type	Visit Type	With	Description	Enc Dept	Acct...	Status	Do...
<b>Recent Visits</b>								
Yesterday	Office Visit		PHARMACOTHER - Ak...		PHXTEL		Open	
05/17/2022	Telephone		Tosher, H	Erroneous encounter-disregard	CMREXT		Sign...	
05/16/2022	Orders Only		FP - Mathewson, P		MFMCFCM		Sign...	
04/25/2022	Orders Only		PT - Donnelly, S	CHA PACE (FKA ELDER SERVICE PLAN ESP) (Primary Dx)	CESPPT		Sign...	
04/19/2022	Dental Encounter		Dental - User, D		CDEN		Open	
04/19/2022	Telephone		FP - Ticotsky, A	Lab Results, Abnormal (COVID)	SASACC		Sign...	
03/09/2022	CCM TELEPHONE ENC		CARE TRANSIT - Trimb...	H2H Telephone Outreach (Medication review)	OCMP CCMC		Open	
03/08/2022	LAB PHLEBOTOMY (C... LAB PHLE...	Lab		Canceled (Error)	SLAB			
03/07/2022	Letter (Out)		CARE TRANSIT - Trimb...	None:	OCMP CCMC		Open	
03/02/2022	Orders Only		Geriatrics - Chao, S	Primary hypertension (Primary Dx)	CHOHC		Sign...	
03/01/2022	RX Office Visit		PHARMACOTHER - Ak...		PHXTEL		Open	
01/11/2022	CCM TELEPHONE ENC		CARE TRANSIT - Trimb...	Complex Care Management; CCM 1st Outreach; CCM 2nd Outreach; CCM 3rd Outreach; CM Assessment; Pre-Visit Work	OCMP CCMC		Open	
01/11/2022	CCM BRIEF NOTE		CARE TRANSIT - Trimb...		OCMP CCMC		Open	
01/11/2022	CCM TELEPHONE ENC		CARE TRANSIT - Trimb...	Complex Care Management (ED Followup)	OCMP CCMC		Open	
12/23/2021	CCM TELEPHONE ENC		CARE TRANSIT - Trimb...		OCMP CCMC		Open	
12/06/2021	Lab Only Visit		FP - D'Agata, C	Vaginal discharge (Primary Dx)	MFMCFCM		Sign...	
<b>6 Months Ago</b>								
11/16/2021	Office Visit		IM - Sundaram, A	Vaginitis and vulvovaginitis	CPCIM		Open	
11/12/2021	Office Visit		FP - Fitch, A	Patient left without being seen (Primary Dx); Vaginal discharge	MFMCFCM		Sign...	
11/12/2021	Office Visit		FP - Early, J	ERRONEOUS ENCOUNTER--DISREGARD (Primary Dx); Vaginal discharge	MFMCFCM		Sign...	
11/12/2021	Office Visit		FP - Cerulli, S	Vaginitis and vulvovaginitis (Primary Dx)	MFMCFCM		Sign...	
11/12/2021	Orders Only		FP - Cerulli, S	Vaginitis and vulvovaginitis (Primary Dx)	MFMCFCM		Sign...	

# Health Maintenance – Adult

Topic	Due Date	Frequency	Date Completed
<b>DM EYE EXAM</b>	<b>Overdue since 11/21/2012</b>	1 year(s)	11/21/2011 (Appt Out CHA) 10/27/2011 (Appt Out CHA)
<b>A1C</b>	<b>Overdue since 1/29/2016</b>	6 month(s)	7/29/2015 (APPT Complet)
<b>DM MICROALBUMIN</b>	<b>Overdue since 7/29/2016</b>	1 year(s)	7/29/2015 (APPT Complet)
<b>COLONOSCOPY</b>	<b>Overdue since 1/19/2017</b>	5 year(s)	1/19/2012 (APPT Complet)
<b>HEALTH CARE PROXY</b>	<b>Overdue since 7/7/2017</b>	5 year(s)	7/7/2012 (DISCUSSED) 6/28/2012 - HEALTH CARE PROXY
<b>AWQ Questionnaire</b>	<b>Overdue since 10/6/2017</b>	1 year(s)	10/6/2016 - HMT AWQ
<b>PAP SMEAR</b>	<b>Overdue since 9/20/2018</b>	5 year(s)	9/20/2013 (Appt Out CHA) 9/20/2013 (DISCUSSED) 5/14/2013 (SEXUALLY INA)
<b>HPV SCREENING</b>	<b>Overdue since 9/20/2018</b>	5 year(s)	9/20/2013 (DISCUSSED) 6/10/2013 (SEXUALLY INA) 6/10/2013 (NOT INDICATE)
<b>TETANUS VACCINE (2 - Tdap)</b>	<b>Overdue since 12/9/2018</b>	<a href="#">Imm Details</a>	12/9/2008 - DTaP-HEP B-IPV AGE 6WKS - <7YRS
<b>MAMMOGRAPHY</b>	Due soon on 7/1/2022	2 year(s)	7/1/2020 (Appt Out CHA) 9/20/2013 (Declined) 1/20/2012 (APPT Complet)
<b>Upcoming</b>			
<b>INFLUENZA VACCINE (Season Ended)</b>	Next due on 9/1/2022	<a href="#">Imm Details</a>	10/6/2015 - Influenza Virus Quad Presv Free Vacc... 5/1/2014 - INFLUENZA VIRUS TRI W/PRESV VAC... 1/12/2013 - INFLUENZA VIRUS
<b>DM COMPLETE FOOT EXAM</b>	Next due on 1/26/2023	1 year(s)	1/26/2022 (APPT Complet)
<b>PNEUMOCOCCAL VACCINE SERIES (65+) (1 - PCV)</b>	Next due on 8/9/2024	<a href="#">Imm Details</a>	
<b>Completed or No Longer Recommended</b>			
<b>HIV SCREENING</b>	Addressed	Once	1/16/2009 (Appt Out CHA)
<b>PHYSICAL EXAM</b>	Completed	Once	1/28/2013 - PR PPPS, INITIAL VISIT 9/6/2012 - PR PPPS, SUBSEQ VISIT
<b>PNEUMOCOCCAL VACCINE SERIES (&lt; 65)</b>	Aged Out	<a href="#">Imm Details</a>	

# HM- Pediatric Example

← →
Chart Review
Health Maintenance
Problem List
Demographics
Medications
Review Flowsheets
Growth Chart
SnapShot
BIDMC Link
Patient Chart Advisories



**Axae Yytest**  
 Female, 13 year old, 1/30/2009  
 MRN: 0002000640  
 Language of Care: Portuguese (Brazilian) [88]  
 ACO Payor: None

COVID Screening Status: Screening Incomplete  
 COVID-19 Vaccine: Unknown

**Bruce Kalow, MD**  
 PCP - General  
 Primary Cvg: None

Allergies: Vancomycin

HCP: No  
 Code: Not on file

BP: 110/70 >1 day (95%/ 92%)  
 Ht: 4' (1.219 m) >30 days (8%)  
 Wt: 27.2 kg (60 lb) >5 days (52%)

SINCE YOUR LAST VISIT  
 FP (2), Pediatrics  
 No results

**CARE GAPS**

- 🔴 HEPATITIS B VACCINE SERIES...
- 🔴 MMR VACCINE SERIES (1 of 2...
- 🔴 HEPATITIS A VACCINE SERIES...
- 🔴 COVID-19 Vaccine (1)

## Health Maintenance

[Address Topic](#)
[Remove Override](#)
[Edit Modifiers](#)
[Report](#)
[Refresh](#)
[Guidelines](#)

Topic	Due Date	Frequency	Date Completed
<b>Current Care Gaps</b>			
<b>HEPATITIS B VACCINE SERIES (2 of 3 - 3-dose primary series)</b>	🔴 Overdue since 3/30/2009	<a href="#">Imm Details</a>	1/30/2009 - Energix B (newborn-10 Yrs)
<b>MMR VACCINE SERIES (1 of 2 - Standard series)</b>	🔴 Overdue - never done	<a href="#">Imm Details</a>	
<b>HEPATITIS A VACCINE SERIES (PEDIATRIC) (1 of 2 - 2-dose seri...</b>	🔴 Overdue - never done	<a href="#">Imm Details</a>	
<b>COVID-19 Vaccine (1)</b>	🔴 Overdue - never done	<a href="#">Imm Details</a>	
<b>IPV VACCINE SERIES (2 of 3 - 4-dose series)</b>	🔴 Overdue since 3/13/2014	<a href="#">Imm Details</a>	2/13/2014 - DTaP-IPV age 4Yrs-<7Yrs
<b>TETANUS VACCINE (2 - Tdap)</b>	🔴 Overdue since 1/30/2016	<a href="#">Imm Details</a>	2/13/2014 - DTaP-IPV age 4Yrs-<7Yrs
<b>HPV VACCINE SERIES (1 - 2-dose series)</b>	🔴 Overdue since 1/30/2020	<a href="#">Imm Details</a>	12/2/2016 - HPV-9
<b>MENINGOCOCCAL (MCV4) VACCINE SERIES (1 - 2-dose series)</b>	🔴 Overdue - never done	<a href="#">Imm Details</a>	
<b>VISION SCREEN</b>	🔴 Overdue - never done	3 year(s)	
<b>HEARING SCREEN</b>	🔴 Overdue - never done	3 year(s)	
<b>HIV SCREENING</b>	🔴 Overdue - never done	Once	
<b>WELL CHILD (13-17 YEARS)</b>	🔴 Overdue - never done	1 year(s)	
<b>Upcoming</b>			
INFLUENZA VACCINE (Season Ended)	Next due on 9/1/2022	<a href="#">Imm Details</a>	2/13/2014 - Flu Vaccine 6-35 Mo
ZOSTER VACCINE (1 of 2)	Next due on 1/30/2059	<a href="#">Imm Details</a>	
<b>Completed or No Longer Recommended</b>			

### Health Maintenance Modifiers

CHA TEST PATIENT

### Status Legend

🔴 Overdue
 🟡 Due Soon
 🟢 Postponed
 📄 Ordered
 ❓ Tentative

# Best Practice Alerts

MRI Brain W & WO Contrast ✓ Accept ✗ Cancel

Priority:

Does the patient have a Pacemaker or other implanted electrical device?

Is the patient allergic to contrast?

To assure imaging is appropriate for clinical symptoms or due to patient restrictions, this order may be changed to reflect patient needs.

Release result to patient via MyCHART

Brief comments to Tech:

Sched Inst: [+ Add Scheduling Instructions](#)

Reason for Exam:

**Common Indications for Exam**

<input type="checkbox"/> Brain metastases suspected	<input type="checkbox"/> Headache, chronic, new features or increased frequency	<input type="checkbox"/> Parkinsonian syndrome
<input type="checkbox"/> Cerebral aneurysm, previously treated	<input type="checkbox"/> Headache, chronic, no new features	<input type="checkbox"/> Seizure, new-onset, no history of trauma
<input type="checkbox"/> Cerebral aneurysm, untreated	<input type="checkbox"/> Headache, new or worsening, neuro deficit (Age 18-49y)	<input type="checkbox"/> Stroke, follow up
<input type="checkbox"/> Dizziness, non-specific	<input type="checkbox"/> Mental status change, unknown cause	<input type="checkbox"/> Transient ischemic attack (TIA)
<input type="checkbox"/> Dizziness, persistent/recurrent, cardiac or vascular cause suspected	<input type="checkbox"/> Neuro deficit, acute, stroke suspected	

**Oncology Indications for Exam**

**Trauma Indications for Exam**

Reason for Exam (Free Text):

Status:

Expected Date:          Approx.

Expires:

Class:

Next Required ✓ Accept ✗ Cancel

BestPractice Advisory - Yytest, Nickname

Imaging is not recommended for classic migraine headaches.

Patients without red flags and a normal neurological examination do not need neuroimaging based upon the current available data. If there is a new neurologic deficit, imaging should be guided by the ACR Appropriateness Criteria topic on ???Cerebrovascular Disease???.

[Full Literature Summary](#)

**Choosing Wisely**

**Remove the following orders?**   MRI Brain W & WO Contrast Score 1

**Acknowledge Reason**

✓ Accept Cancel



# Smartsets/ Order Sets

Advanced view

## SmartSets

Search for new SmartSet

### Suggestions ⤴

<input type="checkbox"/> *Quick Close Care Gaps	<input type="checkbox"/> Well Adolescent (12 Year)
<input type="checkbox"/> ABDOMINAL-PEDI	<input type="checkbox"/> Well Adolescent (13 Year)
<input type="checkbox"/> ADDICTIONS VISIT	<input type="checkbox"/> Well Adolescent (14 Year)
<input type="checkbox"/> ADHD PEDI	<input type="checkbox"/> Well Adolescent (15 Year)
<input type="checkbox"/> Diabetes - Providers	<input type="checkbox"/> Well Adolescent (16 Year)
<input type="checkbox"/> Diabetes Supplies	<input type="checkbox"/> Well Adolescent (17 Year)
<input type="checkbox"/> ENDOMETRIAL BIOPSY	<input type="checkbox"/> WELL ADOLESCENT 18 YEARS OLD
<input type="checkbox"/> ERRONEOUS OFFICE VISIT ENCOUNTER	<input type="checkbox"/> WELL ADOLESCENT 19 YEARS AND OLDER
<input type="checkbox"/> ERRONEOUS TELEPHONE ENCOUNTER	<input type="checkbox"/> Well Child 1 month
<input type="checkbox"/> ETONOGESTREL IMPLANT - NEXPLANON	<input type="checkbox"/> Well Child 12 months
<input type="checkbox"/> FIRST TRIMESTER BLEEDING	<input type="checkbox"/> Well Child 15 Months
<input type="checkbox"/> FLU AND PNEUMO VACCINES	<input type="checkbox"/> Well Child 18 Months
<input type="checkbox"/> GYN ANNUAL EXAM	<input type="checkbox"/> Well Child 2 month
<input type="checkbox"/> Intrauterine Device Procedures	<input type="checkbox"/> Well Child 2 year
<input type="checkbox"/> LEFT WITHOUT BEING SEEN	<input type="checkbox"/> Well Child 3 Year
<input type="checkbox"/> LUPRON DEPOT - ONGOING TREATMENT	<input type="checkbox"/> Well Child 4 Months
<input type="checkbox"/> LUPRON DEPOT - 3 MONTH TRIAL SERIES	<input type="checkbox"/> Well Child 4 Year
<input type="checkbox"/> OB POSTPARTUM VISIT	<input type="checkbox"/> Well Child 5 Year
<input type="checkbox"/> OBESITY PEDIATRICS	<input type="checkbox"/> Well Child 6 Months
<input type="checkbox"/> Outreach Orders per Protocol	<input type="checkbox"/> Well Child 6 Years
	<input type="checkbox"/> Well Child 7 Years
	<input type="checkbox"/> Well Child 8 Years

⤵

# Smartsets/Order Sets – Adult

**SmartSets**

diabet| + Add Open SmartSets Clear Selection

Suggestions

- \*Quick Close Care Gaps
- ABDOMINAL-PEDI
- ADDICTIONS VISIT
- ADHD PEDI
- ASTHMA PEDI INITIAL AND FOLLOW UP
- Diabetes Supplies
- ENDOMETRIAL BIOPSY
- ERRONEOUS OFFICE VISIT ENCOUNTER
- ERRONEOUS TELEPHONE ENCOUNTER
- SPC POC LAB ORDERS
- VAGINITIS
- VITAMIN B12
- Well Adolescent (1
- Well Adolescent (1
- Well Adolescent (1
- Well Adolescent (1
- Well Adolescent (1
- Well Adolescent (1
- WELL ADOLESC
- OLD

SmartSet Search

diabet

**SmartSets**

Name	Code	Type	Pr
Clinical Pharmacotherapy Diabetes Management			
Diabetes Supplies			
NUTRITION REFERRALS			
PACE Diabetic Medications/Supplies			

Accept Clear

Diabetes Supplies ^

**Diabetes Supplies**

**Generic Meters & Supplies**

- glucose monitoring kit
- glucose monitoring test strips
- lancet device misc
- lancets
- insulin syringe-needle
- insulin pen needle
- autolet lancing device

**Freestyle Meters & Supplies**

- Blood Glucose Monitoring Suppl (FREESTYLE LITE MONITORING, SMALLER SCREEN SIZE) Device [52570]
- glucose blood (FREESTYLE LITE) test strip [52571]
- glucose monitoring kit (FREESTYLE) [32818]
- glucose blood (FREESTYLE) test strip [52636]
- LANCET DEVICE MISC [46516]
- LANCETS

**One Touch Ultra and Ultra Smart Meters & Supplies**

- ONETOUCH ULTRA 2 W/DEVICE KIT [48354]
- ONE TOUCH ULTRA TEST STRIP [34300]
- LANCET DEVICE MISC
- LANCETS

Remove Pend

**SURESCRIPTS TEST-123 MAIN ST-ALEXANDRIA-VA**

703-921-2121

Associate Edit Multiple Phase of Care Providers Sign

# Smartsets/Order Sets – Pediatric Example

Well Child 4 Year <sup>⌵</sup>

- CDC Immunization Schedule (0-18 yrs)

**WELL CHILD 4 YEAR**

▼ Progress Note for Well Child 4 Year

WELL CHILD 4 YEARS [10475]

WELL CHILD - CSHCN [52997] [Add Now](#)

▼ Orders to Consider

▼ Vision (well child 4 year)

VISUAL ACUITY SCREEN(aka VISION SCREEN) [99173]

▼ Hearing (well child 4 year)

EVOKED OTOACOUSTIC EMISSIONS SCREEN AUTO ANALYS

▶ Other Tests (well child 4 year) [Click for more](#)

▼ Age Appropriate Immunizations (well child 4 year)

DTaP-IPV Age 4-6 Yrs IM [90696]  
[Routine](#) • Qty-1

MMRV VACC LIVE SUBQ [90710]  
[Routine](#) • Qty-1

▼ Flu Vaccines 3-18 Years

IIV4 VACC PRESERV FREE AGE 6 MONTHS AND OLDER, 0.5ML, IM [90686]  
Qty-1

IIV4 VACC W/PRESERV AGE 6 MONTHS AND OLDER, 0.5ML, IM [90688]  
Qty-1

INFLUENZA VACC, CELL CX, EGG FREE, PRESERV FREE, QUAD, AGE 6 MONTHS AND OLDER, 0.5ML, IM [90674]  
Qty-1

INFLUENZA VACCINE HIGH DOSE FOR 65 AND OLDER, IM [90662]  
Qty-1

Influenza Virus Vac Quad Live Intranasal <18Yrs (FLUMIST) [90672]

▶ Other Immunizations [Click for more](#)

▼ Immunization Administration Codes (well child 4 year)

▶ Other Immunizations [Click for more](#)

▼ Immunization Administration Codes (well child 4 year)

IMMUNIZATION ADMIN EACH ADD [90472.1]  
[Routine](#) • Qty-1

IMMUNIZATION ADMIN SINGLE [90471.1]  
[Routine](#) • Qty-1

IMMUNIZATION ADMIN INTRANASAL / ORAL [90473]  
Qty-1

▼ Vitamin Supplements

PEDIATRIC VITAMINS OR CHEW  
Disp-100 tablet, R-4

▼ School and Camp Form/WIC Referral (well child 4 year)

SCHOOL AND CAMP FORM [110001]

LTR - PEDI SCHOOL & CAMP

School and Camp Form <5yrs. - Includes Current Medications and Problem list [110003]

REFERRAL TO MASS WIC PROGRAM [9049]

▼ EPSDT

COMPLETED EPSDT [S0302]  
[Routine](#)

▼ Diagnosis for Well Child 4 Year

▶ Visit Diagnosis (well child 4 year) [Click for more](#)

Need for prophylactic vaccination with diphtheria-tetanus-pertussis with poliomyelitis (DTP + polio) vaccine [Z23]

Need for MMRV (measles-mumps-rubella-varicella) vaccine [Z23]

Routine infant or child health check [Z00.129] [Select Specific Diagnosis](#)

▼ Level of Service Codes for Well Child 4 Year

▶ LOS Preventive Visit, New Patient (well child 4 year) [Click for more](#)

▶ LOS Preventive Visit, Established Patient (well child 4 year) [Click for more](#)

▼ Follow Up for Well Child 4 Year

▼ Disposition and Follow Up (well child 4 year)

Follow-up Instructions

▶ Patient Instructions (well child 4 year) [Click for more](#)

PARENT INFO SHEET- 4-5 YEARS [10060]

[CVS/pharmacy #8319 - SOMERVILLE, MA - ONE DAVIS SQUARE](#)  
617-629-4156 [Remove](#) [Pend](#)

[Associate](#) [Edit Multiple](#) [Phase of Care](#)

[Providers](#) [Next](#)

# Smartsets/Order Sets

ADOLESCENT EXAM FEMALE (age 12 years and above)

Axae Yytest is a 13 year old female with the following Problems and Medications:

**Patient Active Problem List:**

- Atrial fibrillation (HCC)
- Tobacco use disorder
- COMPLEX CARE MANAGEMENT
- Long term (current) use of anticoagulation
- Diabetes mellitus (HCC)
- Mild persistent asthma

**Current Outpatient Medications:**

- CHLORTHALIDONE PO
- warfarin (COUMADIN) 1 MG tablet
- Cyanocobalamin (VITAMIN B 12 PO)
- VITAMIN C 100 MG OR CHEW

No current facility-administered medications

CONCERNS: {NO CONCERNS 2:}

REVIEW OF SYSTEMS:

- Significant headaches: {DISCUSSED}
- Dental care/problems: {DISCUSSED}
- Skin problems: {DISCUSSED}
- Cardiac/respiratory sx: {DISCUSSED}
- Diet/weight: {DISCUSSED}
- Orthopedic injuries: {DISCUSSED}
- Menstrual problems: {DISCUSSED}

HISTORY:

HISTORY:

HOME:

PHYSICAL EXAMINATION: There were no vitals taken for this visit. No blood pressure reading on file for this encounter.

GENERAL: well appearing female.  
SKIN: Rash: {NONE\_STAR:11360}  
EYES: normal, fundi normal, PERRL, EOM - intact.  
ENT: normal TMs, pharynx, dentition normal, nares patent without abnormalities.  
NECK: normal, supple, no masses or abnormal lymph nodes or abnormal lymph nodes.  
LUNGS: normal, clear to auscultation.  
HEART: normal, no murmurs; pulses and perfusion are normal.  
ABD: normal; soft, non-tender, no organomegaly or masses, not distended.  
Breast: normal; {BREAST EXAM :11256}. Tanner stage {NUMBERS 1-5:11232}.  
GU: Normal external genitalia; Tanner stage {NUMBERS 1-5:11232}.  
MS: normal, exam symmetric, spine without scoliosis; Full ROM all joints.  
NEURO: normal; strength and muscle bulk are symmetric.

ASSESSMENT: {WELL ADOLESCENT ASSESSMENT:14889}

BMI: No height and weight on file for this encounter.

{BMIFA:14882}

TB Risk Assessment: {TB RISK - PEDI:12731}

PLAN: Per orders.  
Follow up visit in 1 year.

Dietary/Nutritional/Healthy Habits Counseling: {WEIGHTCLASSPLAN:14883: "Growth charts, interval change, and percentiles reviewed with patient/ guardian.", "Weight-specific dietary suggestions given.", "Encouraged exercise appropriate to BMI/goals"}

Counseling: {COUNSELING ADOLESCENT:11255: "vaccines and side effects", "minimize soda and fast food", "dental care", "body changes", "sexuality", "contraception", "STD's", "Breast/testicular self-examination", "substance use/abuse", "mental health", "peer pressure", "communication with

}

IS:11191::"discussed"}

ed"}



# Smartphrase

## SmartPhrase Manager - User LIBARIDIAN, LORKY [LLIBARIDIAN]

Level: **User** Profile Department Location Facility User: LIBARIDIAN, LO... [My SmartPhrases](#)

[+ New User SmartPhrase](#) [View](#) [SmartPhrase Lookup](#) [Share With](#) [Copy To](#)

Name	Description	Editors	ID
LABNORMAL	Please send appropriate normal lab letter.	JORGENSEN, ANDREW (INA...	103137
LETTERIRON	Review of your labs show mild anemia related to iron deficiency. I've enclosed a prescription for iron...	JORGENSEN, ANDREW (INA...	103138
LETTERVITAMIND3	Review of your labs show that your Vitamin D levels are very low. I have sent two prescriptions to...	JORGENSEN, ANDREW (INA...	103141
LIPIDSDIET	You have a mild elevation in your lipid profile. Your risk of having a heart attack or stroke in the ne...	JORGENSEN, ANDREW (INA...	103143
LIPIDSNORMAL	Your lipid panel was normal for your cardiovascular risk profile. Your risk of having a heart attack o...	JORGENSEN, ANDREW (INA...	103144
LLRESIDENTPRECEPTO...	PRECEPTOR NOTE On the day fo the pateint's visit, I personally saw and evaluated the patient. I...	LIBARIDIAN, LORKY	254561
LNLABD	+ BS, soft, NT/ND, no hsm, no flank pain	LIBARIDIAN, LORKY	154573

### Dry Skin/Eczema

1. Showers/baths: they need to be tepid (not too hot) and short (not more than 10 minutes.) Need to be only once every 2-3 days.
2. After showers: buy baby oil and while moist (while you're still wet) put baby oil on the dry patches... Then use a soft towel and PAT dry.. (don't rub the towel.)
3. MOISTURIZE!!: apply moisturizers at least three times a day, many people benefit from applying moisturizers six or more times a day... AQUAPHOR is in a white tub with a blue top and can be bought at Target or CVS or other pharmacy... this is very goopy but great for dry skin. Other good moisturizers include: EUCERIN, LUBRIDERM, AVEENO, CETAPHIL
4. On itchy patches: buy hydrocortisone 1% in a large tube. I like the ointment rather than the cream. This is an over-the-counter medicine. Apply it to itchy spots two to three times a day just before the aquaphor.
5. Humidifier: a humidifier in your bedroom will moisten your skin at night and help with the itching... They cost between \$20-200 and can be bought in a department store or a pharmacy.
6. For Soap: use DOVE unscented - dye free. The bar or pump are OK.
7. When washing clothes: also use dye and perfume free detergent. Select the Extra Rinse Cycle on your clothes washer.

LNLGYN	ni external and internal exam, no cmt, ni dimanual exam	LIBARIDIAN, LORKY	156285
LNLHEPBIMM	You do not have Hepatitis B, but you are not immune. If you would like to be immunized, please ca...	LIBARIDIAN, LORKY	158876
LNLHX	@PASTPROB@ @SURGICALHX@ @MED@ @SOC@ @FAMHX@ @ALLERGY@	LIBARIDIAN, LORKY	153559
LNLMORETHAN	More than 50% of the 25 minute visit was spent in couseling and coordination of care.	LIBARIDIAN, LORKY	156002
LNLMUSCLESRAIN	You most likely have sprained or strained a muscle as we discussed. You should wrap and ice the...	LIBARIDIAN, LORKY	153094
LNLNEURO	A+Ox3, nl DTRs UE and LE b/l symmetric, nl gross sensation and strength, nl gait	LIBARIDIAN, LORKY	154066

# Smartphrase

.psa

Abbrev	Expansion
☆ PSA	(MayoClinic.com) Canc...
☆ PSA2TO4	Your PSA (check for pr...
☆ PSADOCUMENTATION	
☆ PSAHI:	
☆ PSANC	

Refresh (Ct

I reviewed the patient's risk of prostate cancer today. He is at **{PROSTATE Average-High Risk 14541}**

**{PSA** I reviewed the patient's risk of prostate cancer today. He is at higher risk of prostate cancer due to: **{Prostate Screening High Risk:14542}**.

**{PSA Document: 13250}** **Black or African ancestry (African American, Haitian, Black Caribbean, Black Latin American)**  
**{PSA Document: 13250}** **Father or brother with a prostate cancer diagnosis before age 65.**  
**Multiple**

**{PSA Document: 13250}**

I reviewed the patient's risk of prostate cancer today. He is at higher risk of prostate cancer due to: Father or brother with a prostate cancer diagnosis before age 65.

For this patient with multiple co-morbidities I have elected not to initiate a discussion of prostate cancer screening, understanding that the risk of harms associated with PSA-based screening and subsequent unnecessary treatment likely outweigh the benefits for this patient.

# Combination

CT Lung: Nodules or Lung Cancer Screenings Only

To order CT imaging of the lung for reasons other than nodules or lung cancer:

- CT Lung Screening - Initial order for patient who me
- CT Lung Screening
- CT Lung Screening
- CT Lung Nodule - in

Next Required

CT LUNG CANCER S

From BestPractic

Please Accept this BP Lung Cancer Screenin

▼ Lung Cancer Scree

▼ Progress Note - Lu

Progress Note - Lu

▼ Visit Diagnosis

Personal history of

▼ CT Lung Screening screening criteria

CT Lung Screening

Details

Billing Code for Sh Routine

Associate Edit Multi

CT Lung Screenin

Priority: R

To assure imagi needs.

Is the patient a current smoker?

What is the patient's total p years?

Patient is asymptomatic:

Was patient cou

Did the patient l

Is this a baseline

Is this a low dos or a routine CT?

Release result to patient via MyC

Brief comments un

Sched Inst.: + Add Scheduling Instructions

Associate Diagnoses

Yytest, Alix Mannir

Add diagnosis + P

CT Lung Screening (Initial)

Billing Code for Shared Decis

Low Dose CT

Immediate Manual release o

Brief comments to Tech:

Sched Inst.: + Add Scheduling Instructions

Remove

## The following Shared Decision Making points were covered:

1. You are agreeing to enroll in an annual lung cancer screening program for as long as you remain eligible. The program that can run for years.
2. The term "low dose" is used because the estimated average whole-body effective dose from a low dose CT scan is not much more than usual background radiation.
3. Most of the nodules we find on these scans will not cause you any harm. Sometimes, after the first scan is done, other follow up scans are needed to see if the nodules are growing. The timing of the follow up scan can vary from 3 to 12 months after the initial scan and depends on what is being followed.
4. If a suspicious nodule is found, you may need follow up testing to help figure out whether it is an early lung cancer. Types of follow up test may include the following: another CT scan, a special scan called a PET scan to determine how active the nodule is and possibly a biopsy
  1. Complications from a lung biopsy are influenced by the location of the nodule being biopsied, its size, and the method of biopsy. In a Medicare study of 1,744 patients who underwent a biopsy of a nodule, 19% experienced some form of complication such as bleeding or collapsed lung (pneumothorax)
  2. A formal CT scan carries an exposure of 5-7 mSv, more than a screening CT scan.
5. LDCT has been shown to find lung cancer early which is then more easily cured. One of the most important things you can do is to quit smoking if you have not already quit smoking.

Review of Risk Factors for Lung Cancer (Eligibility Criteria for Lung Cancer Screening): These are the most recent risk factors identified by the United States Preventative Services Task Force. CMS has not adopted the most recent changes.

A review of her chart shows that she is eligible for lung cancer screening due to the following risk factors:

she is a {Former/Current:18605} smoker of cigarettes. There is documentation of at least a 20 pack year smoking history.

There are no signs/symptoms of lung cancer: {YES/NO:63: "yes"}

# Problem Lists

## Problem List

[Care Coordination Note](#) Edited: Amanda Frank 4/17/2014  
Patient self-management goals: I want to    Medical team treatment goals:    Important care providers for this condition:    Self-management tools given:

[+ Add](#) [DxReference](#)

**Diagnosis** ▲

- Abdominal pain, other specified site
- ABNORMAL LIVER FUNCTION STUDY
  - [Overview](#) Edited: Ira Mintzer 7/2/2008  
Recheck one week.
- Chest pain
- Diabetes mellitus (HCC)
- Major depressive disorder, recurrent, moderate (HCC)
  - [Overview](#) Edited: Doru Iancovici, MD 3/18/2016  
ghujvgvgu
- Migraine headache
  - [Overview](#) Edited: Gregory Larson Sawin 9/8/2008  
Narc contract with Sawin, signed 9/8/8  
Walgreens Malden Center St.  
Percocet 5/325 #90/month.
- Nonspecific serologic evidence of human immunodeficiency virus (HIV)
  - [Overview](#) Edited: Laura Nevill, APRN 5/31/2005  
HAART not indicated 5/31/2005
- Other convulsions
  - [Overview](#) Edited: Joan Mullarky, RN 7/13/2007  
7/13/2007  
Low level depakote increased by 250mg daily. Return one week for repeat level.
- Refusal of treatment for reasons of religion or conscience
  - [Overview](#) Edited: Joan Mullarky, RN 7/13/2007  
Multiple appts missed. Spoke to pt regarding this

# Reporting Workbench

## Patient Population Management



- ▼ My Pts with a Chronic Condition
  - Pts w/ Asthma
  - Pts w / AUD
  - Pts w/ CCM - Active
  - Pts w/ COPD (Reg)
  - Pts w/ Depression
  - Pts w/ Diabetes
  - Pts w/ HIP Team
  - Pts w/ HTN
  - Pts w / OUD
  - Pts w/ <X> Prob List
- > My Pts On or Not On a Medication
- > My Pts Not Seen Recently
- > My Pts w or w/out a Lab Performed
- ▼ My Pts Overdue for HM
  - Pts w/ HM Due Soon & OV - Well Child
  - Pts w/ HM Overdue - <X> Topic
  - Pts w/ HM Overdue - Breast Ca Scrn
  - Pts w/ HM Overdue - Cervical Ca Scrn (Pap)
  - Pts w/ Colpo HM Modifier
  - Pts w/ HM Overdue - Colon Ca Scrn
  - Pts w/ HM Overdue - Colon Ca Scrn w/ GI Note (Y-5)
  - Pts w/ HM Overdue - Care Plan
  - Pts w/ HM Overdue - Childhood Immunizations
  - Pts w/ HM Overdue - HPV/Tdap/Menactra Immunizations
  - Pts w/ HM Overdue - Abnormal Chest Scan CT
- > My Pts Due for HCC Refresh



Chart Encounter Snapshot Add to List Communication

Saved Views - Original View

Detail List Explore

Filter

Re-run Report Refresh Selected Select All

Patient	DOB	Prim Loc	PCP	Benefit Plan	Text OK?	MyC	Pref Language	Last at Any Prim Loc	Next at Any Prim Loc	Next Phx Visit Date	ZIP Code	HCC Gap (CMS)	Smoking Status	Last A1C	Last A1C Dt	Alb/Cr	Alb/Cr Dt	Last LDL	Last LDL Dt	Last PHQ9
[Redacted]	[Redacted]	R...	LIBARIDIAN, LORKY N.	[Redacted]	✓		English	[Redacted]	[Redacted]	[Redacted]	[Redacted]	0.309	Former Smoker	[Redacted]		5 g/mg	02/24/2021	68	[Redacted]	[Redacted]

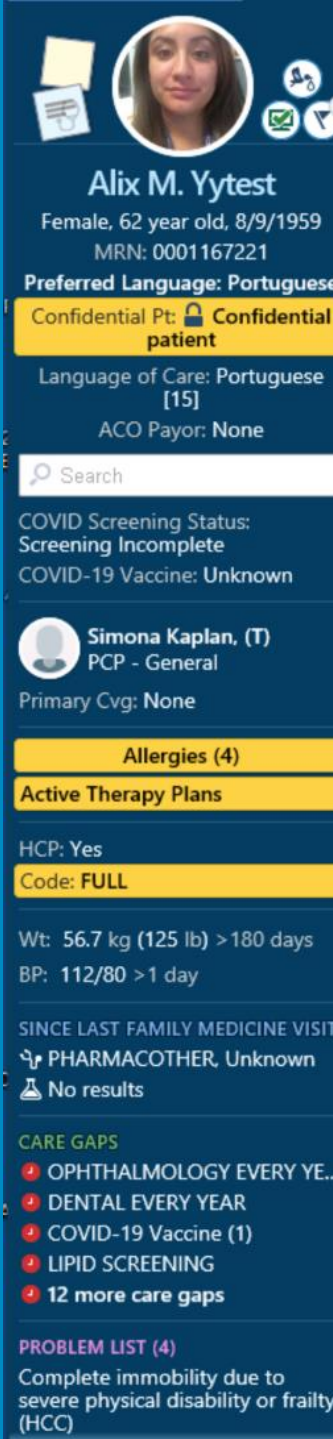
PHQ9 History Recent Vitals Diabetes Flowsheet Health Maintenance Problem List Upcoming/Recent Visits Current Meds Outreach Tracking

Recent Review Flowsheet Data

[View Complete Flowsheet](#)

	8/5/2021	7/1/2019	8/20/2018	9/18/2017	9/18/2017	8/4/2016	7/1/2016
PHQ-9 TOTAL SCORE							
Doc FlowSheet Total Score	-	-	-	-	-	-	4
Doc FlowSheet Total Score	7	-	-	(No Data)	(No Data)	-	-
PHQ-9 FLOWSHEET	8/5/2021	7/1/2019	8/20/2018	9/18/2017	9/18/2017	8/4/2016	7/1/2016
Interest	-	-	-	-	-	0	0
Depressed	-	-	-	-	-	1	0
Sleep	-	-	-	-	-	-	1
Fatigue	-	-	-	-	-	-	1
Appetite	-	-	-	-	-	-	1
Self Esteem	-	-	-	-	-	-	1
Concentration	-	-	-	-	-	-	0
Psychomotor	-	-	-	-	-	-	0

# Patient Headers



Alix M. Yytest  
Female, 62 year old, 8/9/1959  
MRN: 0001167221  
Preferred Language: Portuguese  
Confidential Pt: Confidential patient  
Language of Care: Portuguese [15]  
ACO Payor: None

Search

COVID Screening Status: Screening Incomplete  
COVID-19 Vaccine: Unknown

Simona Kaplan, (T)  
PCP - General  
Primary Cvg: None

Allergies (4)

Active Therapy Plans

HCP: Yes  
Code: FULL

Wt: 56.7 kg (125 lb) >180 days  
BP: 112/80 >1 day

SINCE LAST FAMILY MEDICINE VISIT  
 PHARMACOTHER, Unknown  
 No results

CARE GAPS

- OPHTHALMOLOGY EVERY YE...
- DENTAL EVERY YEAR
- COVID-19 Vaccine (1)
- LIPID SCREENING
- 12 more care gaps

PROBLEM LIST (4)

Complete immobility due to severe physical disability or frailty (HCC)

# Flowsheets

Review HM Plan Wrap-Up Revi... Growth Rooming Flowsheets

File Add Rows LDA Avatar Add Col Insert Col Data Validate Hide Device Data Last Filed Reg Doc Graph More

Vital Signs Pain Assessment Head to Toe Complex Assessment Intake/Output **Birth Center Flowsheet** Birth Center Flows...

Search (Alt+Comma) Expanded View All 1m 5m 10m 15m 30m 1h 2h 4h Interval Start: 0700 Reset Now

Office Visit from 5/19/2022...  
5/19/2022  
2300 Last Filed

Fetal Heart Rate		
Mode		
Doppler/Fetoscope Rate		
Baseline Rate		
Baseline Classification		
Variability		
Pattern		
FHR Category		
Pattern Observations		
Provider Reviewed Fetal Monitor Strip?		
Multiple birth?		
Uterine Activity		
Mode		
Contraction Frequency		
Contraction Duration		
Contraction Pattern		
Contraction Quality		
Resting Tone Palpated		
Vital Signs		
Temp		
Temp src		
Pulse		
Pulse (Heart Rate) Source		
Resp		
BP		
BP Location		
BP Method		
MAP (mmHg)		
MAP by Osc.		
Patient Position		
Cardiac Rhythm		
Ectopy		

Hide All Show All

- Fetal Heart Rate
- Uterine Activity
- Vital Signs
- Pain
- Pain Assessment -...
- Pain Management
- Cervical Exam
- Membranes
- Ongoing PPH Risk
- Fundal Assessment
- Lochia
- Perineum
- Breasts/Nipples
- LATCH
- Oxygen Therapy
- Safe Environment



# Flowsheets Continued

Search:

Recent Flowsheets

- VITALS
- PHQ-9 FLOWSHEET
- SDOH LAST 3 VALUES
- ADULT WELLBEING
- ORTHO KNEE SOCIETY SCORE
- PEDS (PARENT'S EVALUATION OF DEVELOPMENTAL ...
- M-CHAT (MODIFIED CHECKLIST FOR AUTISM IN TODDL...
- MEDICARE ANNUAL WELLNESS VISIT HEALTH RISK A...
- FALL RISK
- DIABETES
- DAST AND AUDIT FLOWSHEET
- PRIMARY CARE BEHAVIORAL RISK SCREENING TOOL...
- NEWBORN FLOWSHEET

Accept

## Flowsheet Report

Select Flowsheets to View

VITALS [23]

Load More

Vitals	2/4/2021	10/22/2019	3/6/2019	3/6/2019	7/10/2018	7/3/2018	2/5/2018	6/27/2017	6/27/2017	6/1/2017	6/1/2017	10/19/2015	3/18/2015
SYSTOLIC		80	168	180						110		106	
DIASTOLIC		60	92	100						70		60	
Pulse													
Temp													
Resp													
Weight					170			165		160			
WEIGHT (kg)					77.11 kg			74.844 kg		72.576 kg			
Height		58.000			62.000			62.000					
Peak Flow													
O2Sat	94												
BMI						31.09			30.18		31.25		
Pain Score													0
Last LMP							2/7/2017		2/7/2017		2/7/2017		

## Flowsheet Report

Select Flowsheets to View

DIABETES [70]

Load More

Diabetes Flowsheet	Latest Ref Rng & Units	10/22/2019	3/6/2019	3/6/2019	7/3/2018	6/27/2017	6/1/2017	6/1/2017	3/14/2017
External HgBA1C	See scanned report %								5.6
Urine Protein	0 - 15 mg/dl								
BP: (Goal <130/80)		80/60	168/92	180/100			110/70		
BMI: (Goal - If >25 a 5-10% decrease (Grade II))					31.09	30.18		31.25	
Ophthalmology Referral		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
CONSULT TO E		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
CONSULT TO N		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
CONSULT TO D		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
Referral to Podiatry		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
CONSULT TO N		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
Referral to Nutrition Ext		(None)	(None)	(None)	(None)	(None)	(None)	(None)	(None)
Flu Vaccine									

# Preference Lists

The screenshot displays two overlapping windows of an 'Order Search' application. The top window shows the 'Database' view for 'HYDROCORTISONE', listing various medication forms. The bottom window shows the 'Preference List' view for the same search term, which is currently empty. The 'Preference List' window includes a 'Panels' section with '(No results found)', a 'Medications' table with several entries, and a 'Procedures' section with '(No results found)'. At the bottom of the 'Preference List' window are buttons for 'Select And Stay', 'Accept', and 'Cancel'. The 'Database' window also has 'Browse', 'Preference List', 'Facility List', and 'Database' tabs.

**Database View (Top Window):**

Name	Code	Stre...	Ty...	Do...	Frequency	D...	Ref	En...	Pref...	Payo...	Co...	Cover...	Formulary	Copay	Dr...
HYDROCORTISONE 0.5 MG P...	142...	0.5...	M...							N/A					Ge...
HYDROCORTISONE 1 % EX GEL	233...	1 %	M...							N/A					Ge...
HYDROCORTISONE 1 % EX SO...	234...	1 %	M...							N/A					Ge...

**Preference List View (Bottom Window):**

**Panels** (No results found)

**Medications**

Name	Code	Type	Dose	Frequency	Di...	Ref	End...	Pref...	Payor...	Co...	Covera...	Formulary	Copay	Dru...
hydrocortisone (ANUSOL-HC) s...	4516	M...	25...					CH...	N/A					Gen...
hydrocortisone cream 1%	4504	M...						CH...	N/A					Gen...
hydrocortisone cream 2.5%	4505	M...						CH...	N/A					Gen...
hydrocortisone ointment 2.5%	4510	M...						CH...	N/A					Gen...
hydrocortisone ointment 1%	4509	Me...	1 F...	2 TIMES...				LIBA...	N/A					Gen...

**Procedures** (No results found)

Select And Stay | Accept | Cancel

# Preference Lists & Favorites

The screenshot shows the 'Order Search' application window. The search bar contains 'HYDROCORTISONE'. The interface is divided into several sections:

- Left Sidebar:** A navigation menu with a search icon and a 'Only Favorites' checkbox. It lists categories: Order Panels (with sub-items 'anemia' and 'hepC'), OP Meds (with sub-item 'Dermatology'), and Orders (with sub-items 'Eczema', 'Std', and 'Viral').
- Search Bar:** Contains the text 'HYDROCORTISONE' and a search icon. To the right are buttons for 'Browse', 'Preference List', 'Facility List', and 'Database'.
- Order Panels Section:** A blue header 'Order Panels' is followed by a sub-header 'anemia'. Below are three columns of items, each with a star icon and a checkbox:
  - Column 1: CBC+Plt with Diff, Ferritin, Folate RBC
  - Column 2: Iron, ROUTINE VENIPUNCTURE
  - Column 3: Total Iron Binding Capacity, Vitamin B12Below this is a sub-header 'hepC' with three columns of items:
  - Column 1: CBC+Plt with Diff, Comprehensive Metabolic Panel, Fasting, Hepatitis C PCR Qual to Quant
  - Column 2: Hepatitis C Virus Genotyping, HIV Antigen Antibody 5th Gen
  - Column 3: Prothrombin Time, ROUTINE VENIPUNCTURE
- OP Meds Section:** A blue header 'OP Meds' is followed by a sub-header 'Dermatology'. Below are three columns of items:
  - Column 1: econazole nitrate cream 1%
  - Column 2: eucerin lotion
  - Column 3: hydrocortisone ointment 1%
- Orders Section:** A blue header 'Orders' is followed by sub-headers 'Eczema' and 'Std'.
  - Eczema:** eucerin lotion
  - Std:** RPR, Amplified Genprobe Chlamydia/GC, ROUTINE VENIPUNCTUREBelow this is a sub-header 'Viral' with three columns of items:
  - Column 1: Hepatitis C Antibody, HIV Antigen Antibody 5th Gen
  - Column 2: Hepatitis B Surface Antigen, Hepatitis B Surface Ab Quant
  - Column 3: ROUTINE VENIPUNCTURE

At the bottom right of the main content area, there is a 'Clear All Selected' button. At the very bottom of the window, there are 'Accept' and 'Cancel' buttons.

# Sidebars

**Epic** Record Viewer Data Courier Build Tools Content Review Patient Station Help Desk Reports Dynamid Schedule Admin Review Encounter Telephone Call SmartTool Editors Media Manager Coding Help Print Secure Log Out Exit

RE ENVIRONMENT KALEY (IT ADMIN) PENNINGTON Search

No Photo, ask for ID

Allergies: Fish derived Products, Peanuts  
 Meds: atorvastatin (LIPITOR) 40 MG tablet, Blood Glucose Monitoring Suppl (GLUCOSE MONITORING...  
 Problem List Access: Major depressive disorder, recurrent episode, moderate (HCC), PTSD (post-traum...  
 Pt Care Team: David Lee (PCP)

CHA Code: FULL  
 CM E... MyC: Pending  
 HCP: Yes  
 Inf: None  
 HCC Gap: 0  
 HM: Due  
 BPAS: (1)

Temp: None  
 Pulse: None  
 Resp: None  
 BP: 126/80  
 SaO2: None  
 Weight: 79.8 kg (176 lb)

**Plan**

BestPractice Problem List SmartSets

**BestPractice Advisories**

This patient has a condition (asthma, COPD, or diabetes) for which a flu shot is recommended. Please consider ordering at this time (click Expand for details).

**Problem List**

Care Coordination Note Edited: Dineen Tennihan, RN 7/6/2019  
 Patient self-management goals: I want to improve depression, diabetes Medical team treatment goals: T...  
 Search for new problem + Add Show:  Past Problems

**New problems from outside sources**

Problems need attention. Go Reconcile →

Diagnosis	Resolved	Visit
Major depressive disorder, recurrent episode, moderate (HCC)	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
PTSD (post-traumatic stress disorder)	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
Suicide attempt (HCC)	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
Scrotal cyst	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
H/O domestic violence	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
High risk sexual behavior	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
Allergic rhinitis due to pollen	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
Dyspepsia and other specified disorders of function of stomach	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
NASH (nonalcoholic steatohepatitis)	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
History of cocaine use	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
History of marijuana use	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>
Primary syphilis	Change Dx <input checked="" type="checkbox"/> Resolve	<input type="checkbox"/>

**Visit Diagnoses**

Search for new diagnosis + Add Previous Problems

No visit diagnoses.

**Medications & Orders**

Comments Edited: Bruce Cawley 4/10/2018  
 Psychopharm by LMHT 04/10/18 Pt has a knowledge deficit re names of his medications.He reports he take...  
 Patient-Reported  
 New medications from outside sources  
 Medications need attention. Go Reconcile →  
 Review open orders  
 Placing a new order?  
 Use the Visit Taskbar at the bottom of your screen to add, edit, and sign orders at any point during a visit. + Add Order Dismiss

Name	Dose, Frequency	Adh	✓	✗	⚡	⌂	✕	⌵
<b>Outpatient Medications</b>								
atorvastatin (LIPITOR) 40 MG tablet	40 mg, NIGHTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood Glucose Monitoring Suppl (GLUCOSE MONITORING KIT) monitoring kit		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ciclopirox (LOPROX) 0.77 % cream	DAILY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
glucose blood test strip		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lancets		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
metFORMIN (GLUMETZA) 500 MG (MOD) 24 hr tablet	1,000 mg, 2 TIMES DAILY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
polyethylene glycol (GLYCOLAX/MIRALAX) packet	17 g, DAILY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

✓ Mark as Reviewed Last Reviewed by David Lee, MD on 8/21/2019 at 9:56 AM

**This Visit** Notes Summary

Visit Snapshot  
 Current as of: Mon 9/23 10:20 AM. Click to refresh.

**Diabetes**

\*\*\*Coming soon!\*\*\*  
 Diabetes related guidelines and metrics, including relevant medications, procedures, results, and comorbidities, will soon be displayed in this section. Stay tuned!

**Diabetes**

**Labs**

HbA1c	8.8%	1mo ago
Second HbA1c	10.5%	4mo ago
Cr	1 mg/dL	5mo ago
Microalb	6 ug/mg	4mo ago
LDL	162 mg/dL	5mo ago
GFR	> 60 ML/MIN	5mo ago

**Vitals**

Last BP	126/80
BMI	25.99

**Routine Monitoring**

Last Eye Exam SmartData Date	8/19/2019
Last Foot Exam Date	8/21/2019
Two A1Cs in Last 12 Months	Yes
Last PHQ-9	9

**Immunizations**

Influenza vaccination	Not on file
PPSV23 Pneumococcal vaccination	8/26/2015
PCV13 Pneumococcal vaccination	Not on file

**Relevant Medication Classes**

Prescribed biguanide	Yes
----------------------	-----

**Comorbidities**

Has Coronary Artery Disease	No
Has Diabetic Retinopathy	No
Has Diabetic Renal Disease	No
Has Neuropathy	No
Has Hypertension	No

# Sidebars -

H

## Hypertension

*Tip: Hold the "shift" button on your keyboard when clicking a link to open a new window outside of Epic (workstation can be secured).*

### Links to Resources:

Hypertension Guidelines - link coming soon!

### Links to Patient Education Videos:

[Starting Blood Pressure Medication](#)

[Lifestyle Changes for High BP](#)

[Monitoring Blood Pressure at Home](#)

[Complete HTN Video Library](#)

## Hypertension

### Labs

Na	137 mmol/L	10d ago
K	4.5 mmol/L	10d ago
Cr	1.6 mg/dL	10d ago
GFR	44 ML/MIN	10d ago
Cholesterol	103 mg/dL	1yr ago
Triglycerides	175 mg/dL	1yr ago
HDL	29 mg/dL	1yr ago
LDL	55 mg/dL	1yr ago

### Results

Last Echocardiogram Date	2/13/2018
Last Stress Test Date	6/12/2019
Last ECG date	6/10/2020

### Vitals

BMI	30.68	3wk ago
Last BP	114/62	3mo ago
Previous BP (2nd)	110/56	3mo ago
Previous BP (3rd)	120/60	4mo ago

## Medications

### Current Antihypertensives Meds

Isosorbide  
Mononitrate,  
Metoprolol  
Succinate,  
amlODIPine  
Besylate

### Relevant Medication Classes

Prescribed Thiazide Diuretics	No
Prescribed Loop Diuretics	No
Prescribed beta blocker	Yes
Prescribed ACE/ARB	No
Prescribed Alpha Blocker	No
Prescribed antiadrenergic antihypertensives	No
Prescribed calcium channel blockers	Yes
Prescribed vasodilators	Yes
Prescribed NSAIDs	Yes

### Social History

Smoking Tobacco Use Status	Former Smoker
Smokeless Tobacco Use Status	Former User
Last Ref to Tobacco Education	Not on file
Alcohol: Frequency	Not on file

### Comorbidities

Has Diabetes , Has Coronary Artery Disease , Has Hyperlipidemia

### Past Visit Information

Last ED/IP Visit - HTN	3/5/2020
Last Nephrology Visit	Not on file
Last Cardiology Visit	6/4/2020
Last Pharm. Visit	5/28/2020
Last Nutritionist visit	Not on file
Last RN Chronic Disease Visit	Not on file

















Current as of: 6/14/2020 5:27 AM ?



# Medication Warnings

Medication Warnings for Yytest, Alix Manning

New Warnings (4 unfiltered, 3 filtered) Show filtered (3)

 <b>Drug-Drug: warfarin and amiodarone</b> Amiodarone may inhibit hepatic metabolism and increase the anticoagulant effect of vitamin K antagonists (e.g. Anticoagulants). Bleeding may occur. <a href="#">Details</a>	<input type="text" value="Override reason"/>   <input type="button" value="Don't Show This Warning Again"/>	<b>warfarin (COUMADIN) 2 MG tablet</b>  Prescription. <b>New.</b> Long-term. <input type="button" value="Remove"/>	<b>amiodarone (PACERONE) 100 MG tablet</b>  Prescription. <b>New.</b> Long-term. <input type="button" value="Remove"/>
 <b>Drug-Drug: warfarin and sulfamethoxazole-trimethoprim</b> The hypoprothrombinemic effects of Anticoagulants may be increased during concurrent administration of Sulfamethoxazole/Trimethoprim. <a href="#">Details</a>	<input type="text" value="Override reason"/>   <input type="button" value="Don't Show This Warning Again"/>	<b>warfarin (COUMADIN) 2 MG tablet</b>  Prescription. <b>New.</b> Long-term. <input type="button" value="Remove"/>	<b>sulfamethoxazole-trimethoprim (BACTRIM DS) 800-160 MG per tablet</b>  Prescription. <b>Active.</b> <input type="button" value="Discontinue"/>
 <b>Pregnancy Warning: warfarin</b> Contraindicated for Preeclampsia <a href="#">Details</a>	<input type="text" value="Override reason"/>   <input type="button" value="Don't Show This Warning Again"/>	<b>warfarin (COUMADIN) 2 MG tablet</b>  Prescription. <b>New.</b> Long-term. <input type="button" value="Remove"/>	
 <b>Pregnancy Warning: warfarin</b> Contraindicated for Pregnancy		<b>warfarin (COUMADIN) 2 MG tablet</b>  Prescription. <b>New.</b> Long-term. <input type="button" value="Remove"/>	

Scroll down to enable override options.

# A few best practices for CDS

Have a committee or a team

Focus on the problem, not the solution

Understand the workflow

Focus on giving guidance, not an intervention

Understand how your clinical teams use the EHR

→ Often the person requesting the change (especially higher up) does not know exactly what they want, or what types of changes or tools are needed. YOU have to know what questions to ask.

→ Keep it as simple as possible for the user

Questions?



## Let's take a look at those cases

A mobile mammogram unit is going to go to 2 Marzes to do screening mammography. You are asked to "support the work."

It is observed that almost all of the children in a specific village are documented as having the same weight. You are asked to "use the EHR to figure it out and fix it."

The Medical Director at your clinic notices that children are not being given the appropriate vaccines at their appointments. You are asked to "use the EHR to figure it out and fix it."

The MoH wants to ensure that physicians are using the most appropriate and cost-effective BP medications. You asked to "use the HER to figure it out and fix it."

The MoH wants to reduce unnecessary antibiotic  use (or MDI's) in hospitals and outpatient clinics

# Thank You



**Contact**  
Name  
Organization  
Contact Info

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