Optimizing Cancer Screening using your EMR

A Case Study using OSCAR EMR

Urslin Fevrier-Thomas





Presenter Disclosures

- Presenter:
 - Urslin Fevrier-Thomas
- Relationship with Commercial Interests:
 - NONE
- Disclosure of Commercial Support:
 - NONE
- Mitigating Potential Bias:
 - The content of this presentation has been reviewed by a family physician to ensure that it remains unbiased and has no commercial representation



Learning Objectives and Agenda

Objectives:

To optimize OSCAR EMR for proper documentation

To identify patients due for cancer screening

- Breast
- Cervical
- Colorectal

Agenda:

- Getting Started
- Data Standardization
 and Documentation
- Reporting
- Screening Activity Report (SAR)
- Getting More Involved
- Summary



About this Presentation

Cancer Screening Recommendations

- Provincial Cancer Screening Guidelines
- Primary Care
- OSCAR EMR
- Breast, Cervical, Colorectal cancers



Getting Started

Early detection and treatment

- Education
- Screening
- Accurate and Timely information

Information Technology

Enables proactive Primary Care





Getting Started

- Why is this important?
- Up-to-date OSCAR EMR
- Access to
 - Demographic Report Tool
 - Ontario Prevention Report
- Contact your OSCAR Service Provider (OSP)

DATA STANDARDS

Data entered into consistent fields

Consistent terminology used

Adopted by everyone using the EMR

Enables the creation of meaningful reports





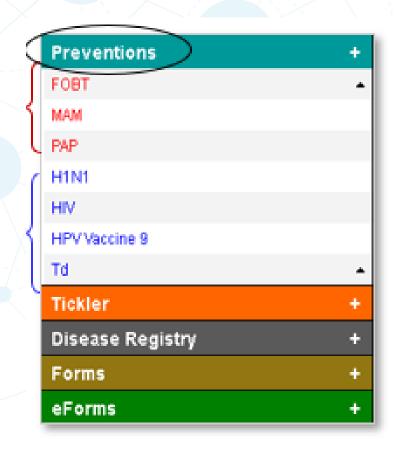
About Cancer in Ontario

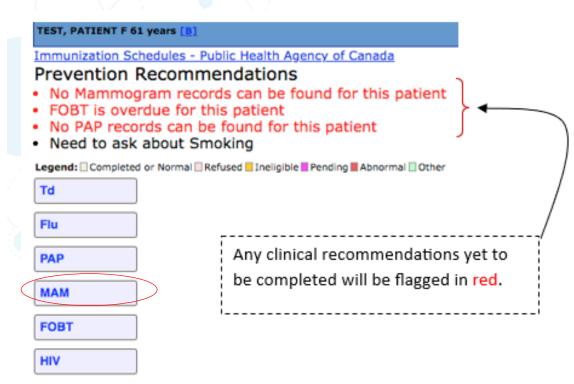
- 1 in 2 people will get cancer in their lifetime
 - 1 in 4 will die from cancer
- Lung cancer most common cause of cancer-related death
- Breast cancer most commonly diagnosed cancer in women
- Colorectal cancer ranks #2 in incidence in men
- Up to 80,000 abnormal PAP tests require assessment each year
- Almost 15,000 patients in Ontario have a positive FOBT but no record of a colonoscopy
- Almost 3,000 patients with early treatable (colorectal) disease requiring follow-up



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Data Standardization & Documentation Using the Preventions Module



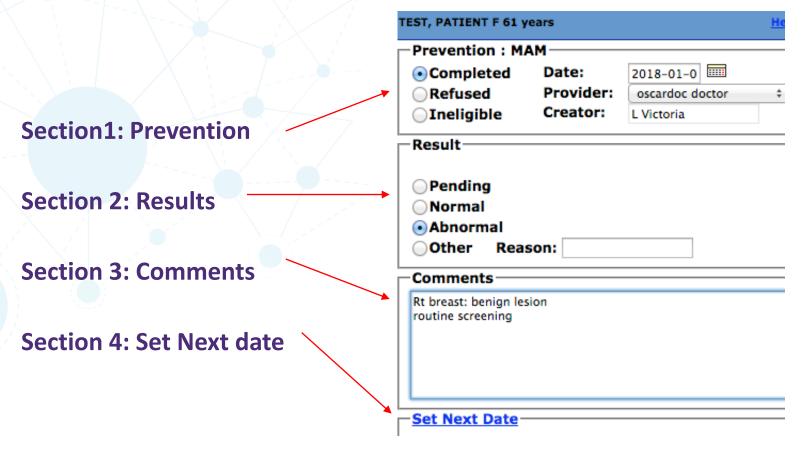




Data Standardization & Documentation Using the Preventions Module

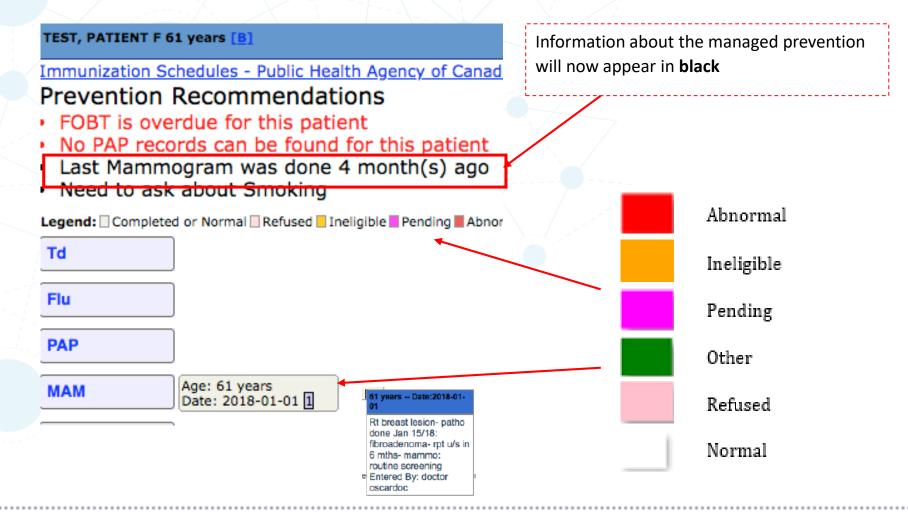
Provincial Cancer Screening Guidelines:

- MAM & FOBT every 2 years
- PAP every 3 years
- Colonoscopy every 10 years





Data Standardization & Documentation Using the Preventions Module







Data Standardization & Documentation Breast Cancer Screening

Mammogram

MAM - Preventions Module

Breast MRI

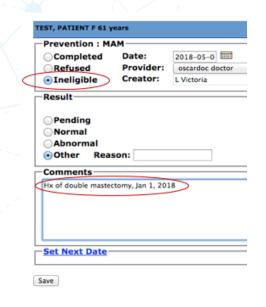
Breast MRI - Preventions Module

History of Double Mastectomy

- MAM Preventions Module Ineligible
- Medical History eChart
- Tickler set reminder for next screening

History of Breast Cancer

- MAM Preventions Module Ineligible
- Disease registry 174
- Tickler set reminder for next screening











Data Standardization & Documentation

Breast Cancer Screening

High-Risk Criteria

- Carrier or First-Degree Relative of a Deleterious Gene Mutation Carrier
- Determined to be at >25% Lifetime
 Risk of Breast Cancer
- Received chest radiation before the age 30
- Part of the OBSP high risk program

Abnormal Findings

MAM - Preventions Module

- MAM Preventions Module
- Medical History eChart
- Tickler set reminder for next
 screening

Exclusions

MAM - Preventions Module

Remember to add the details in the **Comments** section



Data Standardization & Documentation

Cervical Cancer Screening

PAP

PAP - Preventions Module

HPV

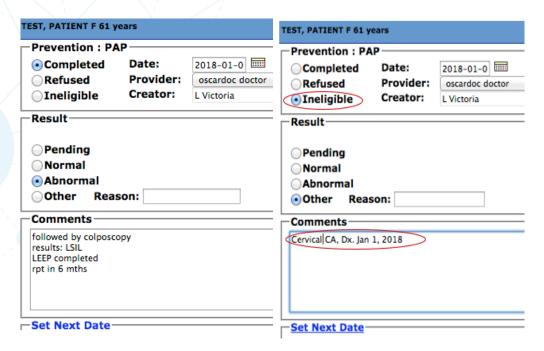
- HPV Swab Preventions Module
- Medical History eChart
- Tickler set reminder for next screening

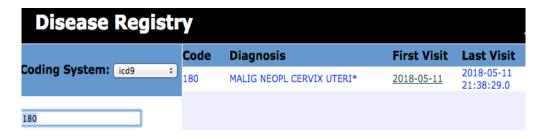
Colposcopy

- PAP Preventions Module
- Tickler set reminder for next screening

History of Cervical Cancer

- PAP Preventions Module Ineligible
- Disease registry 180
- Tickler set reminder for next screening









Data Standardization & Documentation Cervical Cancer Screening

High-Risk Criteria

- History of dysplasia
- Immunodeficiency
- Cervical Cancer
- HPV positive

- PAP Preventions Module
- Medical History eChart
- Tickler set reminder for next screening

Abnormal Findings

PAP - Preventions Module

Exclusions

PAP - Preventions Module

Remember to add the details in the **Comments** section



Data Standardization & Documentation

Colorectal Cancer Screening

FOBT

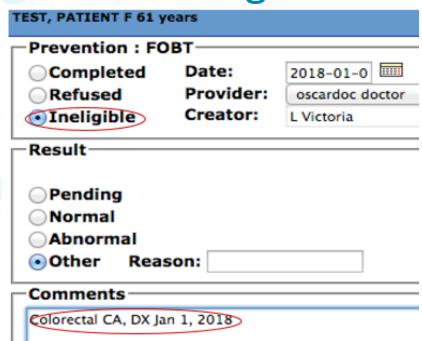
FOBT - Preventions Module

Colonoscopy

COLONOSCOPY - Preventions Module

History of Colorectal Cancer

- FOBT Preventions Module Ineligible
- Disease registry 153
- Tickler set reminder for next screening



Disease Regis	try			TESTL
Coding System: icd9	Code	Diagnosis	First Visit	Last Visit
153	153	MALIGNANT NEOPLASM COLON*	2018-05-18	2018-05-18 09:36:06.0





Data Standardization & Documentation Colorectal Cancer Screening

High-Risk Criteria

- First-degree relative with history of Colorectal Cancer
- Inflammatory Bowel Disease
- Familial Polyposis
- Current or previous abnormal results (e.g. tubular adenoma, dysplastic polyp)

- COLONOSCOPY Preventions Module
- Medical History eChart
- Tickler set reminder for next
 screening

Abnormal Findings

COLONOSCOPY - Preventions Module

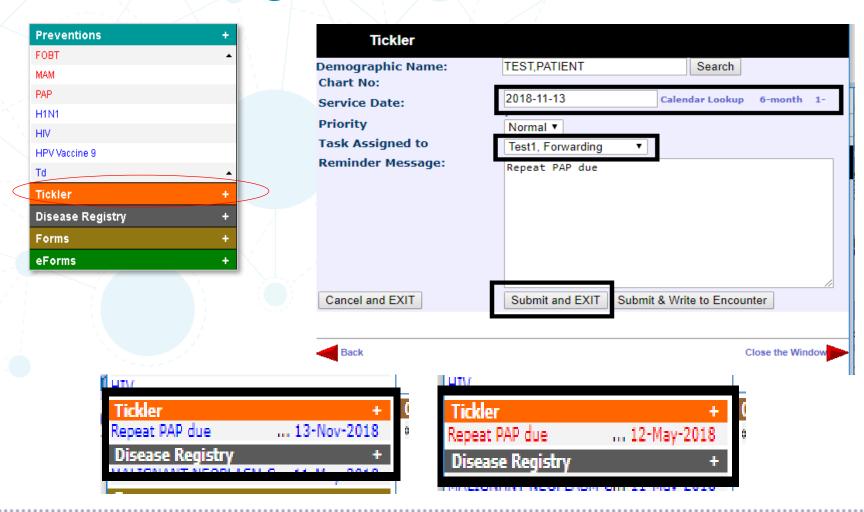
Exclusions

COLONOSCOPY - Preventions Module

Remember to add the details in the **Comments** section



Data Standardization & Documentation Using the Tickler Module



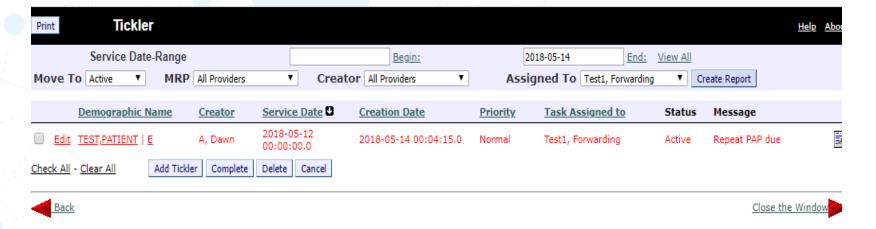




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Data Standardization & Documentation Using the Tickler Module







7

Reporting Ontario Prevention Report

- Track Prevention Progress
- Calculate Prevention Bonus

Create Templates (Patient sets)

- each physician
- each type of screening







Reporting Demographic Report Tool

Schedule Caseload Resources Search Report Billing In

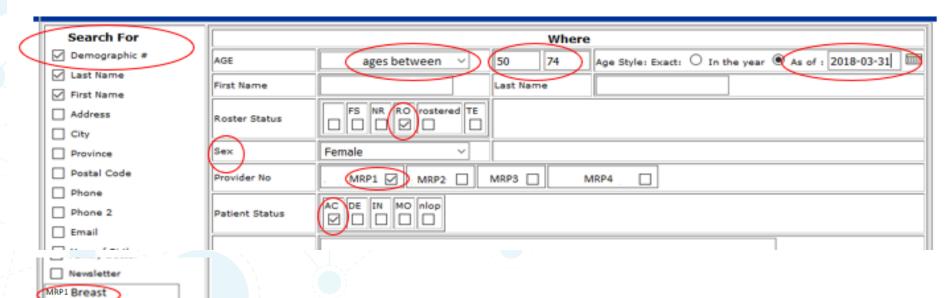
RE	PORT LIST				
1 2 3	EDB List 05 Active Patient List Day Sheet	From 2018-5-18	~	To 2018-5-18	
	*All appointments Non Rostered Only □	From 2018-5-18		To 2018-5-18	8
	*Print Day Sheet for only new appointments	2018-5-18 ~			
1	*Lab Day Sheet	2018-5-18 ~			
- 3	*Billing Day Sheet	2018-5-18 ~			
4	Tabular-style Daysheet	2018-5-18			
5	Bad Appt Sheet	1 1 1 2	V	2018-5-18 ~	
6	Patient Chart List	3	~		
7	Old Patient List	La contraction of	~	age >	
8	No Show Appointment List		~	Start Date:	- Inn
9	Consultation Report				
10	Laboratory Requisition Report				
11	Demographic Report Tool				
12	Demographic Set Edit				
13	Ontario Prevention Report				
14	Demographic Study List				
15	Chronic Disease Management				





7

Reporting Demographic Report Tool



- MRP1 Breast
- MRP1 Cervix
- MRP1 Colon

#OMDESC18

- MRP1 MAM
- MRP1 PAP
- MRP1 FOBT

Save Query

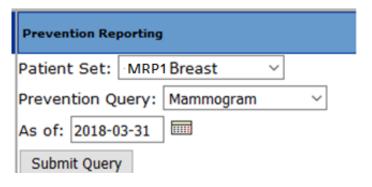
Run Query



Reporting Ontario Prevention Report

Sc	hed	dule	Case	load	R <u>e</u> so	ources	<u>S</u> e	arch	Repo	ort) !	<u>B</u> illing	<u>I</u> n
	DE	PORT	TILET									
	KL	PORT	LIST									
	1	FDB	List 05				From	2018-5-18			To 2018-5	-1
	2		ve Patie					2010 5 10			2010 5	-
	3		Sheet	10 2150			-			~		
	Γ		appoint	ments			_					
			on Roste				From	2018-5-18			To 2018-5	-1
			nt Day S			new	2040 5	- 10				
			ointmen		,		2018-5	5-18 ×				
			Day She				2018-5	5-18 ~				
		*Billir	ng Day 9	Sheet			2018-5	5-18 ~				
	4	Tabu	ılar-styl	e Days	sheet		2018-5-1	18				
	5	Bad	Appt Sh	eet						~	2018-5-1	8
	6	Patie	ent Char	t List			١			~		
	7		Patient				1			~	age >	
	8		Show Ap			st				~	Start Da	at
	9		sultation									
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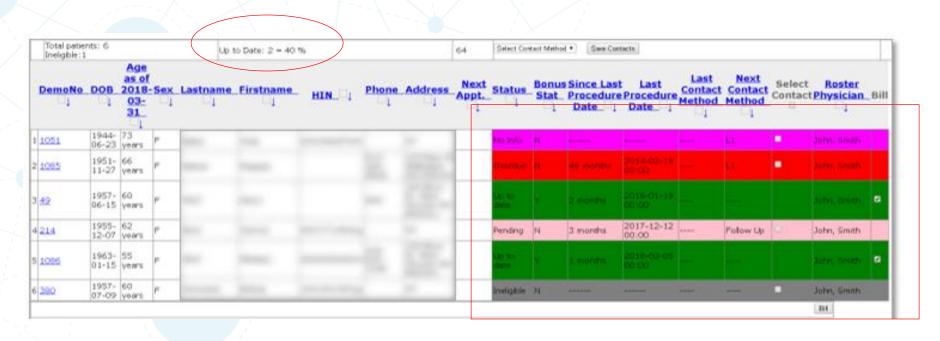
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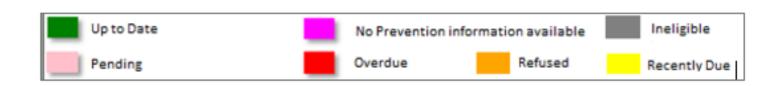




Reporting

Ontario Prevention Report





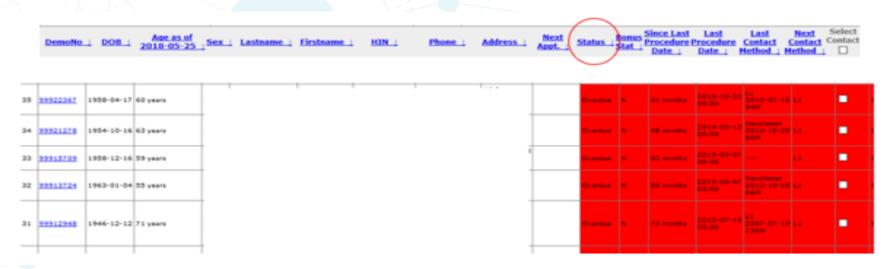




Reporting Ontario Prevention Report

Sort by Status

List patients in various categories (e.g. those who are overdue)



NOTE:

 Due - will not account for manual input using the Set Next Date in the Preventions module





Screening Activity Report (SAR)

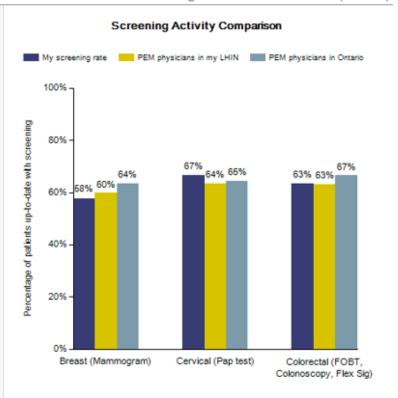
Screening Activity Report (SAR) as of 31-Dec-2016

Go to Summary

Dashboard Physician: DOCTOR SAR CPSO: 000000

LHIN: Hamilton Niagara Haldimand Brant (HNHB)

Physician Level Summary	<u>Breast</u>	Cervical	Colorectal
	Screening	Screening	Screening
Total eligible individuals	265	588	397
Total excluded individuals (due to previous cancer, surgery, or OBSP high	13	53	2
Action required	114	201	149
Abnormal screen, follow-up needed	0	<u>6</u>	2
Invalid result, retest required	NΙΑ	0	2
Overdue for screening	114	<u>195</u>	145
Due for screening ≤ 6 months	48	45	20
Physician review required	13	<u>50</u>	146
Colonoscopy in the last 10 years or Flexible Sigmoidoscopy in the last 5 years	N⊮A	N⊮A	141
Review patient history	<u>5</u>	<u>45</u>	0
Abnormal screen, follow-up underway or completed	<u>8</u>	<u>5</u>	<u>5</u>
No screening action required: normal screen	90	292	82



Note: Data is reported as of the cut-off date. Recent screening and assessment activities may not be included due to data lag.



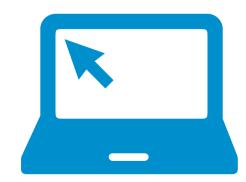


SAR – Common Uses

- Bring your EMR up to date
- Keep your EMR up to date by sorting monthly for recent screens
- Find patients who have screened positive and have had no follow-up
- Update screening data for new patients
- Not using EMR? The SAR can be used for point of care for screening.
- Audit practise to find & contact overdue patients ("triple reds")

#OMDFSC18

• Calculate your preventive care bonus







SAR – Screening Summary

Enrolled Patients Screening Summary as of 31-Dec-2017

Go to Dashboard

Physician: DOCTOR SAR CPSO: 000000

	Pa	atient Informa	ation					Scre	ening Status			
						В	reast	C	ervical	Colorectal		
Surname	Given Name	HIN	Date of Birt	Age	Sex	Eligible	Status 🖵	Eligible	Status	Eligible _	Status 🕌	
Surname 1	Given Name 1	HIN 1000			F	N		Υ	Normal	N		
Surname 2	Given Name 2	HIN 1001			F	N		Y	Review	N		
Surname 3	Given Name 3	HIN 1002			F	Υ	Action	Y	Review	Υ	Review	
Surname 4	Given Name 4	HIN 1003			М	N		N		Y	Action	
Surname 5	Given Name 5	HIN 1004			F	Υ	Action	Y	Normal	Υ	Action	
Surname 6	Given Name 6	HIN 1005			М	N		N		Υ	Action	
Surname 7	Given Name 7	HIN 1006			F	N		Y	Review	N		
Surname 8	Given Name 8	HIN 1007			М	N		N		Y	Normal	

Breast: Enrolled Patients 50-74

Go to Dashboard

As of 31-Dec-2017

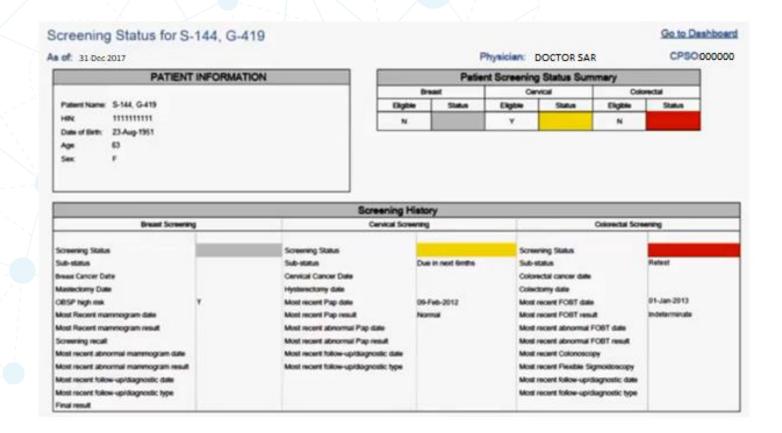
	Patient Information			Screening Status		Excl	Exclusions OBSP High Risk		Most Recent Mammogram	•				Most Rece	nt Follow-up/[Activity	Diagnostic
Surname	Given Name	HIN	Age	Status	Sub-Status	Breast Cancer (Date)	Mastectomy (Date)		Date	Result	Screening Recall	Date	Result	Date	Туре	Final Result
Surname 1	Given Name 1	HIN 4000			Overdue				18-Nov-12	Abnormal	Return 2 Yr	01-Nov-12	Abnormal	30-Jul-14	Breast Ultrasound	Benign
Surname 2	Given Name 2	HIN 4001			Overdue											
Surname 3	Given Name 3	HIN 4002			Normal screen				7-Oct-15	Normal	Return 2 Yr					
Surname 4	Given Name 4	HIN 4003			Overdue											
Surname 5	Given Name 5	HIN 4004			Overdue											





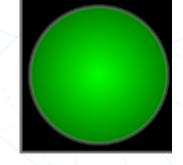
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SAR – Screening Summary





SAR – Know the Colours



GREEN

NO ACTION REQUIRED



YELLOW

REVIEW REQUIRED



RED

ACTION REQUIRED

Screening Activity Report (SAR) as of 31-Dec-20

Dashboard

Physician Level Summary	Breast	Cervical	Colorectal
	Screening	Screening	Screening
Total eligible individuals	<u>265</u>	<u>588</u>	397
Total excluded individuals (due to previous cancer, surgery, or OBSP high	13	53	2
Action required	114	201	149
Abnormal screen, follow-up needed	0	6	2
Invalid result, retest required	NA	<u>0</u>	2_
Overdue for screening	114	<u>195</u>	145
Due for screening ≤ 6 months			20
Dae for Screening 2 o mondis	<u>48</u>	<u>45</u>	20
Physician review required	13	50	146
Colonoscopy in the last 10 years or Flexible Sigmoidoscopy in the last 5 years	NA	NIA	141
Review patient history	<u>5</u>	<u>45</u>	<u>0</u>
Abnormal screen, follow-up underway or completed	8_	<u>5</u>	<u>5</u>
No screening action required; normal			
screen screen	<u>90</u>	292	<u>82</u>

Note: Data is reported as of the cut-off date. Recent screening and assessment activities may not be included due to data lag.

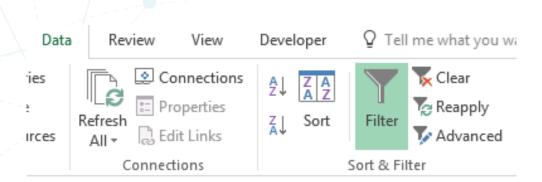




2

SAR – Triple Reds Filtering in Excel

Action required
Abnormal screen, follow-up needed
Invalid result, retest required
Overdue for screening



	Pa	itient Inform	ation			Screening Status								
						В	reast	C	ervical	Colorectal				
Surname	Given Name	HIN	Date of Bir	Ag€	Sex	Eligible	Status 🦨	Eligible	Status 🚚	Eligible	Status 🚜			
Surname 14	Given Name 14	HIN 1013			F	Υ	Action	Υ	Action	Υ	Action			
Surname 15	Given Name 15	HIN 1014			F	Υ	Action	Υ	Action	Υ	Action			
Surname 20	Given Name 20	HIN 1019			F	Υ	Action	Υ	Action	Υ	Action			
Surname 52	Given Name 52	HIN 1051			F	Υ	Action	Υ	Action	Υ	Action			
Surname 89	Given Name 89	HIN 1088			F	Υ	Action	Υ	Action	Υ	Action			
Surname 91	Given Name 91	HIN 1090			F	Υ	Action	Υ	Action	Υ	Action			
Surname 316	Given Name 316	HIN 1315			F	Υ	Action	Υ	Action	Υ	Action			
Surname 326	Given Name 326	HIN 1325			F	Υ	Action	Υ	Action	Υ	Action			





SAR - No Follow-Up

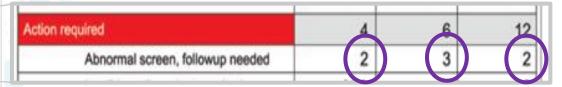
Screening Activity Report (SAR) as of 30-Nov-2013 Dashboard Go to Summary

Physician: HG-308 HS-22

CPSO: 790822

LHIN: North Simcoe Muskoka

Physician Level Summary	Breast Screening	Cervical Screening	Colorectal Screening			Screening	Activity Compari	son
Total eligible inidviduals	13	14	23		My screen	ing rate PEM p	nysicians in my LHIN	PEM physicians in Ontario
Total excluded inviduals (due to previous cancer, surgery or OBSP high risk)	8	4	3		100%			
Action required	4	6	12	screening			700	
Abnormal screen, followup needed	2	3	2	ocue	80%		79%	
invalia results, retest requirea	N/A	1	Z	with	89	19/		
Overdue for screening	2	2	8	date w	60%	60% 60%	57% 59%	57%
Due for screening ≤ 6 months	2	2	2	-ot-dn	0070			
Physician review required	4	5	7	stients	40%			41%
Colonoscopy in the last 10 years or Flexible Sigmoidoscopy in the last 5 years	N/A	N/A	3	Percentage of patients up-to-date	20%		•	
Review patient history	2	3	3	Proer	20%			
Abnormal screen, followup underway or completed	2	2	2	Ā	0%			
			-			st (Mammogram)	Cervical (Pap test)	Colorectal (FOBT,
No screening action required: normal screen	2	1	2					Colonoscopy, Flex Si



Note: Data is reported as of the cut-off date. Recent screening and assessment activities may not be included due to date lag.



SAR vs EMR



- Patients' Roster Status
- PAP results done elsewhere
- **Misplaced** results may have not come to your office, forgot to input into EMR, etc.
- Provincial & Regional comparative data



- BREAST Double mastectomies, cancer history (date delay), results for non-OBSP screens
- CERVICAL Sexual activity status, some hysterectomies, colposcopy pap results
- **COLORECTAL** Colonoscopy results, colectomies, family history, high risk status
- Identification of Palliative patients
- Identification of patients who have declined screening
- Exclusions and high risk information





SAR - FAQ

Where does the information come from?

Patients' enrolment status; Cancer Care Ontario's organized screening programs (OBSP, OCSP, CCC);
 OHIP billing codes; Ontario Cancer Registry

Can I change a status, or remove a patient from my SAR?

• It is <u>not possible</u> for a physician to manually change a status in the SAR. The status will only change when new information is received (i.e. OHIP codes)

How can I track my non-rostered patients' results?

• <u>OBSP</u>: contact your local OBSP site; <u>OCSP</u>: Cytobase; <u>CCC</u>: no database (SAR is an available tool to track these patients)

Will the SAR show me screens that I didn't do myself?

• **Yes**! If a patient has an OBSP mammogram, an out-patient pap test, a CCC FOBT or colonoscopy, screens will be populated in your SAR (*ie. female students who go away for post-secondary education and have a pap test, the result will be appear in your SAR*).





Getting More Involved Unattached Follow-up

Sign-up to take on take on unattached patients

- Requiring follow-up after an abnormal FOBT result
- At high risk for colorectal cancer requiring a colonoscopy

CCO's Contact Centre

- Patient Registration Form / Patient Attachment
- Appropriate provider by geography

Selected Providers

- Obligation to complete follow-up
- Can be removed from the Contact Centre list at any time





Getting More Involved Physician-Linked Correspondence

- PEM physician name included in screening letters sent by CCO to rostered patients
 - Motivate patients to get screened
 - Colorectal cancer screening

- Complete Physician-Linked Correspondence Consent form
 - CCO Website
 - Fax, email, mail





Summary

Preventions

- **Abnormal findings**
- **High Risk Patients**
 - PAP dysplasia/colposcopy, HIV positive, HPV positive, cervical cancer
 - o COLONOSCOPY positive etails in Comments cancer history of colorectal cancer, current or previous abnormal results (e.g. tubular adenoma, dysplastic polyp)
 - MAM BRACA, chest radiation, >25% lifetime risk, OBSP high risk program

- **Exclusions**
 - PAP total hysterectomy, not sexually active
 - FOBT Positive family history, requires colonoscopy, colectomy,
 - MAM prophylactic double mastectomy, breast cancer
- Set Next Date manual input
 - Repeat screening
 - Outside normal guidelines





Summary

Provincial Cancer Screening Guidelines

- MAM & FOBT every 2 years
- PAP every 3 years
- Colonoscopy every 10 years

Ticklers

Set reminders

Registry

- Breast, colorectal or cervical cancer
- Exclude them from screening

Medical History (eChart)

- High-risk
- History of cancer
- Other





Summary

OSCAR Service Provider (OSP)

- HPV Swab
- Breast MRI

Bonus calculations

- Ontario Prevention Report
- Roster list keep updated
- Exclude in Preventions if needed

Screening Activity Report (SAR)

Help keep your EMR up-to-date

Unattached Follow-up

Abnormal FOBT- unattached patients

Physician-Linked Correspondence

Encourage screening in patients











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