

EHR Functionality Summary Guide

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Introduction

This document summarizes common functionality in Electronic Health Record software that may help health care systems and health care providers (HCPs) improve clinical quality and population health through more consistent patient identification, communication, and adherence to clinical pathways.

- EHRs can improve patient experience by automating tasks such as patient education, reminders for due and past-due vaccinations, and appropriate outreach to patients including after visit summaries through a patient portal.
- Population health can be enhanced by providing HCPs with insight into vaccination in their practice as compared to guidelines, registry reports to identify patients for whom defined actions should be taken, and order sets to ensure clinical consistency.
- EHR systems can help increase use of clinical decision support features and increase consistency in the provision of care.

This document summarizes these capabilities:

Objective	Functionality
1 Identify gaps in care, assess patient adherence, and measure practice performance	Query-based Reporting Dashboards
2 Expand communications with patients via the patient portal, email, or hardcopy	Appointment Reminders Visit Summary
3 Enhance point-of-care interactions	Immunization Schedule Alerts Order Sets Documentation Templates

NOTE: The images shown in the document are not from a particular EHR and are illustrations intended to help the reader. Please refer to your EHR for actual details.

- **Reports** can identify lists of patients by querying on specific criteria.
- **Dashboards** are another type of report, configured to display performance monitoring against goals.
- Both can be effective in raising awareness and closing gaps in care. For example, an organization or practice may establish a goal and a timeline to reduce the gaps (eg, X % of patients who missed vaccine appointments are contacted and rescheduled within X days).

Example



Missed Appointment Reports

- Use an Immunization or Vaccination Visit Type when scheduling appointments which include vaccinations due
- Determine a routine timeframe for running a Missed or No Show Appointment Report for Vaccine-included visit types
- Using the report, contact the patients promptly to reschedule the vaccination appointment, and use the patient's preferred method of contact for best results

Summary Reports can also serve as benchmarking tool

- Select vaccines to include in Dashboard or summary reports

Reporting Example 1: Using Reporting to Track Missed Appointments

- Generating an **Encounters Report** can include cancelled appointments and no-shows for visits specific to vaccinations.
- Patients from this list can be contacted using automated phone calls, letters, or messages via the patient portal to remind them to reschedule the appointment.

Example

Appointment Analysis Report

Report Type:

Sort By:

Practice Totals Only:

Date:

Resource: ALL

Appointment Type: ALL

Status: ALL

Locations: ALL

Status:

ALL
Complete
Office Canceled
Office Rescheduled
Other
Patient Canceled
Patient No-Show
Patient Rescheduled
Unchanged

OK

Cancel

Reset

Appointment Request and Recall Alert

Request Type	Status	Appt Type	Provider/Resource	Create Date	Request Date	Location	Communication
Recall		Immunization Followup		07/24/2015	06/01/2015		Patient Portal
Recall		Immunization Followup		07/24/2015	06/01/2015		Text Message
Recall		Immunization Followup		07/24/2015	06/01/2015		Letter
Recall		Immunization Followup		07/24/2015	06/01/2015		Telephone

Reporting Example 2: Using the Summary Report to Assess Performance

- The **Summary Report** provides overall insight into patient populations.
- Summary reports can be established based upon multiple criteria, including diagnosis, and series completion. They can also be used as patient lists on which to take action for patients with gaps in care.
- Reminders can be configured for patients on the summary report to identify a gap in care during the visit.
- Selected vaccines can be included in a dashboard.

Example

Vaccine Summary Report



Patients



Problems



Meds



Labs



Allergies



Imms

 Vaccines **Missing Vaccines**

Select one Missing Vaccine Code to find patients who did not have that one vaccination.

Select multiple Missing Vaccine Codes to find patients who did not have any of those vaccinations.

Add a date range to find patients who did not have the selected vaccination during that time frame.

Apply Selections for a list of patients who meet your criteria.

Select a Vaccine to activate
Missing Vaccines

Missing Vaccine/CPT Code



Td

Influenza

Tdap



Provider for Menu 3 & All PCP excluding mid-levels

Score Filter

1%

39%

Providers	Num	Den	Exclu	Goal	Score	Status
Provider A	19	206	100	10%	6%	X
Provider B	12	129	100	10%	9%	X
Provider C	12	112	100	10%	10%	X
Provider D	25	370	100	10%	6%	X
Provider E	17	166	100	10%	10%	X
	10	165	100	10%	5%	X

- EHRs contain functionality which includes a variety of communication methods to foster patient engagement. Finding the right combination and offering options to the providers and the patients can help keep patients engaged and informed about their care.

Example

Leverage the EHR communication capabilities to send letters, secure messaging, and patient portal messages or make automated phone calls to patients.



The keys to this approach are:

- Send appointment reminders; use patient-preferred method of communication whenever possible
 - Use specific information in the communication; the more relevant the message, the greater the overall patient response will be
 - Define a consistent process to contact and follow up with the patient
- Provide the patient with a visit summary. The summary should include patient education, a list of actions the patient needs to take, and information on follow-up visits.

Patient Communications Example 1: Send Pre-Visit Reminders for Scheduled Appointments

- Pre-visit Appointment Reminders ensure that patients remember that they have appointments, and enable an opportunity to reschedule proactively, if needed.

Example

Immunization Reminders

Appointment Date | Patient | Protocol | All Labs/DI/Imm Alerts | Dr | Rx

Protocol ... Provider/Facility Filter

Report List Date(s) Date(s) Due By

Look Up

<input type="checkbox"/>	Patient	Test	DOB	Sex	Age	Home Phone	Last Done	Due Date	Last Visit	Status
<input type="checkbox"/>	Patient 1	Immunization	10/01/2011				No Record		12/06/2015	
	Patient 2	Immunization 1	01/01/2000				01/01/2015		06/01/2015	
	Patient 3	Immunization 2	02/02/2000				02/02/2015		08/02/2015	
	Patient 4	Immunization 2	03/03/2000				03/03/2015		05/03/2015	

Letter ... Run Letter(s)

Patient Communications Example 1: Using the Visit Summary Effectively

- Using the Alerts, and an effective Order Set during the visit, enables the HCP to quickly document the treatment plan. The treatment plan details are included on the clinical Visit Summary.
- The summary document can be handed to the patient during the office visit or uploaded to the portal, and can be a useful reference for them.

Example

Visit Summary		As of Jul. 01, 2015		
Patient Demographics				
Patient Address	Communication	Language	Race / Ethnicity	
	@gmail.com	English (Preferred)	White or Caucasian / Not Hispanic or Latino	
Reason for Visit				
Reason	Comments			
Hypertension				
Hyperglycemia				
Vaccination				
Encounter Details				
Date	Type	Department	Care Team	
06/01/2015	Office Visit	FAMILY PRACTICE		
Active Allergies and Adverse Reactions - as of 07/01/2015				
No Known Allergies				
Current Medications - as of 07/01/2015				
Prescription	Sig.	Disp.	Refills Start Date End Date Status	
aspirin 81 MG tablet	Take 81 mg by mouth daily			Active
levocetirizine 5 MG tablet	TAKE 1 TABLET BY MOUTH EVERY EVENING	90 tablet	1 06/03/2015	Active
amLODIPine-Benazepril 5-20	TAKE 1 CAPSULE BY MOUTH EVERY DAY	90 tablet	1 06/03/2015	Active
Active Problems - as of 07/01/2015				
Problem	Noted Date			
Increased fasting blood sugar	12/09/2014			
Nasal inflammation due to allergen	12/09/2014			
High blood pressure	12/09/2014			
History of urinary stone	12/09/2014			
High cholesterol, LDL goal below 130	12/09/2014			
Immunizations - as of 07/01/2015				
Name	Dates Previously Given	Next Due		
Influenza	06/11/2015	07/11/2016		
Social History - as of 07/01/2015				
Tobacco use	Types	Packs/Day	Years used Date	
Never smoker		0	0	
Last Filed Vital Signs				
Vital Sign	Reading	Time Taken		
Blood Pressure	110/78	06/11/2015 9:10 AM EDT		
Pulse	60	06/11/2015 9:10 AM EDT		
Temperature	36.8 °C (98.2 °F)	06/11/2015 9:10 AM EDT		
Respiratory Rate	16	06/11/2015 9:10 AM EDT		
Height	-			
Weight	87.998 kg (194 lb)	06/11/2015 9:10 AM EDT		
Body Mass Index	31.33	06/11/2015 9:10 AM EDT		
Oxygen Saturation	-			
Prescriptions Ordered During Visit				
Prescription	Sig.	Disp.	Refills Start Date End Date	
methyPREDNISoloe 4 mg tablet	Take 1 tablet (4 mg total) by mouth daily, follow package directions	21 tablet	0 06/11/2015 06/10/2016	
Plan of Care				
Upcoming Encounters				
Date	Type	Specialty	Providers	
07/24/2015	Appointment	Cardiology		
12/11/2015	Appointment	Family Medicine		

- An EHR provides many point-of-care features to assist providers in identifying relevant actions to be taken during a visit. Using any or all of these functions can improve your patients' vaccination status. These functions become impactful when combined in the visit workflow.

Example



The keys to this approach are:

- Using the Immunization Schedule to view the patient's full vaccination schedule and status of vaccinations at a glance
 - Configure Alerts based on this schedule to display due or past due vaccine notifications to the provider when the patient is being seen
- Using Order Sets which include vaccines, follow-up appointments for next in series, and patient education materials
 - Review Order Sets and update as needed to meet current guidelines
- Defining Documentation Templates to enhance the documenting process, enabling check-out processes to include all of the patient instructions in a timely manner

Example 1: Using the Immunization Schedule

- The immunization schedule in the EHR can be used to identify when action needs to be taken. Vaccination schedules can be set up to identify items that are due or past due.

Example

The screenshot displays the 'Immunizations' section of an EHR. On the left, a list of seven vaccines is shown with their next due dates. Vaccine 4 is highlighted. The main area shows a grid for 'Immunizations' with columns for Dose 1 through Dose 5. The grid uses color coding: red for 'Overdue', green for 'Due', and yellow for 'Upcoming'. Vaccine 1 is overdue for Dose 1. Vaccine 2 is due for Dose 1. Vaccine 3 is upcoming for Dose 1. Vaccine 4 is upcoming for Dose 1. Vaccine 5 is upcoming for Dose 1. Vaccine 6 is upcoming for Dose 1. Vaccine 7 is upcoming for Dose 1. The interface also includes a 'View' dropdown set to 'Pediatric', a 'Registry Consent: Unknown' status, and a 'VFC Eligibility:' section with a legend for 'Upcoming', 'Due', and 'Overdue'.

Immunizations	Dose1	Dose 2	Dose 3	Dose 4	Dose 5
Vaccine 1	Overdue				
Vaccine 2	Due				
Vaccine 3	Upcoming				
Vaccine 4	Upcoming				
Vaccine 5	Upcoming				
Vaccine 6	Upcoming				
Vaccine 7	Upcoming				

Enhance point-of-care interactions using the EHR

Functionality: Alerts

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Example 2: Using Clinical Decision Support to Remind the HCP of Due or Past Due Vaccines During the Visit

- HCPs can create CDS alerts to prompt the physician and clinical staff of vaccines which are due or overdue during a patient visit.

Example

Health Reminders		All ▼		Health Reminders		
Counsel for Nutrition Weight Assessment & Counseling NQF	Overdue Next 10/09/09	Health Reminders				
Anticipatory Guidance for Sp... Male 11-15 years	Overdue Next 09/24/15	Care Guidelines: Primary Care Adult Medicine ▼				
Assess BMI Percentile Weight Assessment & Counseling NQF	Overdue Next 09/24/15	<input type="checkbox"/> Work Pane <input type="checkbox"/> Show Guidelines <input type="checkbox"/> Due Only				
Counsel on Physical Activity Weight Assessment & Counseling NQF	Overdue Next 09/24/15	Tier / Reminder	Frequency	Status / Guidelines	Recommend / Last Recorded	Comments
Annual Preventative Visit Male 11-15 years	Due Next 09/24/15	2 Counsel for Nutrition	qyear	Overdue Weight Assessment & Counseling NQF	10/09/2009 10/09/2008	
Td Booster Male 11-15 years	Next 09/21/15	2 Anticipatory Guidance for Sports Safety	qyear	Overdue Male 11-15 years	09/24/2015 09/24/2014	
		2 Assess BMI Percentile	qyear	Overdue Weight Assessment & Counseling NQF	09/24/2015 09/24/2014	
		2 Counsel on Physical Activity	qyear	Overdue Weight Assessment & Counseling NQF	09/24/2015 09/24/2014	
		2 Annual Preventative Visit	qyear	Due Male 11-15 years	09/24/2015 09/24/2014	
		2 Td Booster	q10 year	Current Male 11-15 years	09/21/2015 09/24/2014	

Example 3: Using Order Sets to Ensure a Thorough Care Plan

Order Sets can include a complete menu of options for easy selection, and provide “at-hand” efficiency for the HCP.

- Orders for vaccines, follow-up appointments for next in series, and patient education materials can be included in the order set.
- Order sets promote consistency and patient engagement by facilitating discussion about the importance of all steps of the patient care plan.

Updating Order Sets to be thorough and current

- Review order sets on a regular basis to ensure that they include the most recent recommendations.
- They also may be updated to include return visit orders and patient education materials.

Example

Plans	Schedule	Legend
Childhood Immunizations 0-18 Years	<input type="checkbox"/>	Overdue Due On Due Soon Postponed
Childhood Immunizations 0-6 Years	<input type="checkbox"/>	
Adult Immunizations 18- 64 Years	<input type="checkbox"/>	
Adult Immunizations 65+ Years	<input type="checkbox"/>	

Override Type Abbreviations

Done	Done
Declined	Declined
(N/S)	Reason not specified

Enhance point-of-care interactions using the EHR

Functionality: Documentation Templates

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Using Documentation Templates

- Defining Documentation Templates to enhance the documenting process, enabling check-out processes to include all of the patient instructions in a timely manner.

Example

Draft	Search	Outline	Preview		
First Annual/Subsequent Wellness	PE	Medical/Social History	Test/Consults/Vaccines	Assessment	Plan
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p>Vaccinations</p> <p><input type="checkbox"/> Y administered Influenza Vaccine</p> <p><input type="checkbox"/> Y administered Tdap Vaccine</p> <p><input type="checkbox"/> Y administered Td Vaccine</p> </div> <div style="width: 50%;"> <p>Colorectal Screening</p> <p><input type="checkbox"/> Y ordered Fecal Analysis - Occult Blood</p> <p><input type="checkbox"/> Y ordered Fiberoptic Sigmoidoscopy</p> <p><input type="checkbox"/> Y ordered Complete Colonoscopy</p> </div> <div style="width: 50%;"> <p>Labs</p> <p><input type="checkbox"/> Y ordered Blood Counts - CBC</p> <p><input type="checkbox"/> Y ordered Lipids Test Panel</p> <p><input type="checkbox"/> Y ordered Basic Metabolic Chem Panel</p> <p><input type="checkbox"/> Y ordered Comp Chem Panel</p> <p><input type="checkbox"/> Y ordered Blood Glucose - Fasting</p> </div> <div style="width: 50%;"> <p>Other Tests/Consults</p> <p><input type="checkbox"/> Y ordered Mammogram</p> <p><input type="checkbox"/> Y ordered Bone Density Studies</p> <p><input type="checkbox"/> Y Glaucoma Screening</p> <p><input type="checkbox"/> Y Consultation With A Nutritionist</p> <p><input type="checkbox"/> Y Electrocardiogram</p> </div> </div>					