

Planned Care, Population Management, & Data Management

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Informatics Philosophy & Core Functions

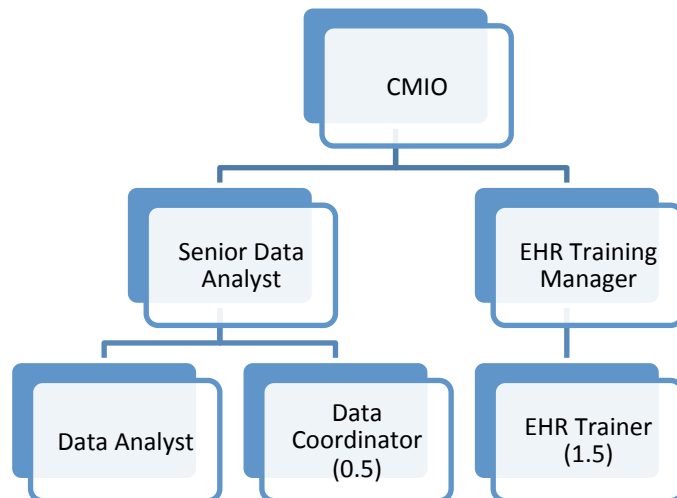


Core functions:

- EHR optimization
 - training
 - customization
- Data Analysis for Clinical and Operational data
- Other duties as assigned:
 - telemedicine
 - innovative tech
 - Equipment

Philosophy:

- Maximize the use of our technology
- Make sure that people are doing the work that requires human interaction



Population Health Structural Cornerstones



1. Huddle
2. Recall
3. Time dedicated to management of chronic illness
4. Identifying populations for services to improve health
 - Hepatitis C treatment
 - Behavioral Health and Addiction
 - Nutrition
 - Health education
 - Case Management & Navigation
 - Shared medical visits, wellness services

Huddle

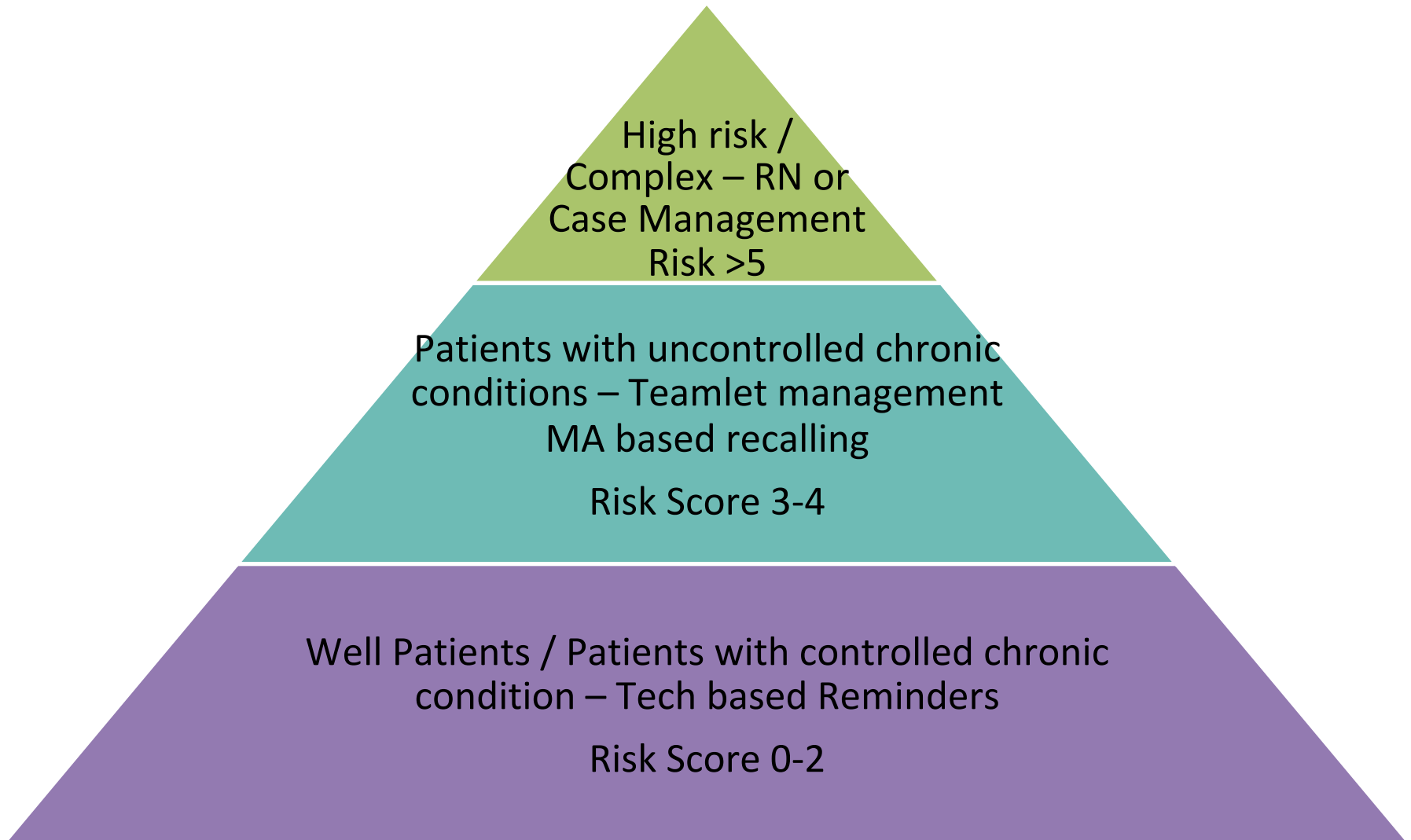
The purpose of the huddle is to systematically review patients' charts in order to prepare for patient visits.

[\(How to huddle wiki\)](#)

Components of a hearty huddle:

	Provider	MA
1. Clinical review	Talks through the clinical review	Types notes in chief complaints field
1. Visit Planning – Relevant (alerts in eCW for same day appts only)	Makes decision on what will be done today. <u>Types notes</u> in chief complaints field	Reads (Talks) complete lists of alerts to provider.
1. Merge Templates	Recommends templates to be merged	Merges templates as instructed or by protocol.
1. Anticipate needs from other team members	Discuss and anticipated patient needs with MA, Flow-coordinator and RN	Discuss and anticipated patient needs with MA, Flow-coordinator and RN, NOTES any anticipated needs in chief complaints field

Recalls

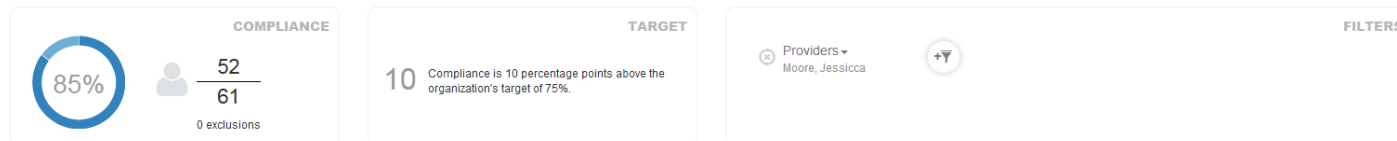


	Registry Recalls (Manual from eCW)	eCW Campaigns (AutomatedRecalls)	Outbound Phone Calls (by Staff)
Chronic Conditions	Hypertension—Not Seen in the Last 6 Months Quarterly	Hypertension—BP not controlled at last Office Visit Quarterly	Hypertension—Team recalls for last BP not controlled (every 2 mo)
	Diabetes—not seen in the last 3 months Every 2 mo	Diabetes—no A1c in the last 12 months	Diabetes—Team recalls for A1c >9 (every 2 mo), QIP recalls for eye exams & nephropathy screening
	Heart Disease—not seen in the last 6 months Quarterly		UDS Recalls for CAD/IVD on an aspirin (Annually)
	Asthma—not seen in the last 6 months Every 2 mo		Coumadin—Team patients with last INR out of range or overdue (Ongoing)
	COPD—not seen in the last 6 months Quarterly		QIP—Monitoring Persistent Medications (pts tak- ing ACE/ARB/Diuretic and are due for CMP)
Pediatrics		Well Child, 2-18 years—not seen in the last 1 year QIP Custom Campaign—3-6 years due for WCC	
	Well Child, 2-20mo—not seen in the last 3 months Monthly	Well Child Reminders, 2, 4, 6, 9, 12,15,18 mo Reminds 1 mo before	QIP—3-6 years due for a Well Child Check
Cancer Screenings & Wellness Exams	Cervical CA Screening—45-64 years with no pap in the last 3 years (Quarterly)	Cervical CA Screening—21-45 years with no pap in the last 3 years	QIP—Patients due for a pap smear
		Breast CA/Well Woman Exam—50-69 years with no mammo in the last 2 years	Medicare Annual Wellness Exam
	Colorectal Test Reminder—insure test ordered in the last 3 weeks but not returned (Weekly)	Colorectal CA Custom Campaing—pts 50-75 with an insure test in the past and now due	Colorectal CA—pts 50-75 years with no insure test in the last 1 year (Ongoing MA recalls)
IZs		Flu Shots Available (6mo and up)	2-23 months, overdue for a Dtap
		Proposed: 6mo-8 years, 2nd flu shot due	16-23 months, overdue for any childhood vaccines

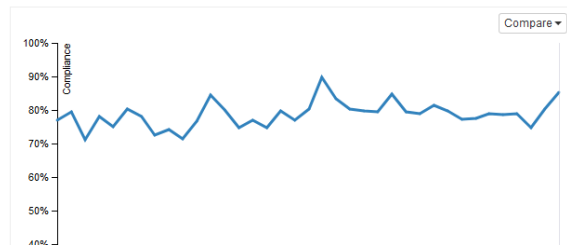
Team Time – 45 min/month

INCENTIVE - Hypertension Control ⓘ

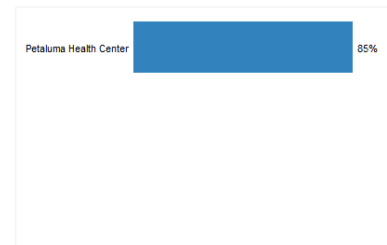
Measurement period: August 1, 2017—July 31, 2018



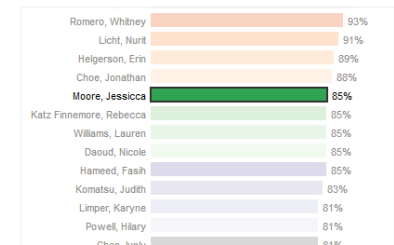
Compliance trend



Compliance by Location



Compliance by Provider



Measure Results

All Patients Compliant Patients **Non-Compliant Patients** Excluded Patients

Displaying 9 of 9 results

Export ▾

Search

Measure ↓	Start Date	End Date	Patient Name	MRN	Risk Score	DOB	Provider Name	Location	Msmt Value	Numerator	
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Alicia Lopez, MD	1000001	3.0	10/10/1978	Moore, Jessica	Petaluma Health Center	144/80	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Daniel Antonio	1000002	4.0	10/10/1978	Moore, Jessica	Petaluma Health Center	145/72	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Rafael Lopez	1000003	3.0	10/10/1978	Moore, Jessica	Petaluma Health Center	140/81	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Martha Gonzalez, RN	1000004	5.0	10/10/1978	Moore, Jessica	Petaluma Health Center	140/72	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Maria Martinez	1000005	1.0	10/10/1978	Moore, Jessica	Petaluma Health Center	152/93	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Jonathan, Kevin	1000006	4.5	10/10/1978	Moore, Jessica	Petaluma Health Center	160/87	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Sally Roberts	1000007	5.0	10/10/1978	Moore, Jessica	Petaluma Health Center	153/96	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	David Martinez	1000008	2.5	10/10/1978	Moore, Jessica	Petaluma Health Center	132/90	N	ⓘ
INCENTIVE - Hypertension Control	08/01/2017	07/31/2018	Charles Kim	1000009	2.0	10/10/1978	Moore, Jessica	Petaluma Health Center	141/83	N	ⓘ

Risk Stratification & Risk Scores



Running lists of patients for interventions

- Behavioral health
- Care Management
- Team nurse visits
- Shared / Group visits

Care teams – see the number at huddle

Use alerts/visit planning to drive services for particular risk groups

Panel adjustment or staffing adjustment for high risk panels

Risk Model

- Influenced by AAFP and other risk models (like HCC conditions)
- Incorporates risks, chronic conditions, SDOH, medications, ED utilization, and admissions

Point Values:

- Risks = ½pt
- Chronic conditions = 1pt
- SDOH and utilization mixed

Risk Level”

- 0-2 points = Low Risk
- 3-4 points = Medium Risk
- >5 points = High Risk

Risks	Point Value	Fields	Fields
BMI >29	0.5	Vitals	BMI field
smoking	0.5	Struc Data	Social history
prediabetes	0.5	Dx	Group - prediabetes
high triglycerides	0.5	Dx	E78.1
arthritis	0.5	Dx	Group - Arthritis
chronic pain (no opiates)	0.5	Dx	G89.4
Hypertension	0.5	Dx	I10
Conditions	Point Value	Fields	Fields
CHF	1	Dx	Group - CHF
COPD	1	Dx	Group - COPD
DM	1	Dx	Group - DM
CAD	1	Dx	Group - CAD
PVD/PAD	1	Dx	Group - vascular disease
MH	1	Dx	Group - 2703 MH diagnosis
Addiction	1	Dx	Group - sub use dx
Chronic Pain	1	Dx	G89.29
Stroke	1	Dx	Group - stroke
Cognitive decline	1	Dx	group - cog decline
Chronic Stress/Trauma	1	Dx	group - trauma
ESLD/Cirrhosis	1	Dx	Group - Cirrhosis
Add on	Point Value	Fields	Fields
Homeless	1	demogr	Info scrn
no insurance	0.5	demogr	Info scrn
Disabled? Or Dual	1	demogr	Info scrn
on anticoagulation	1	med	group - anticoagulation and other anticoag
on benzos	0.5	med	group - benzodiazepines
ED use >2	1	st Joes	
Hospital admit >0	1	st Joes	
>9 meds	1	Med list	
>9 conditions	1	Prob list	
uncontrolled illness add on	0.5	Dx	group - uncontrolled
FLAG - NEEDED	Point Value	Fields	Fields
ESRD	flag	Dx	Group - ESRD
HIV	flag	Dx	Group - HIV
Cancer	flag	Dx	Group - Cancer
0 - 2 points	Green		
3-4 points	Yellow		
>5	Red		
unpointed	Grey		

Care Team Alerts



Yolanda Briscoe has 11 appointments on 09/14/2017

8:30 AM
RP Intake [Redacted] 53 years old MRN: 35785.1 PCG: Dalbir Khalsa
Risk Score: 6.0

Care Gaps

Due for Colorectal Cancer Screening
Recommended Intervention: Order Colonoscopy or Fit Kit Today

Due for Screening Vitamin D Level (Dx of Depression)
Recommended Intervention: Order Vitamin D Test

Quality Measure Warnings

Patients with CHF on ACE or ARB
Behavioral Health - PHQ-9 in Patients With Depression
QIP Colorectal Cancer Screening - Non Compliant List

9:00 AM
MH Intake [Redacted] 31 years old MRN: 192824 PCG: Iun-Iu Aileen Chen
Risk Score: 3.5

Care Gaps

Due for HIV Screening
Recommended Intervention: Order HIV Screening Lab

Not Web-Enabled
Recommended Intervention: Web Enable Patient Today

Due for Smoking Cessation Treatment
Recommended Intervention: Order RX Or Referral to SMV Smoking Cessation Group

Due for smoking cessation counseling
Recommended Intervention: Counsel patient to quit smoking (document in preventive medicine window)

Due for PRAPARE

Alert based on risk >3

Identifying Patients for Intervention



Reports: High-Risk Patients With An Appointment Today ⓘ

Description

A list of patients with an appointment today who have a risk score greater than or equal to 5.0.

▶ Run Report

Expected run time: 2.321 sec.

Results table

Petaluma Team 1

Petaluma Team 2

Petaluma Team 3

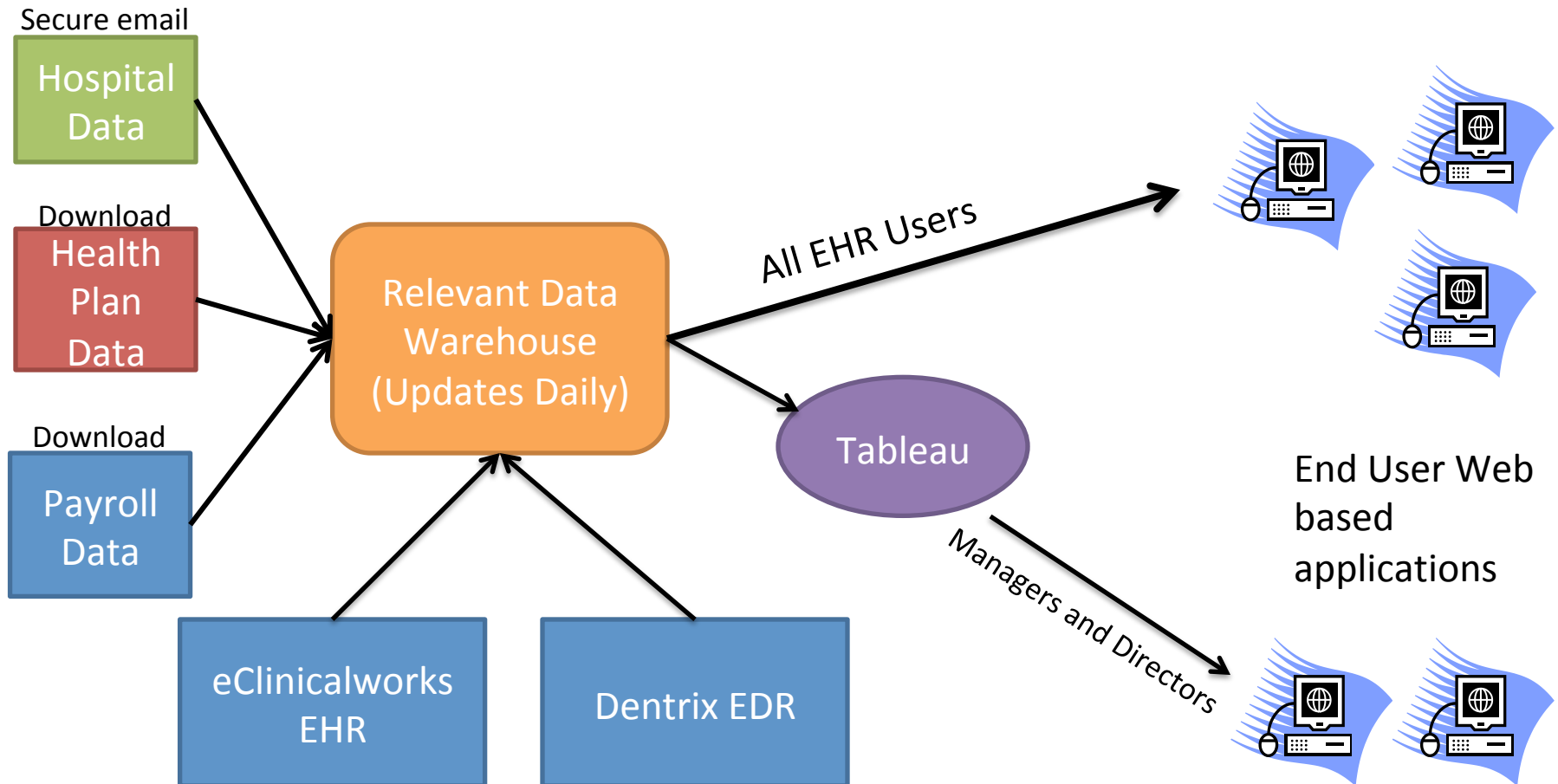
RP Team 1

RP Team 2

Petaluma Specialty & Women's Health +

starttime	patient	acctnum	visittype	resource	department	apptdate	riskscore	Totals
08:45:00	[REDACTED]	22027.1	OV	Pendleton	Petaluma Medical Team 1	2017-09-14	6.0	1
09:00:00	[REDACTED]	48759.1	OV	Hameed	Petaluma Medical Team 1	2017-09-14	7.0	1
09:15:00	[REDACTED]	2439.1	OV	Pendleton	Petaluma Medical Team 1	2017-09-14	8.0	1
09:45:00	[REDACTED]	111450	OV	Hameed	Petaluma Medical Team 1	2017-09-14	5.5	1
10:00:00	[REDACTED]	38209.1	OV	Pendleton	Petaluma Medical Team 1	2017-09-14	6.5	1
10:15:00	[REDACTED]	152386	OV	Pendleton	Petaluma Medical Team 1	2017-09-14	8.5	1
10:30:00	[REDACTED]	117161	OV	Hameed	Petaluma Medical Team 1	2017-09-14	9.0	1
11:00:00	[REDACTED]	112488	OV	Pendleton	Petaluma Medical Team 1	2017-09-14	5.5	1
	[REDACTED]	2099.1	OV	Chi	Petaluma Medical Team 1	2017-09-14	5.0	1
13:45:00	[REDACTED]	27033.1	ABS	Sandhu	Petaluma Medical Team 1	2017-09-14	5.0	1
	[REDACTED]		OV	Hameed	Petaluma Medical Team 1	2017-09-14	5.0	1
14:15:00	[REDACTED]	165822	ABS	Sandhu	Petaluma Medical Team 1	2017-09-14	5.5	1
16:00:00	[REDACTED]	116380	OV	Hameed	Petaluma Medical Team 1	2017-09-14	6.0	1
Totals								13

Data Mining



Data Quality



Training and Instruction

- Onboarding
- Connected to relevant
- 1:1 re-training

Monitoring

- Validation at build
- Continuous validation tool/discrepancy reporting tool

Validation and Discrepancy Tools



Measures: Adolescent HPV Vaccine

[Go to Report](#)[Validation](#)[Edit](#)

Required importers

Measure key ADOL HPV

Measure type process

Notes

Measure set(s) Pediatrics

Compliance target % 45

Show in Visit Planning No

Measure description Adolescents who have received recommended 2 doses of HPV vaccine by thirteen years of age.

Denominator description Patients who had a thirteenth birthday during the measurement period.

Numerator description Patients in the denominator who have received at least 2 doses of HPV vaccine by thirteen years of age.

Exclusion description Allergy to HPV vaccine or any component. Patients who are marked "deceased" or "inactive" in eClinicalworks.

Measure rationale Every year in the United States, HPV causes 30,700 cancers in men and women. HPV vaccination can prevent most of the cancers (about 28,000) from occurring.

Measure URL http://wiki.phc.local/phcwiki/index.php?title=Data_Capture_HPV_Vaccine

Measure developer AICP

Measure steward AICP

Last modified 2 months ago by Danielle Oryn

Last run 8/20/2018 (took 96 minutes, 38 seconds)

Data source Staging database

Generate sample of patients in the current measurement period's denominator
Generate sample of patients NOT in the current measurement period's denominator
[Read more about validation](#)

Measure Results

[All Patients](#)[Compliant Patients](#)[Non-Compliant Patients](#)[Excluded Patients](#)

Displaying 25 of 341 results

[Export](#)

Measure ↓	Start Date	End Date	Patient Name	MRN	Risk Score	DOB	Provider Name	Location	Msmmt Value	
Adolescent HPV Vaccine	09/01/2017	08/31/2018	Pat. Connick	[MRN]	0.0	[DOB]	Connick, Megan	Rohnert Park Health Center	Latest HPV: 05/09/2018	[Info]
Adolescent HPV Vaccine	09/01/2017	08/31/2018	Jillian Geissler	[MRN]	0.0	[DOB]	Geissler, Jillian	Rohnert Park Health Center	Missing: HPV (1/2)	[Info]
Adolescent HPV Vaccine	09/01/2017	08/31/2018	Carmen Butts	[MRN]	0.0	[DOB]	Butts, Carmen	Petaluma Health Center	Latest HPV: 05/09/2018 Y	[Info]
Adolescent HPV Vaccine	09/01/2017	08/31/2018	Dalbir Khalsa	[MRN]	0.0	[DOB]	Khalsa, Dalbir	Petaluma Health Center	Latest HPV: 01/31/2018 Y	[Info]
Adolescent HPV Vaccine	09/01/2017	08/31/2018	Erin Helgerson	[MRN]	0.0	[DOB]	Helgerson, Erin	Petaluma Health Center	Missing: HPV (1/2) N	[Info]

If anything about this data point is wrong, click here to report a discrepancy

Data Use Training



Onboarding

Regular team meetings

How-to guides on PHC wiki

Page Discussion

Read Edit View history More

Search phcwiki

Training - provider data use

Weekly:

Report and Link	Location	Suggested steps
Productivity	Relevant	Review FYTD visits compared to target for current and the year. If you are not at target for the current date, take steps to get closer to target (be available RN visits, add shifts, talk with team about scheduling & no show/late practices, etc.)

Monthly:

Report and Link	Location	Suggested steps
1) Provider Incentive 2017-2018 Measure Set	Relevant	Review drug screen measure and clean up problem list as needed for pts with acute pain only. Check in with your MA to see what recalls he/she has been working on. Request recalls on certain measures, as needed. For measures not meeting/progressing towards goals, P-D-S-A different team workflows to increase your rates. Talk to provider teams who have high performance on measures to ask about best practices.
2) Self Management Goals	Relevant	Check in with your MA, make sure you are using the huddle alert. Talk to provider/MA teams who have high performance on the measure and ask about best practices.
2) Immunizations	Relevant	Check in with your MA, make sure you are reviewing immunizations at huddle. Talk to provider/MA teams who have high performance on the measure and ask about best practices. use the reports in Relevant BEHIND on vaccines 21-24 months , BEHIND on vaccines 9-12 months , or BEHIND on vaccines 15-18 months
Billing and Documentation Errors	Excel document from your team director	Review your outstanding errors. Complete outstanding notes. Make sure to communicate to billing when you are done! Either MJelly or email.

Quarterly:

Report and Link	Location	Suggested steps
Panel Report	Tableau or from your Team Director	Review with team director
Continuity Report	Tableau or from your Team Director	Review with team director
Provider Report Card	Printed from your Team Director	Review with team director

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Data Request System



smartsheet

Data Request Form

Please use this form to request data or analysis. Requests are reviewed and prioritized twice / week by the informatics team. We will contact you with any questions. The more detailed of a request you provide the more likely that your request will be completed quickly. ON AVERAGE PLEASE EXPECT THAT REQUESTS WILL BE COMPLETED WITHIN 2 WEEKS.

If you are request duplicate the request will not be processed and we will assist you in locating the needed information.

Your Name *

Request Date *

Description of Request *

Please provide as detailed a request as possible. (Numerator, Denominator, where the data will come from in eCW or other application).

What will the data be used for? Please be as detailed as possible. *

I need help with measure definition? *

Requested Timeframe *

☐ Send me a copy of my responses

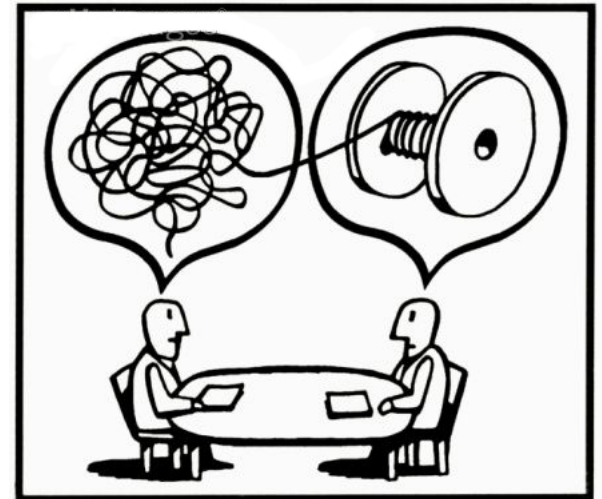
		Assigned to	Flag	Completed Date	Requester Name	Request Date	Description of Request	Requested Timeframe
			☆		Lauren Williams	08/31/18	Number of patients with diabetes per provider Number of patients with pre-diabetes per provider	1 Month
			☆		Alaina Cantor	08/16/18	Bright Heart Health monthly report. Please see email forwarded by Danielle and/or I can forward again email with two data requests (word and excel). We will need to generate data back to the beginning of the year and then moving forward on a monthly basis.	2 Weeks
			☆		Tiffany Jimenez	08/14/18	Please change Relevant Care Gap alert for Depression Screening to start at age 16 years. OK'd by DO. Please let us know when it's completed so we can notify staff.	2 Weeks
			☆		Tiffany Jimenez	08/14/18	Fix Behind on Vaccines relevant reports: 9-12 months, 12-17 months, 18-24 months.	1 Week
			☆		Tiffany Jimenez / Kir	08/13/18	Dental recall list: Kids 9 months-35 months with no appt in dental. Add column for Outside dental home (MA template in WCC, i'll send a screenshot).	1 Week
	Shaun		☆	08/20/18	Jessica Moore	08/10/18	I want to know how many patients who said they were unemployed looking for work (PRAPARE) had an appointment or a warm hand off with a navigator in the past 9 months. I don't know if you're able to look back to Sept-Oct 2017 to compare, but I realize we didn't get a baseline. I'm not sure how navigators document warm handoffs or if it is the same. Might try running it with the number of those patients who had a procedure referral to a navigator as well. I'll be out the 13th-19th, but would love to have this by the 20th when my call with Jim will take place :).	1 Week
			☆		Rachel Nichols	08/06/18	Request eBO report listing item keys from the following tables, with any associated description fields, flag fields, etc. asynccitemkeys dentalitemkeys nutrassess	2 Weeks

Management of Measures

Measures

Care Gaps

Reports



Relevant Data



Participants saw the
back-end of Petaluma's
Relevant system.

Drill Down View



Measure Results

Displaying 10 of 35 results

[Export](#)

Measure ↓	Start Date	End Date	Patient Name	MRN	Risk Score	DOB	Provider Name	Location	Msrmt Value	Numerator
CRCCANSCR	09/18/2016	09/17/2017	Munoz, Maria	16466.1	1.5	09/18/1940	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Bilgicman, Tamer	41386.1	2.5	04/27/1978	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Khan, Cheri	23094.1	1.0	08/01/1968	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Jung, Jonathan	20918.1	1.5	04/29/1984	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Farr, Brandon	6554.1	0.5	06/11/1993	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Hsu, Lisa	40128.1	6.5	09/14/1978	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Agarwal, Chandra	37170.1	1.5	04/24/1978	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Pardo-Garcia, Francisco	11372.1	4.5	08/01/1968	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Makarewicz, Linda	42904.1	0.0	06/11/1958	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N
CRCCANSCR	09/18/2016	09/17/2017	Harris, George	35602.1	4.0	06/11/1971	Choe, Jonathan	Rohnert Park Health Center	No Colo: No sig: No Fit	N



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