The Road to Population Health

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Population Health Management Department
Los Angeles County Department of Health Services

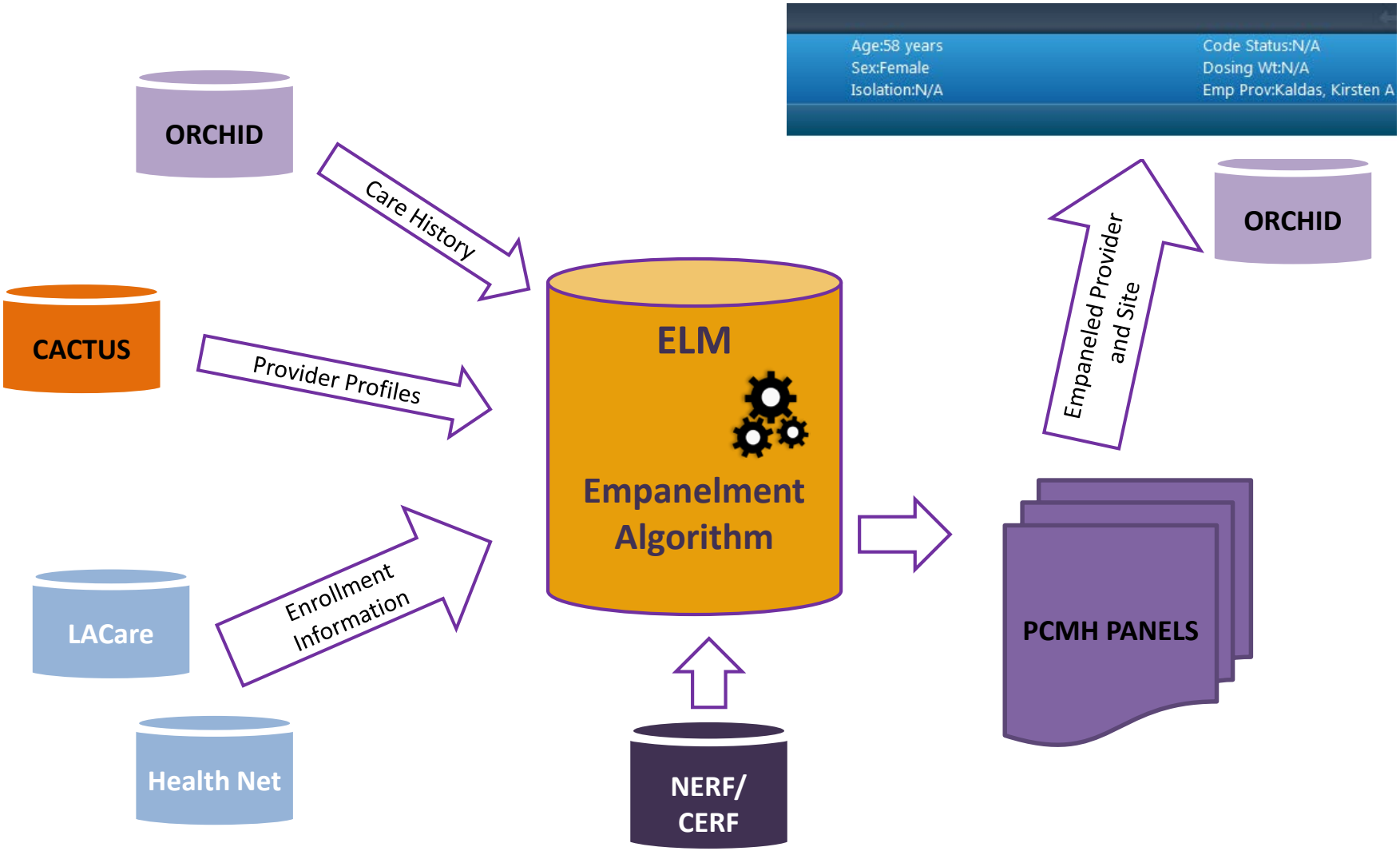
Los Angeles County Department of Health Services

- Safety net provider of Los Angeles County
  - Population 10 million
- $4.5 billion/year health system with 23,000 staff
- 2nd largest public health system in the nation
- Affiliations with UCLA and USC
- 29 facilities (4 hospitals)
- 670,000 unique patients per year
- Over 4500 providers, 810 PCMHs
- 385,000 empaneled lives

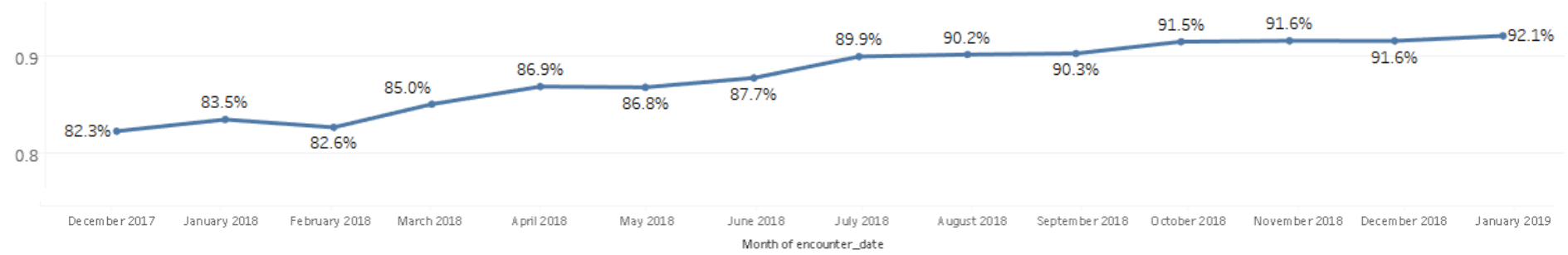
ELM

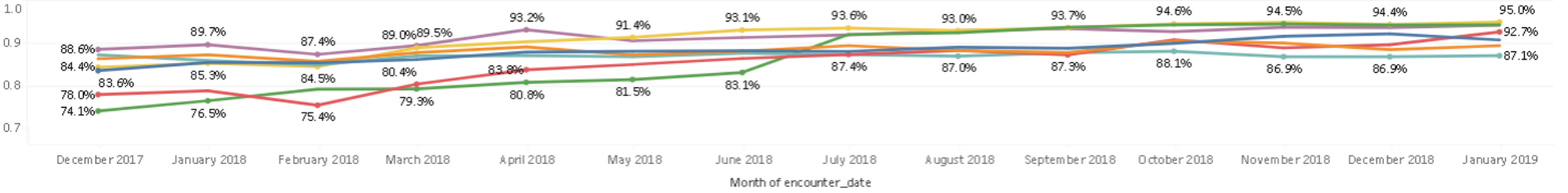
- Empaneled Life Management
- Cerner HealtheIntent
- Four Components
  - Empanelment
  - Registries
  - Care Management
  - Analytics

Empanelment



Empanelment Outcomes

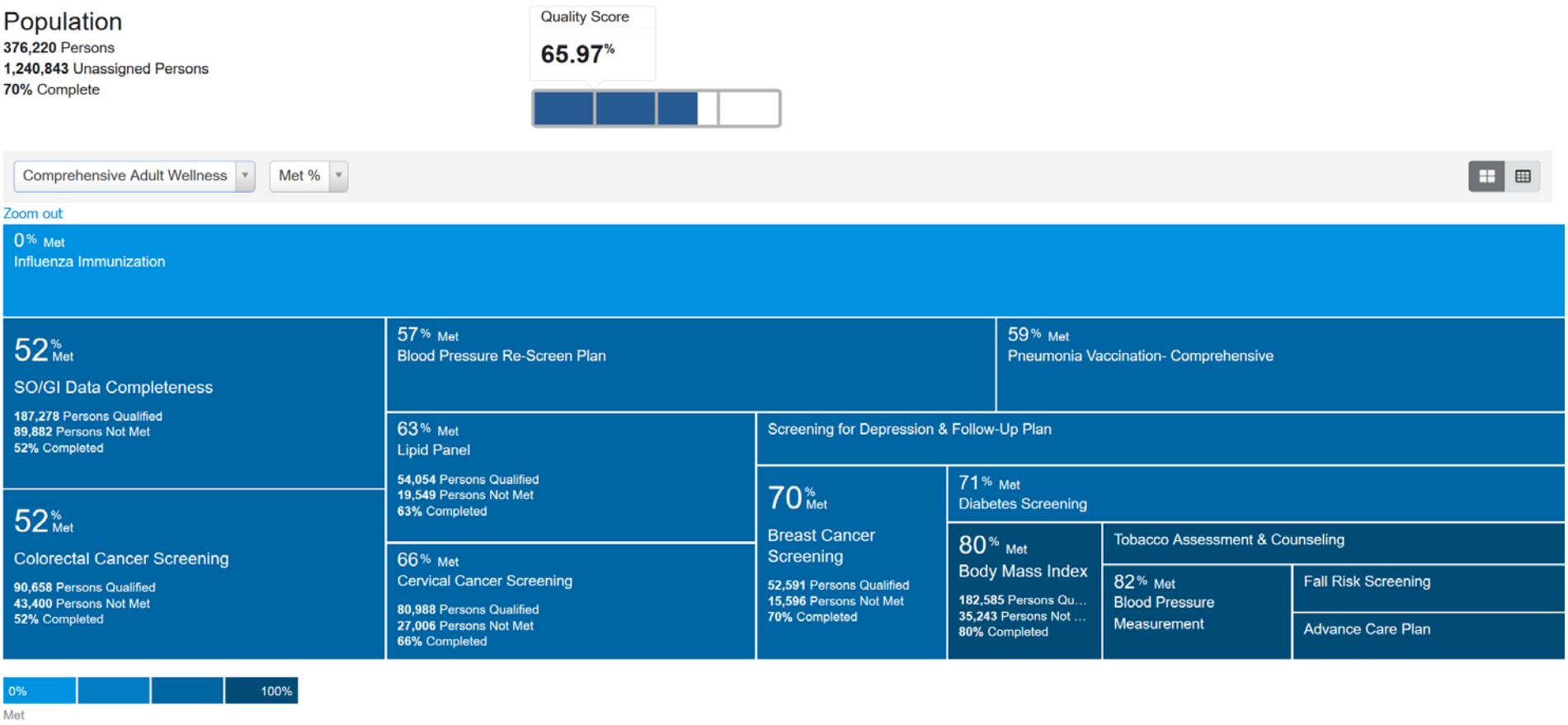




Provider-centric empanelment fidelity at the facility level

- For any given primary care provider, are the patients they see empaneled to the facility in which the provider is working
- Internal target is 90%
- Has the need to track historic empanelment

Registries


Population
376,220 Persons
1,240,843 Unassigned Persons
70% Complete
Quality Score
65.97%
Comprehensive Adult Wellness
Met %
Zoom out
0% Met
Influenza Immunization
52% Met
SO/GI Data Completeness
187,278 Persons Qualified
89,882 Persons Not Met
52% Completed
57% Met
Blood Pressure Re-Screen Plan
59% Met
Pneumonia Vaccination- Comprehensive
63% Met
Lipid Panel
54,054 Persons Qualified
19,549 Persons Not Met
63% Completed
Screening for Depression & Follow-Up Plan
52% Met
Colorectal Cancer Screening
90,658 Persons Qualified
43,400 Persons Not Met
52% Completed
66% Met
Cervical Cancer Screening
80,988 Persons Qualified
27,006 Persons Not Met
66% Completed
70% Met
Breast Cancer Screening
52,591 Persons Qualified
15,596 Persons Not Met
70% Completed
71% Met
Diabetes Screening
80% Met
Body Mass Index
182,585 Persons Qu…
35,243 Persons Not …
80% Completed
Tobacco Assessment & Counseling
82% Met
Blood Pressure Measurement
Fall Risk Screening
Advance Care Plan
0%
100%
Met

Primary Care Registries

- Adolescent Wellness (17 measures)
- Asthma (4 measures)
- Atrial Fibrillation (3 Measures)
- Childhood Wellness (18 measures)
- Chronic Kidney Disease (7 measures)
- Comprehensive Adult Wellness (15 measures)
- COPD (5 measures)
- Depression (3 measures)
- Diabetes (11 measures)
- Heart Failure (5 measures)
- Hepatitis C (2 Measures
- Hyperlipidemia (7 measures)
- Hypertension (1 measure)
- IVD/CAD (11 measures)
- Pediatric Asthma (10 measures)

Specialty Registries (Unscored)

- Breast Cancer (1 measure)
- Colon Cancer (1 measure)
- Maternity (18 measures)
- Myelodysplastic Syndrome/MDS (1 measure)
- Pediatric Cardiomyopathy (11 measures)
- Pediatric Diabetes (17 measures)
- Pediatric Epilepsy (13 measures)
- Pediatric IBD (17 measures)
- Rheumatoid Arthritis (2 measures)

Standard Registries: 23
Standard Measures: 173

Custom Registry: 1
Custom Measures: 27

Chronic Disease Registry Requirements	Type	Measures	Status
Clinical Standard v4 Depression Registry Requirements	Registry	17	
Clinical Standard v4 Diabetes Registry Requirements	Registry	32	
Clinical Standard v4 Heart Failure Registry Requirements	Registry	11	
Clinical Standard v4 COPD Registry Requirements	Registry	11	
Clinical Standard v4 Hypertension Registry Requirements	Registry	9	
Clinical Standard v4 Ischemic Vascular Disease Coronary Artery Dis ease Registry Requirements	Registry	26	
Clinical Standard v4 Lipid Management Registry Requirements	Registry	10	
Clinical Standard v4 Asthma Registry Requirements	Registry	10	
Clinical Standard v4 Chronic Kidney Disease Registry Requirements	Registry	13	
Clinical Standard v4 Atrial Fibrillation Registry Requirements	Registry	7	
Clinical Standard v4 Rheumatoid Arthritis Registry Requirements	Registry	5	
Clinical Standard v4 Hepatitis C Registry Requirements	Registry	5	
Clinical Standard v4 HIV Registry Requirements	Registry	26	NEW REGISTRY: In-Progress
Clinical Standard v4 Chronic Pain Registry Requirements	Registry	17	NEW REGISTRY: In-Progress

https://wiki.cerner.com/display/CSR/Clinical+Standard+v4+Registry+Requirements

Registry Name: Comprehensive Adult Wellness

Summary

The Comprehensive Adult Wellness Registry will include persons in the registry population, aged 18 years and over, with one outpatient visit or extended care visit during the current measurement year, or the prior two measurement periods.

Inclusion

Inclusion Criteria Description	

	• Person meets the following:
	  • Person's age is ≥ 18 years as of the last day of the current measurement period.
	• **AND** Person meets at least one of the following encounter requirements:
	  • Person has an *Outpatient Visit* during the current measurement period or the prior two measurement periods.
	  • **OR** Person has an *Extended Care Visit* during the current measurement period or the prior two measurement periods.

Inclusion Criteria
AgeGTE18 **AND** (OutpatientVisit **OR** ExtendedCareVisit)

Exclusion

Exclusion Criteria Description	

	• Person meets the following:
	  • Person is deceased at any time prior to the end of the current measurement period.
	  • **OR** Person is in *Hospice Care* during the current measurement period.
	  • **OR** Person is manually excluded.

Exclusion Criteria
ManuallyExcluded **OR** Deceased **OR** HospiceCare

Measure Name: Breast Cancer Screening

Description	The proportion of females in the Comprehensive Adult Wellness Registry population, aged 50 through 74 years, with a documented mammogram within 27 months prior to the end the current measurement period.
References	NQF 2372
Polarity	GOOD

INCLUSION CRITERIA

INCLUSION Criteria

- *Female* persons aged ≥ 50 and < 75 years as of the end of the current measurement period.

Inclusion Criteria
FemaleGender **AND** AgeGTE50andLT75

EXCLUSION CRITERIA

EXCLUSION Criteria

- Female persons are excluded from this measure if they meet any of the following:
  - *Bilateral Mastectomy* at any time prior to the end of the current measurement period.
  - **OR** Persons who had a *Unilateral Mastectomy* **AND** *50_QUAL* at any time prior to the end of the current measurement period.
  - **OR** at least one of the following:
    - *Mastectomy, Right* at any time prior to the end of the current measurement period.
    - **OR** *Unilateral Mastectomy* **AND** *Rt_QUAL* at any time prior to the end of the current measurement period.
  - **AND** at least one of the following:
    - *Mastectomy, Left* at any time prior to the end of the current measurement period.
    - **OR** *Unilateral Mastectomy* **AND** *Lt_QUAL* at any time prior to the end of the current measurement period.

Exclusion Criteria
BilateralMastectomy **OR** UnilateralMastectomy50 **OR** (MastectomyRight **AND** MastectomyLeft)

MET CRITERIA

MET Criteria	• Person has at least one of the following:
	  • A *Bilateral Mammogram* within 27 months prior to the end of the current measurement period.
	  • **OR** a *Unilateral Mammogram* within 27 months prior to the end of the current measurement period.
	  • **AND** a *Mastectomy* at any time prior to the end of the current measurement period.
	  • **OR** a *Mammogram* within 27 months prior to the end of the current measurement period.

Met Criteria
BilateralMammogram **OR** (UnilateralMammogram **AND** MastectomyPrior) **OR** Mammogram

EXCEPTION CRITERIA

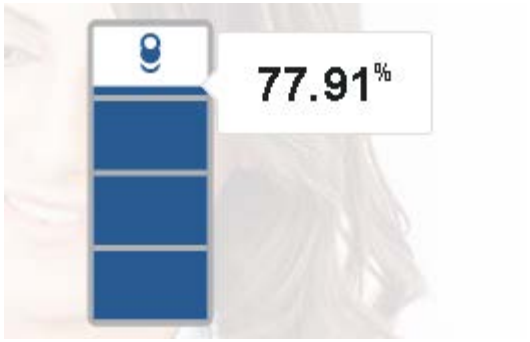
EXCEPTION Criteria	• Person had *Mammogram Declined* documented during the current measurement period or 15 months prior to the current measurement period.

Exception Criteria
MammogramDeclined

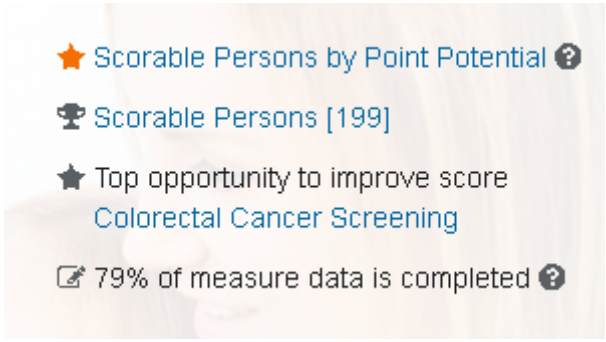
Due Date: Breast Cancer Screening

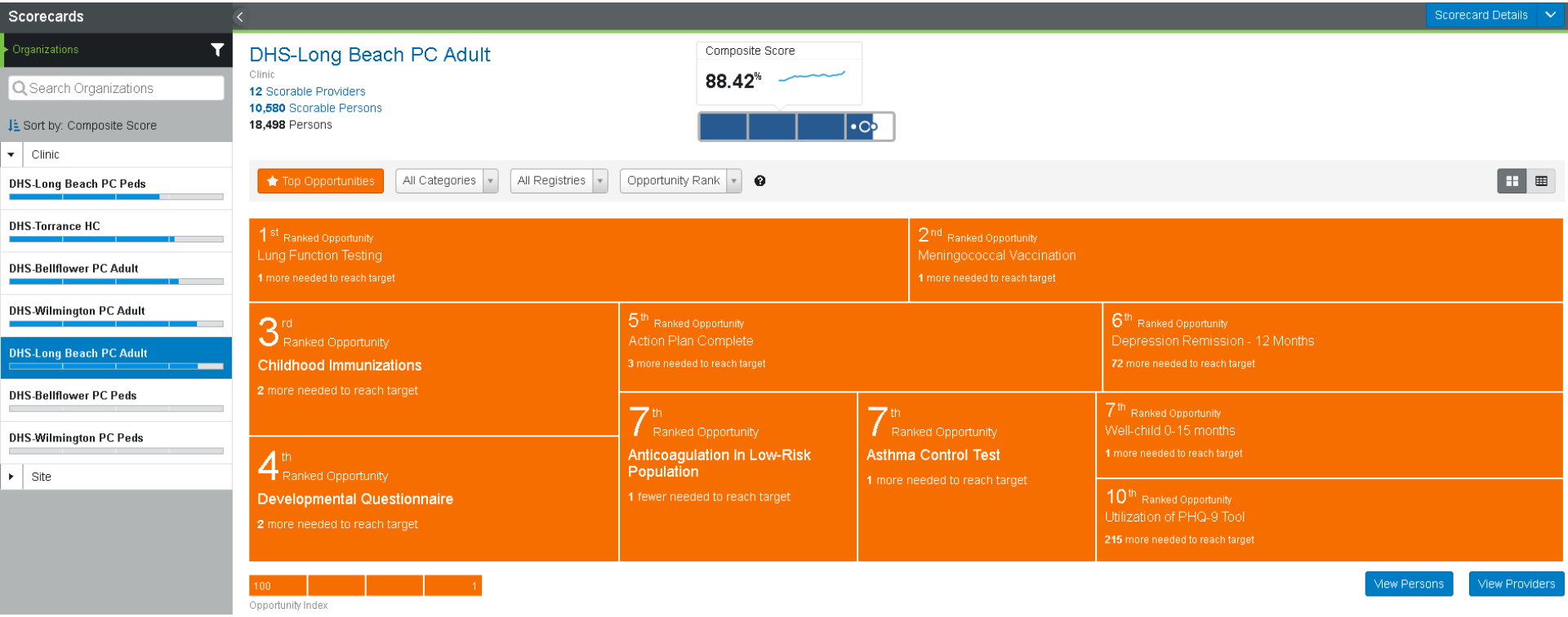
Due Date Description	• Person is included in the Breast Cancer Screening measure (and not excluded)
	  • If most recent date of service for a *Bilateral Mammogram* is > 820 days from date of generation of list.
	  • **OR** a *Unilateral Mammogram* ≥ 820 days from date of generation of list.
	  • **AND** History of *Unilateral Mastectomy* documented anytime prior to the end of the current measurement period.
	  • **OR** a *Mammogram* ≥ 820 days from date of generation of list.

Due-date Criteria
BilateralMammogramDueDate **OR** (UnilateralMammogramDueDate **AND** HistoryOfUnilateralMastectomyDueDate) **OR** MammogramDueDate with frequency of 820 days

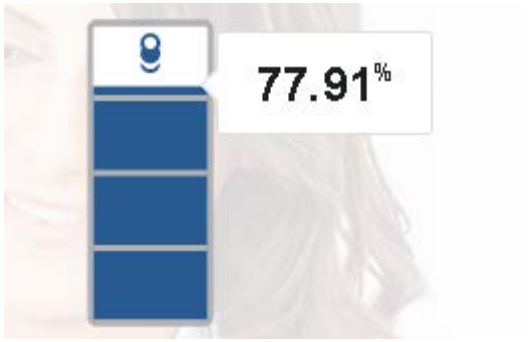

77.91%

Scorecards


Scorable Persons by Point Potential
Scorable Persons [199]
Top opportunity to improve score
Colorectal Cancer Screening
79% of measure data is completed


Scorecards
Organizations
Search Organizations
Sort by: Composite Score
Clinic
DHS-Long Beach PC Peds
DHS-Torrance HC
DHS-Bellflower PC Adult
DHS-Wilmington PC Adult
DHS-Long Beach PC Adult
DHS-Bellflower PC Peds
DHS-Wilmington PC Peds
Site
Scorecard Details
DHS-Long Beach PC Adult
Clinic
12 Scorable Providers
10,580 Scorable Persons
18,498 Persons
Composite Score
88.42%
Top Opportunities
All Categories
All Registries
Opportunity Rank
1st Ranked Opportunity
Lung Function Testing
1 more needed to reach target
2nd Ranked Opportunity
Meningococcal Vaccination
1 more needed to reach target
3rd Ranked Opportunity
Childhood Immunizations
2 more needed to reach target
5th Ranked Opportunity
Action Plan Complete
3 more needed to reach target
6th Ranked Opportunity
Depression Remission - 12 Months
72 more needed to reach target
4th Ranked Opportunity
Developmental Questionnaire
2 more needed to reach target
7th Ranked Opportunity
Anticoagulation In Low-Risk Population
1 fewer needed to reach target
7th Ranked Opportunity
Asthma Control Test
1 more needed to reach target
7th Ranked Opportunity
Well-child 0-15 months
1 more needed to reach target
10th Ranked Opportunity
Utilization of PHQ-9 Tool
215 more needed to reach target
100
1
Opportunity Index
View Persons
View Providers

Scorecards



Scorable Persons by Point Potential

Scorable Persons [199]

Top opportunity to improve score
Colorectal Cancer Screening

79% of measure data is completed

Internal Medicine-IM
199 Scorable Persons
256 Persons

Composite Score
77.91%

Top Opportunities | All Categories | All Registries | Opportunity Rank

1st Ranked Opportunity
Colorectal Cancer Screening
1 more needed to reach target

2nd Ranked Opportunity
Blood Pressure < 140/90 mm Hg
1 more needed to reach target

3rd Ranked Opportunity
Antiplatelet Therapy
1 more needed to reach target

4th Ranked Opportunity
Depression Remission - 12 Months
3 more needed to reach target

Utilization of PHQ-9 Tool

6th Ranked Opportunity
Hepatitis B Vaccination
2 more needed to re...

6th Ranked Opportunity
Statin Therapy - Diabetic Group
2 more needed to re...

Creatinine Ratio

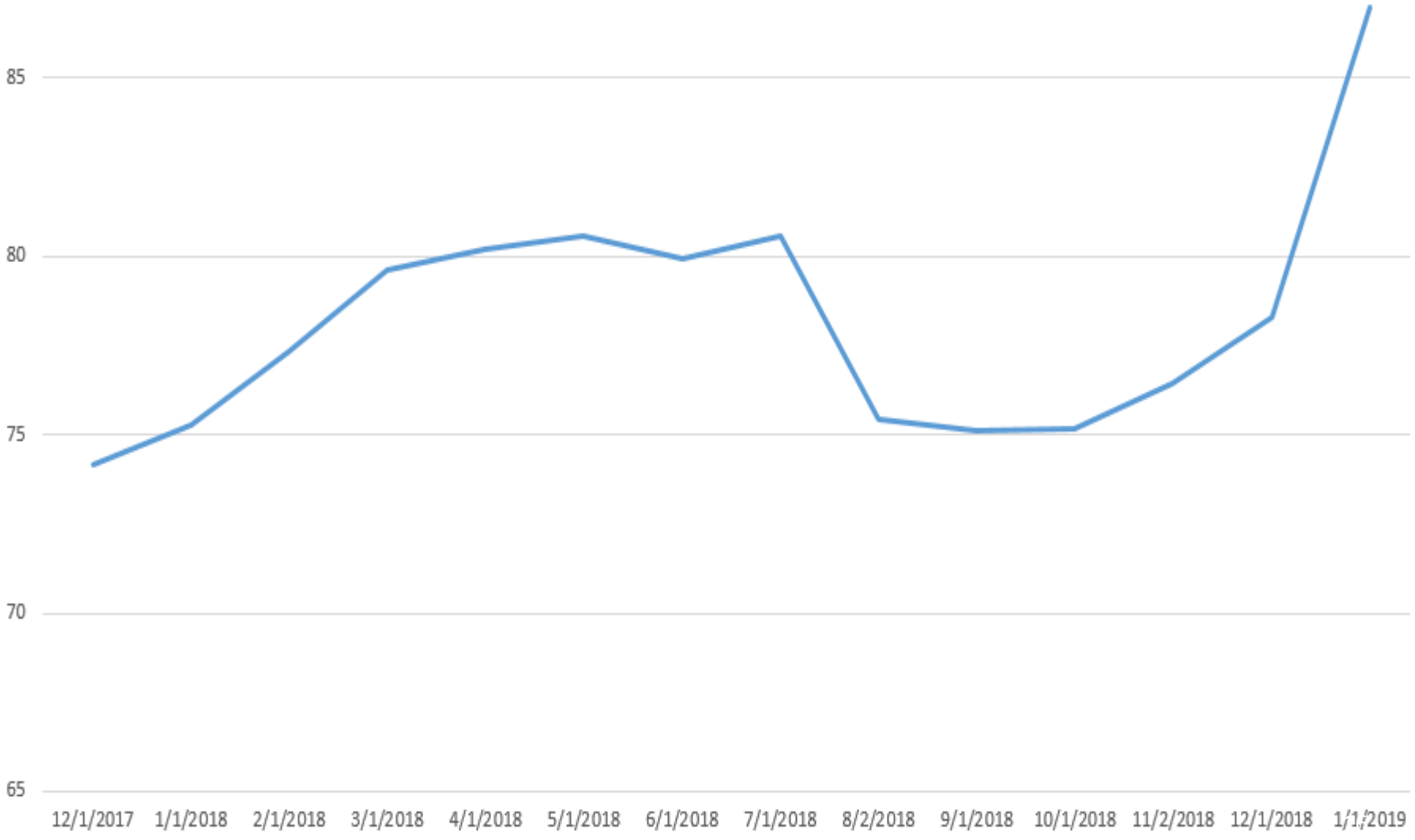
8th Ranked Opportunity
Foot Exam
23 more needed to reach target

8th Ranked Opportunity
Hepatitis A Vaccination
3 more needed to reach target

Registry Workflow

- Select a registry measure
- Identify care gaps
- Create outreach list
- Perform outreach to close gaps

ELM Registries Composite Scores



PRIME Results

- 70 total measures
- 46 pay-for-performance (P4P)
- Over 99% achievement rate
- $222 million dollars
- 17 out of 21 metrics in the High Performance Pool met 20% gap closure

ELM

- Empanelment
- Registries
- Care Management
- Analytics

ELM Care Management

- Patients identified algorithmically
  - High Risk Adult and Senior (19,479)
  - Transition Care Management (919)
  - Utilization Coordination (2,585)
  - High Risk Pediatrics (1,119)
  - High Risk Maternity (1,847)
- Cases passed to aligned care managers

Care Manager Dashboard

100%

Case List | Care Manager Overview

Cases By Status

Status	Cases
New	1
Pending Enrollment	0
Enrolled	1
Active	1
Pending Closure	0
Total Cases	3

Potential Cases List (23)

Organizer Observation Notifications

All Visits

No results found

Notes/Reminders (2)

Result Range: All

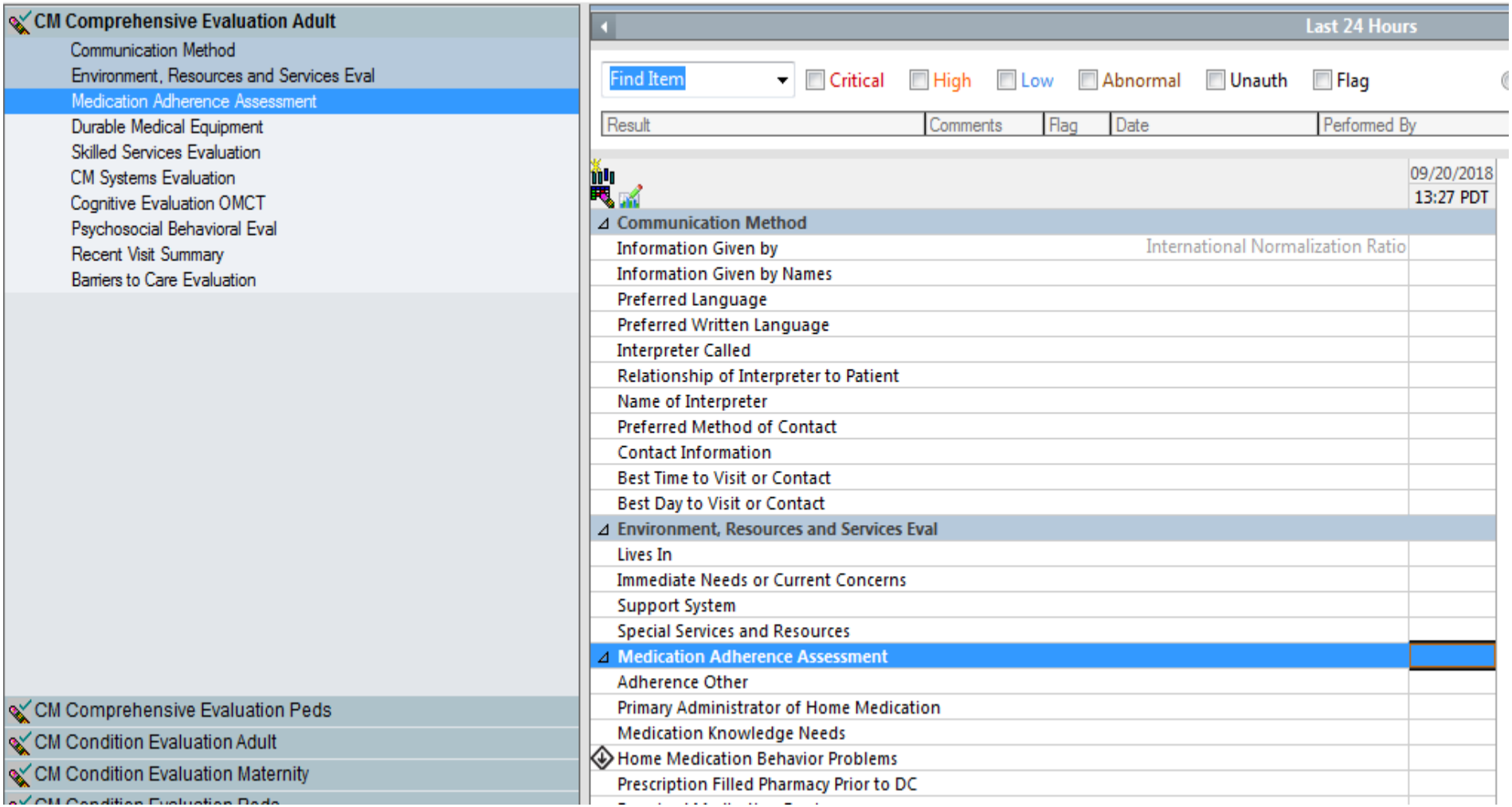
Reminders (2)

Patient	Subject / SubType
Doe, Jason Jon	**Reminder Message**
DOB: -- MRN: --	zzCare Coordination Referral
Harrell, Donna	**Reminder Message**
DOB: -- MRN: --	Patient Follow-up

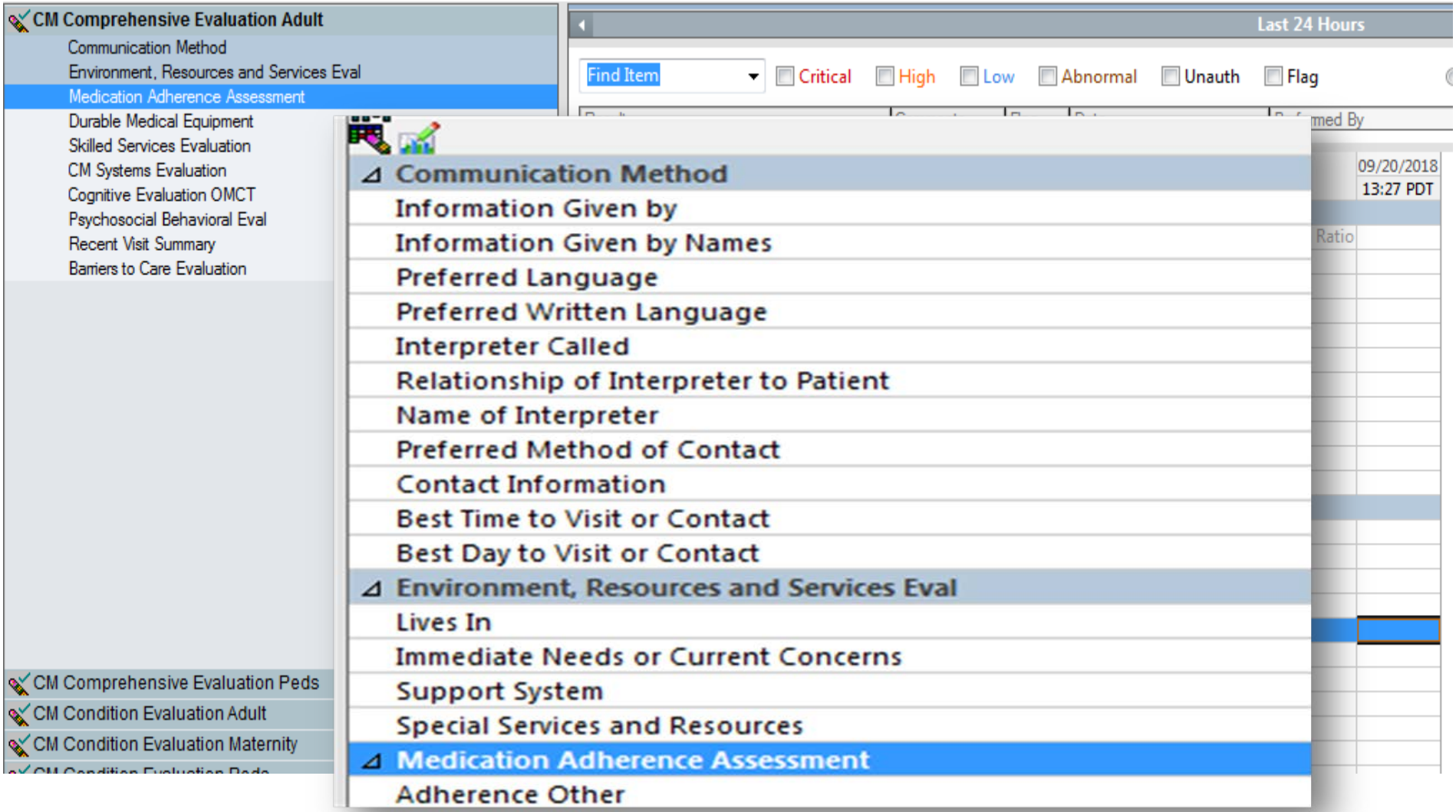
Care Management Referral

Identified	A patient has been identified by an algorithm. A case is created and assigned to a care manager.
New	A care manager has picked up the case
Pending enrollment	A care manager attempted to contact the patient
Enrolled	A care manager has been able to reach the patient and the patient has agreed to engage in care management
Active	The care manager and the patient are actively engaged in care management
Pending Closure	The care manager is keeping patient on their radar, but not actively managing them (e.g. pregnant patients awaiting delivery)
Closed	Case closed, for example management is completed or the patient declined care management

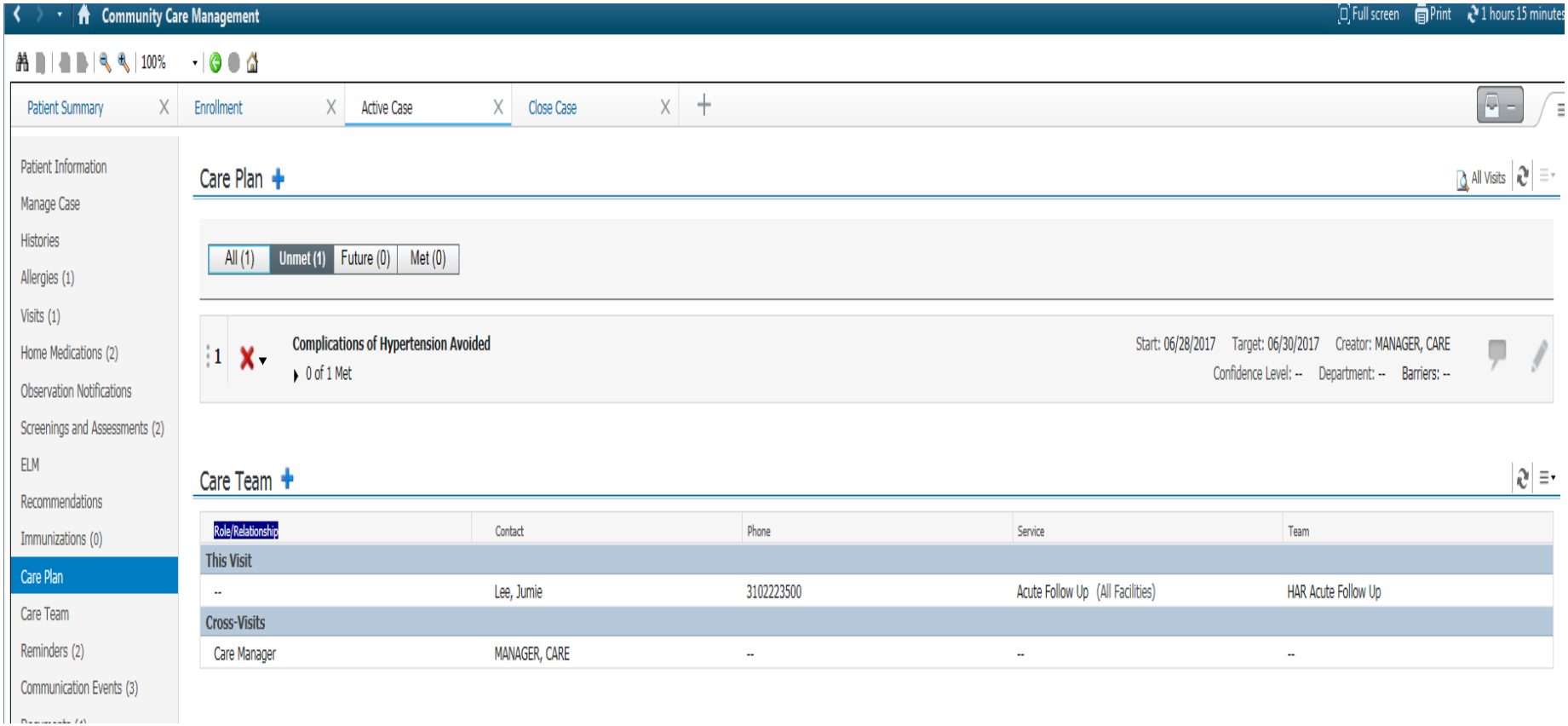
Initial Assessment



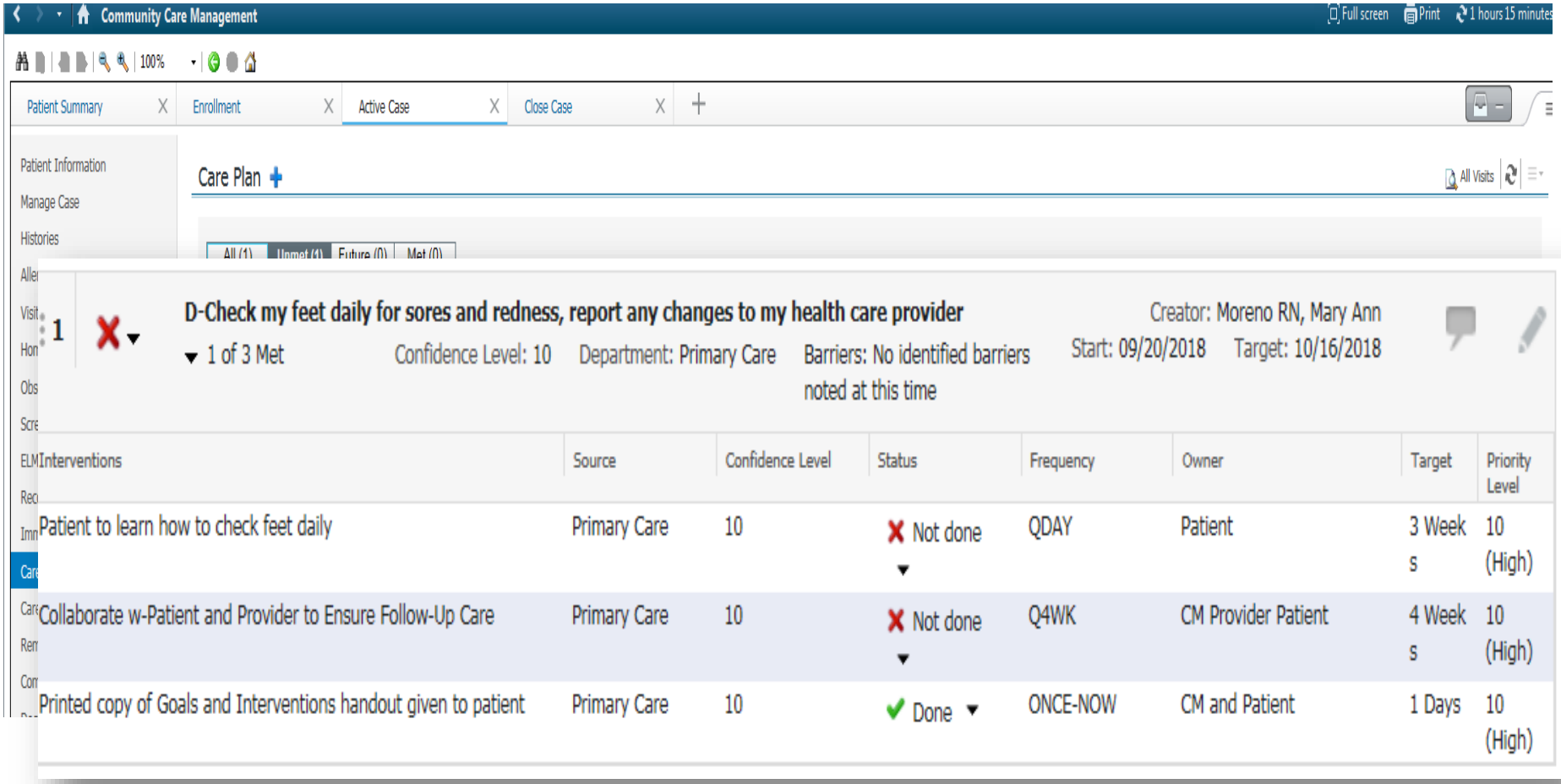
Initial Assessment



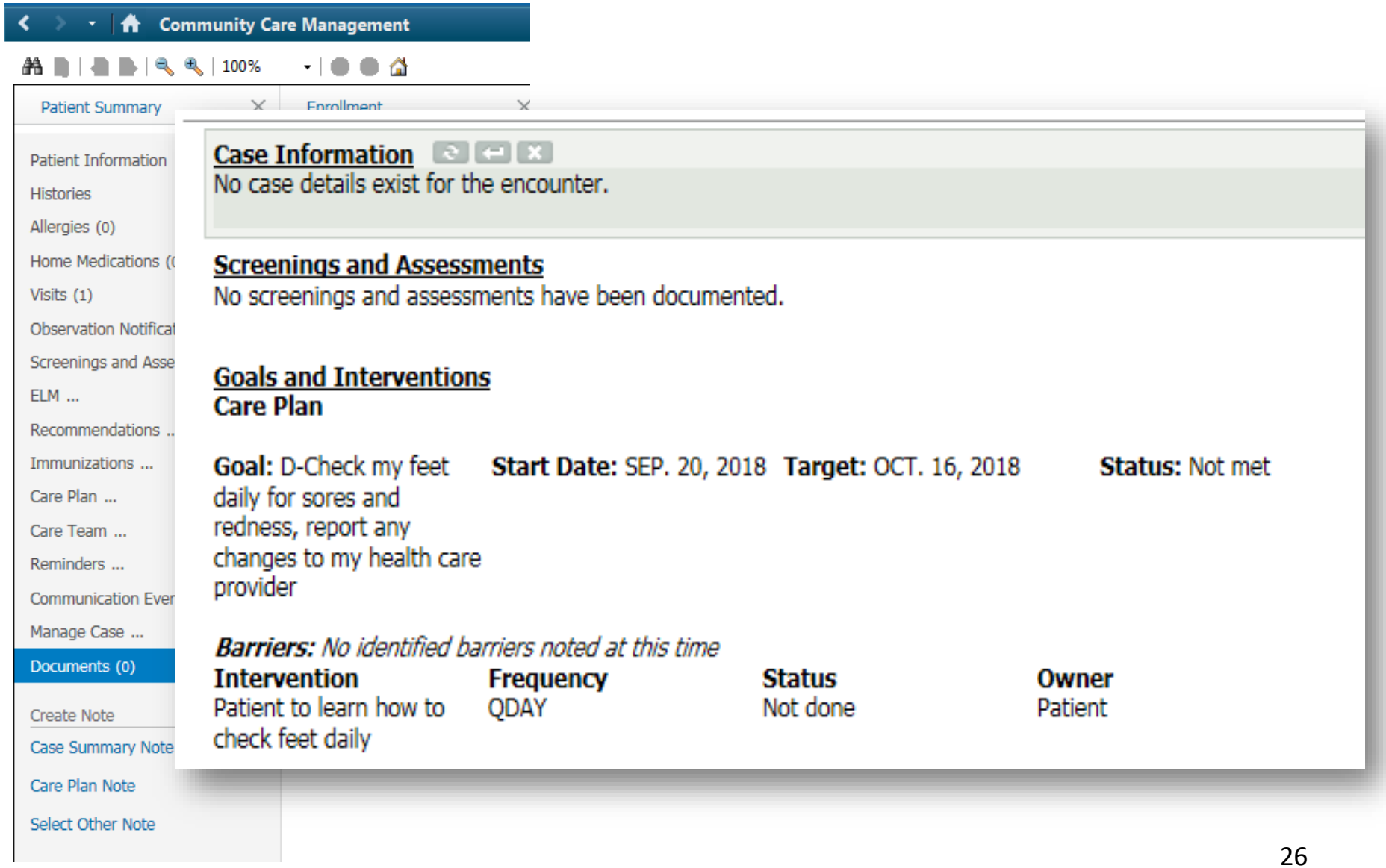
Create Care Plan



Create Care Plan

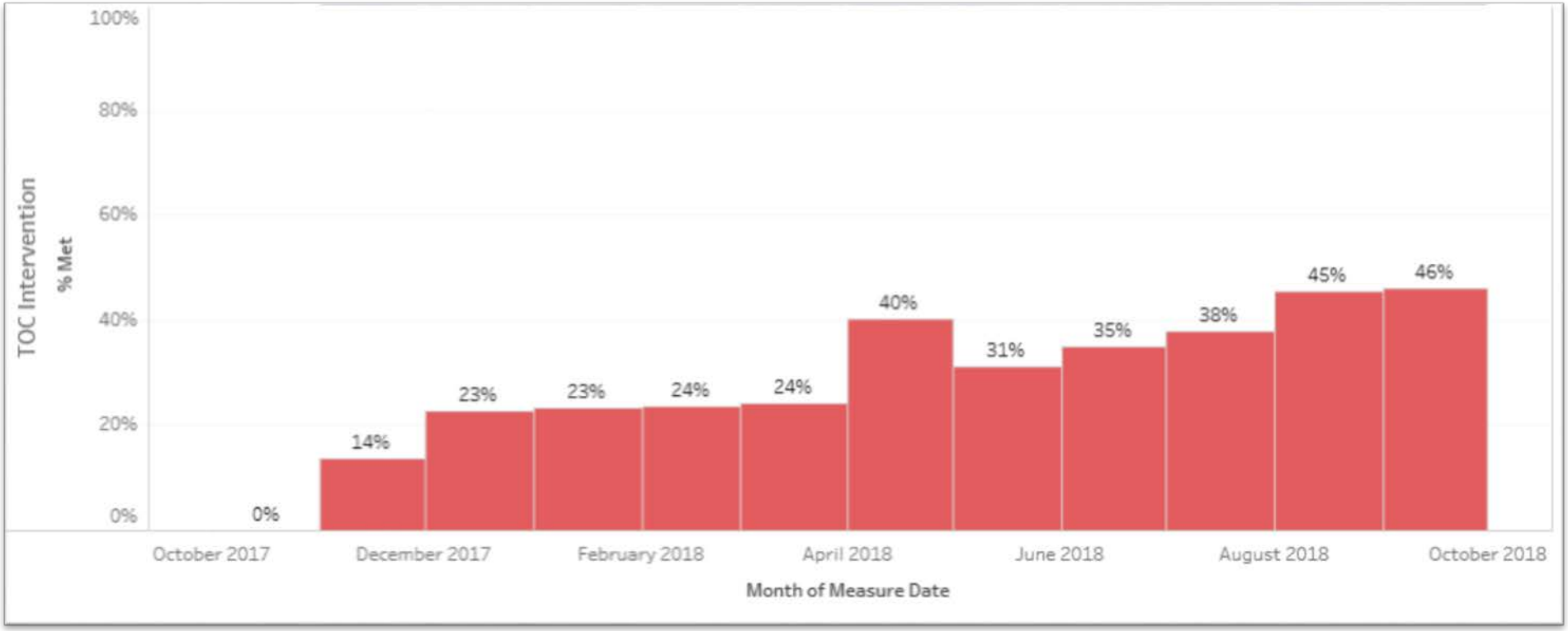


Note Created



Outcomes

- Decreased Inpatient utilization (3% drop)
- Decreased Observation utilization (0.5% drop)
- Decreased Emergency utilization (3% drop)
- Increased Outpatient utilization (22% increase)

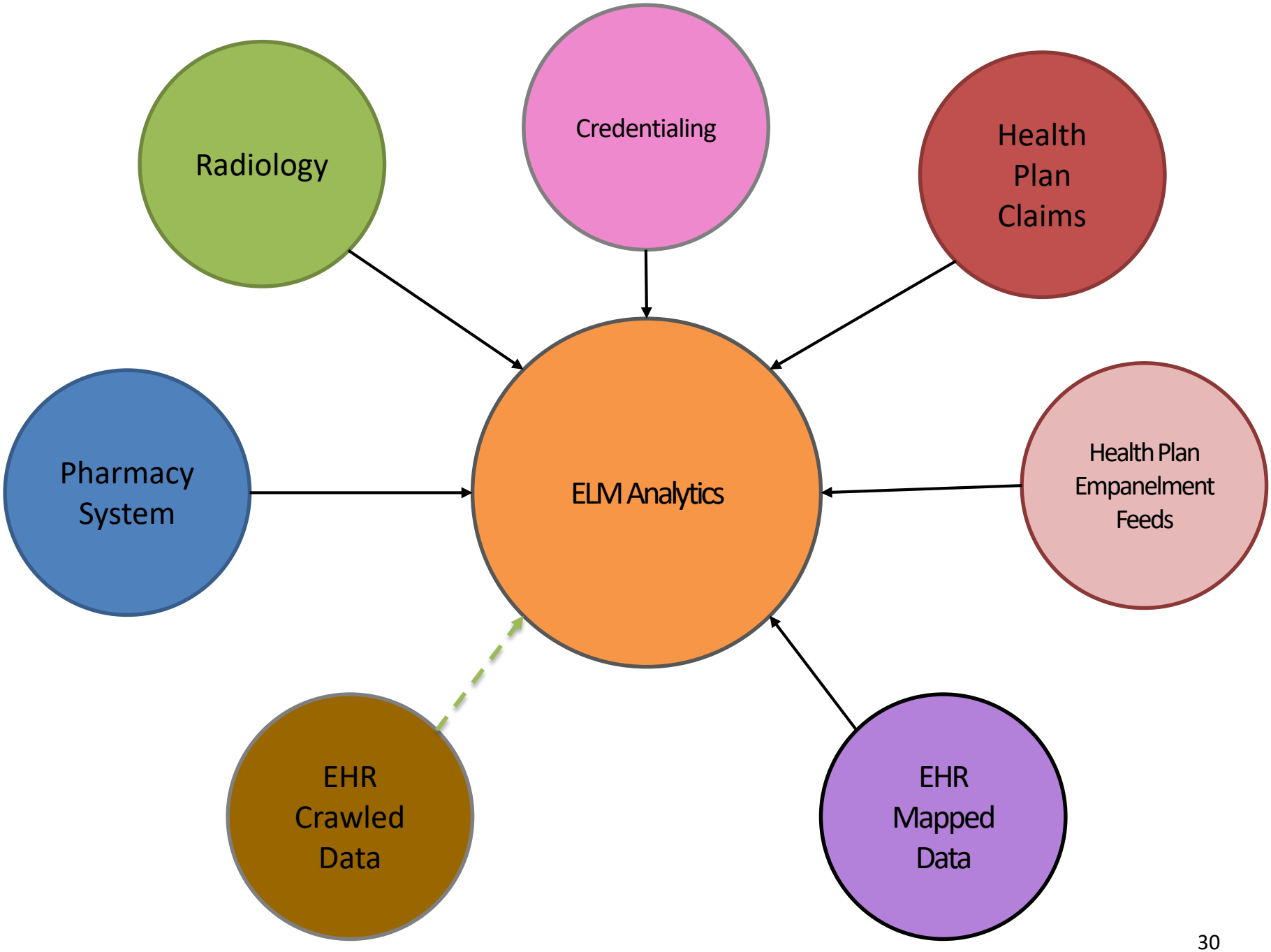


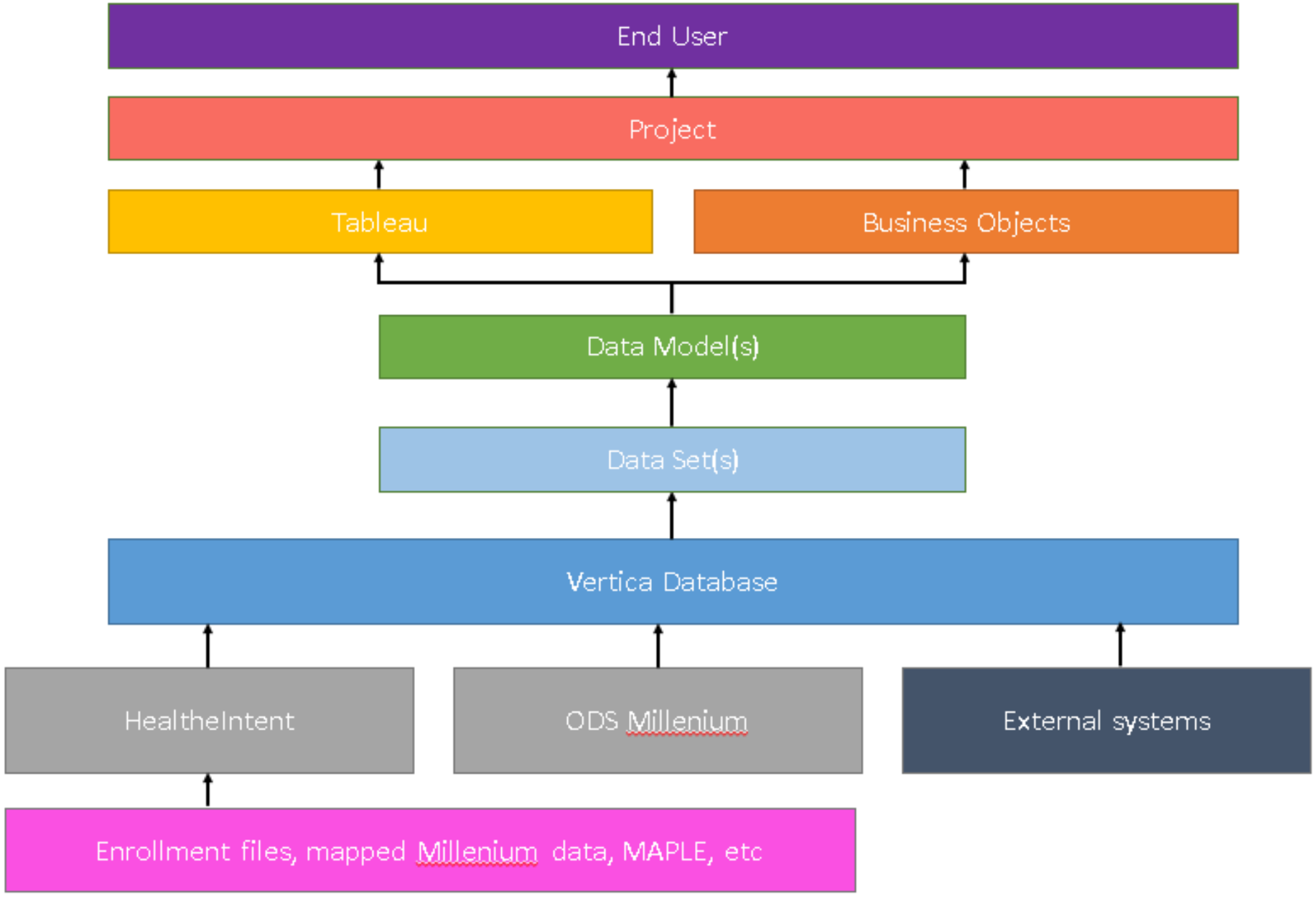
ELM

- Empanelment
- Registries
- Care Management
- Analytics

ELM Analytics

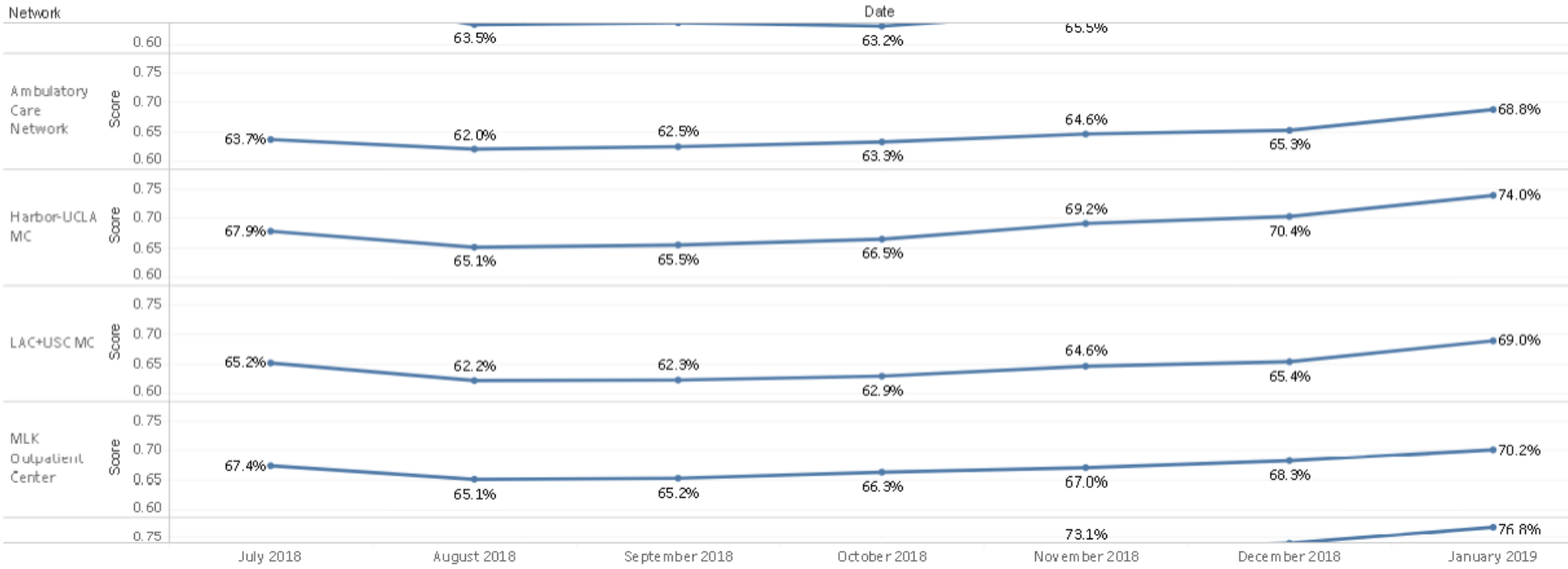
- Runs off Vertica database
- Powerful rendering capacity
  - Business Objects (web-based)
  - Tableau (desktop or web-based)
- Accessible to all
- Understands clinical “concepts” out of the box, and can be “taught” others


Radiology
Credentialing
Health Plan Claims
Pharmacy System
ELM Analytics
Health Plan Empanelment Feeds
EHR Crawled Data
EHR Mapped Data


End User
Project
Tableau
Business Objects
Data Model(s)
Data Set(s)
Vertica Database
HealtheIntent
ODS Millenium
External systems
Enrollment files, mapped Millenium data, MAPLE, etc

DHS | By Network | By Clinic | By Provider | Last Month Rankings

Cumulative Registry Trends (Comprehensive Adult Wellness: All)



Date (snapshots taken first of every month)

Last 3 quarters

Registry

Comprehensive Adult Wellness

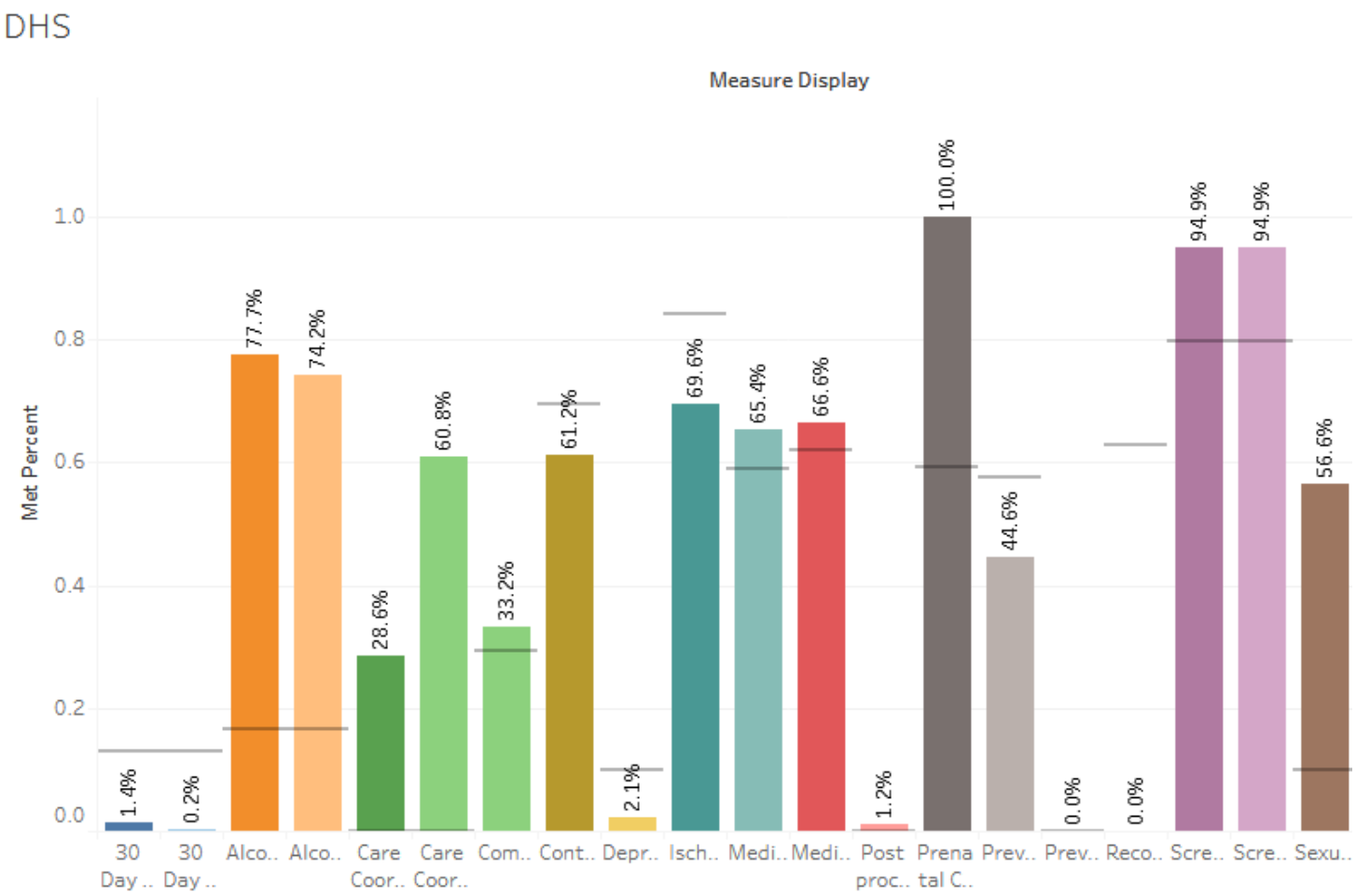
Measure

(All)

Network

- [x] (All)
- [x] Null
- [x] Ambulatory Care Network
- [x] Harbor-UCLA MC
- [x] LAC+USC MC
- [x] MLK Outpatient Center
- [x] Olive View-UCLA MC
- [x] Other
- [x] Rancho Los Amigos NRC

DHS | Trend by Network | Trend by Clinic | Trend by Provider



Network

- [x] (All)
- [x] Ambulatory Care Network
- [x] Harbor-UCLA MC
- [x] LAC+USC MC
- [x] MLK Outpatient Center
- [x] Olive View-UCLA MC
- [x] Rancho Los Amigos NRC

Cancel | Apply

Month

July 2018

Measure Display

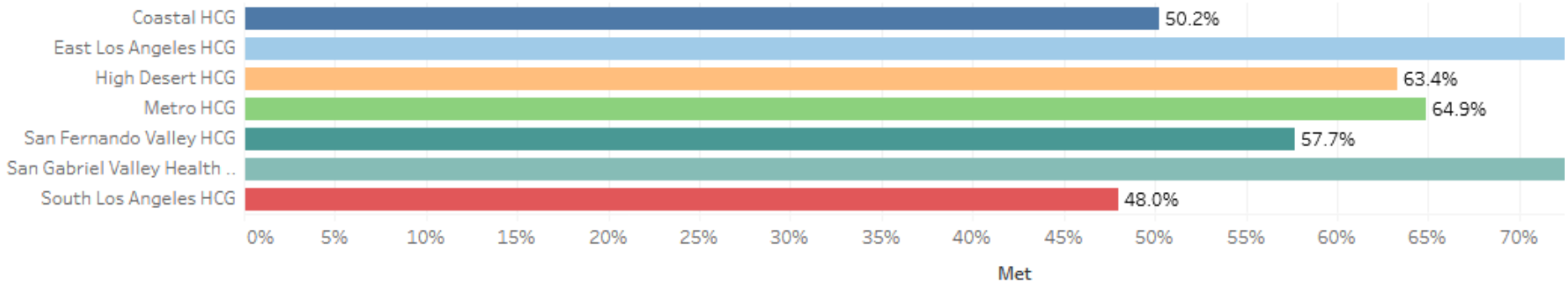
- 30 Day Readmission (1.3.2)
- 30 Day Readmission (2.2.1)
- Alcohol and Drug Misuse (...
- Alcohol and Drug Misuse (...
- Care Coordinator Assignm...
- Care Coordinator Assignm...
- Comprehensive Diabetes ...
- Controlling High Blood Pr...
- Depression Remission at ...
- Ischemic Vascular Disease...
- Medication Reconciliation...
- Medication Reconciliation...
- Post procedure ED visits a...
- Prenatal Care (2.1.6)

ACN Scorecard Trend by Facility

			June 2018	July 2018	Trend
Breast Cancer Screening Target: 71.4%	1	West Valley Health Center	78.7%	77.0%	-1.7%
	2	Roybal CHC	75.9%	76.3%	0.4%
	3	East San Gabriel Valley Health Center	75.8%	75.8%	0.0%
	4	Hudson CHC	75.0%	74.8%	-0.2%
	5	San Fernando HC	74.0%	73.6%	-0.4%
	6	El Monte CHC	72.7%	72.5%	-0.2%
	7	Bellflower HC	71.3%	71.7%	0.4%
	8	East Los Angeles Health Center	71.8%	71.3%	-0.5%
	9	Mid-Valley CHC	72.3%	71.0%	-1.3%
	10	Humphrey CHC	68.9%	69.9%	1.0%
	11	Wilmington HC	69.3%	69.1%	-0.2%
	12	Torrance HC	66.8%	68.1%	1.3%
	13	High Desert RHC	67.7%	67.6%	-0.2%
	14	Long Beach CHC	67.4%	67.5%	0.1%
	15	La Puente HC	67.8%	66.3%	-1.5%
	16	South Antelope Valley HC	64.7%	64.3%	-0.4%
	17	Antelope Valley HC	64.0%	63.1%	-0.9%
	18	Glendale HC	62.3%	61.8%	-0.5%
	19	Curtis Tucker HC	57.7%	58.8%	1.1%
	20	Lake Los Angeles CC	56.3%	55.1%	-1.2%
		Littlerock CC	56.3%	55.1%	-1.2%
Cervical Cancer Screening Target: 69.8%	1	East San Gabriel Valley Health Center	79.8%	81.1%	1.3%
	2	El Monte CHC	71.4%	72.4%	0.9%
	3	Roybal CHC	66.1%	66.9%	0.9%
	4	High Desert RHC	65.4%	66.9%	1.5%
	5	Long Beach CHC	66.3%	65.9%	-0.4%
	6	Mid-Valley CHC	64.9%	65.2%	0.4%
	7	Humphrey CHC	64.4%	64.6%	0.2%
	8	Hudson CHC	64.0%	64.5%	0.5%
	9	La Puente HC	64.1%	64.3%	0.2%
	10	Wilmington HC	64.2%	63.6%	-0.6%
	11	San Fernando HC	62.6%	63.1%	0.5%
	12	Bellflower HC	61.3%	60.8%	-0.5%
	13	West Valley Health Center	59.5%	58.5%	-1.0%
	14	South Antelope Valley HC	57.5%	58.4%	0.9%
	15	Torrance HC	57.8%	58.4%	0.6%

Overview | **By HCG** | By Facility | By PCP | Satsify Type

By HCG



Shows the total number of patients aged 11 through 21 (from their 11th birthday to their 21st birthday) who have received either:

a) 2 HPV vaccinations by their 15th birthday with no additional shots or
b) 2 HPV vaccinations by their 21st birthday if the first shot occured before their 15th birthday or
c) 3 HPV vaccinations by the 21st birthday with no shot occuring before their 15th birthday

The standard denominator is all empaneled patients who are age 11-21 today, those this age range can be changed using the control on the right side of the screen.

Questions?

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