

Core Collaborative Measures and Reporting Resources

Cole Stanley, MD, CCFP

Family Physician, Raven Song & IDC

Medical Lead, Continuous Quality Improvement, Vancouver Coastal Health

Outline

- Outcome, process, and balancing measures
- EMR OUD visit template
- EMR Queries
- Excel reporting tool
- Population of focus
- Key Metrics
 - Engagement (1.2)
 - OAT access (1.3)
 - Active oOAT (2.2)
 - Optimal oOAT dosing (2.3)
 - Retention on oOAT (2.4)
 - Quality of Life score (3.2)
- Optional measures

Three types of measures

- How will we know that our changes resulted in an improvement?
- **Outcome measures:** what are we trying to achieve?
- **Process measures:** Are we doing the right things to get there?
- **Balancing measures:** Are our changes causing problems to other parts of the system?

Three types of measures - Example

- The team decides to test a change where the LPN will call patients on day before rx is due as a check-in/reminder, with hopes of decreasing missed doses and increasing retention
- **Outcome measures:** Number of missed doses, Retention on oOAT
- **Process measures:** percentage of missed dose faxes from pharmacy that prompted a phone call to patient
- **Balancing measures:** Time taken by LPN to do this work

EMR OUD Visit Template

304.04 Opioid Use Disorder (OUD) added to Problem List
 DSM-5 OUD criteria

Prescription Creator

OAT:

Daily dose (mg):

Start Day:

Last Day:

Rx Duration (days):

Carry Directions: DWI CARRIES

Witnessed Ingestion: (SEVEN)

Direction For Use:

Treatment course

Treatment stage:

OAT initiation date:

Most recent OAT start date:

Stable dose date:

OAT duration:

Visit Checklist

Pharmanet Reviewed

Any ORT missed doses in last 7 days? Yes No

If yes, describe:

Current substance use reviewed

ODs in the last 30 days? Last Value?

Last date?

Linkage to social work/counselling discussed

Last checked:

Has THN kit

Has THN training Last checked:

Has access to harm reduction supplies Last checked:

Aware of supervised consumption sites Last checked:

Last score

First score

Last Lab Results

AST: No Result Found

ALT: No Result Found

Hep A IgG:

HCV RNA:

Hep B SAb:

HCV Ab:

HIV Ab:

Urine beta-HCG:

ECG Last done:

Rapid UDS Results Last UDS Results at 11 Sep 2017

Cocaine: Positive Negative

Amphetamines: Positive Negative

Methadone: Positive Negative

Opioids: Positive Negative Positive

Oxycodone: Positive Negative Positive

Benzodiazepines: Positive Negative

Fentanyl: Positive Negative

Buprenorphine: Positive Negative

Hydromorphone: Positive Negative

Other:

EMR Queries

- Each team on Profile EMR should have at least one person with access to QI/queries environment so that queries can be run and reports created monthly
- Contact cole.stanley@vch.ca if you need to gain access for a team member

Profile EMR queries - Examples

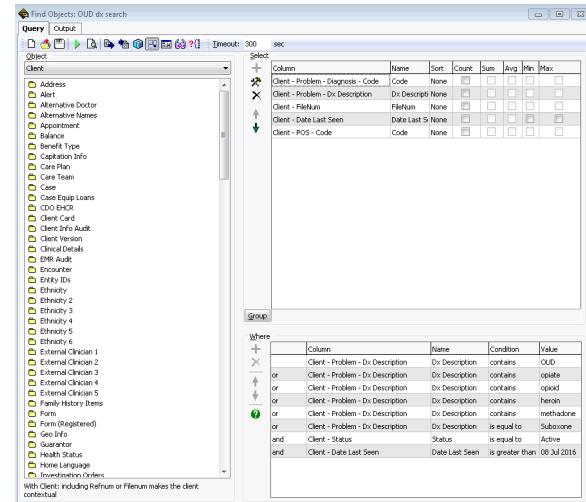
BOOST 1 POF baseline

BOOST 1 POF 304.0 opioid use disorder

BOOST 1.2N Engaged in care/lost to care

BOOST 1.2D Engaged in care/lost to care

BOOST 1.3N oOAT access



EMR OUD Visit Template

New Methadone Controlled Prescription for ASHMORE, GUY
VCH/PHC EMR

Print Defaults Set Reset 7

PLEASE PRINT

PERSONAL HEALTH NO.		PRESCRIBING DATE	
		12 Sep 2017	
PATIENT NAME			
FIRST	INITIAL	LAST	
GUY ASHMORE			
STREET			
2119 GUELPH ST			
ADDRESS			
CITY	PROVINCE	DATE OF BIRTH	
VANCOUVER	BC	DAY	MONTH YEAR
		27	Apr 2000
Rx: DRUG NAME		DUE TO THE PATIENT'S	
METHADONE		INABILITY, I CONFIRM	
AND STRENGTH		DELIVERY IS REQUIRED.	
10 mg/ml		PRESCRIBER'S SIGNATURE	
NUMERIC QUANTITY ALPHA			
700 mg		SEVEN HUNDRED mg	
START DAY: 12 Sep 2017		LAST DAY: 18 Sep 2017	
CIRCLE ONE		SPECIFY NUMBER OF DAYS PER WEEK OF WITNESSED	
Dose <input checked="" type="radio"/> CARRIES <input type="radio"/>		INGESTION IN PHARMACY	
100 mg/day		NUMERIC ALPHA	
DIRECTIONS FOR USE		7 (SEVEN)	
METHADONE		PRESCRIBER'S SIGNATURE	
PRESCRIBER'S INFORMATION		CPSID	
		FOLIO	
PHARMACY USE ONLY			
RECEIVED BY: PATIENT OR AGENT SIGNATURE		SIGNATURE OF DISPENSING PHARMACIST	

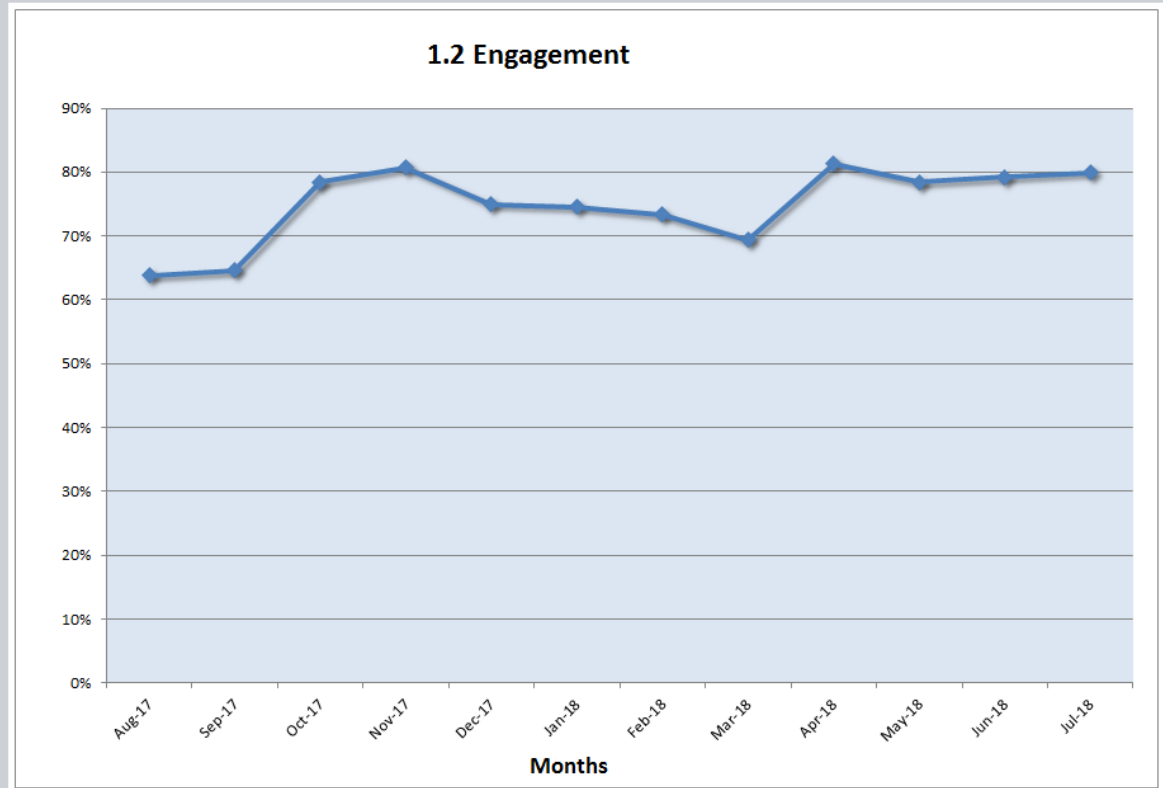
*PHARMACY COPY - COPYING OR DUPLICATING THIS FORM IN ANY WAY CONSTITUTES AN OFFENSE

PRESS HARD
YOU ARE MAKING 2 COPIES
PRINTED IN BRITISH COLUMBIA

Excel Reporting Tool

D67 fx =IF(D18<>"",D18/D12,#N/A)			D	E	F	G	H	I	J	K	L	M	N	O
BOOST QI Measures			Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
<p>Instructions: Fill in measures that are relevant to your team's aims. Reach out to the Collaborative staff for assistance customizing. When you have filled in the data elements, scroll to row 60 for results.</p>														
Indicators														
Population of Focus (POF)														
Population of Focus (POF)														
<p>All active clients with ICD-9 codes: 304.7 and/or 304.00 and/or 304.0 and/or 304.9 and/or Problem List contains any one or more of the following: OUD, Opiate, Opioid, Methadone, Heroin, Suboxone with date last seen being more recent than one year ago. Subtract clients meeting the numerator definition that have clear documentation of having moved or gone elsewhere* (MOGE) if your recording system does not already do this automatically.</p>			470	480	510									
Required Measures														
1.2 Engagement														
definition			5											
1.3 oOAT Access														

Excel Reporting Tool



1.2 Engagement 1.3b 1.4 2.2ab 2.3 3.2 3.3 1.5 1.6 1.7 1.8 1.9 2.4 2.5 2.6 2.7 2.8 3.4 3.5 BLANK

Population of focus (POF)

- List of active clients within our team who have opioid use disorder
 - Difficult to get list currently due to incomplete or inaccurate problem lists
- Operational definition for baseline data from Profile EMR (query “BOOST POF baseline” available in QI/query environment)
 - POS=“our clinic code” (eg. Raven Song = RSG)
 - Status = “active”
 - Date Last Seen > today-1y (date last seen is within past year)
 - Problem list descriptions contain any ONE or more of the following:
 - OUD
 - opiate
 - opioid
 - methadone
 - heroin
 - Suboxone
- Teams not on Profile EMR will need different operational definition

Population of focus (POF)

Find Objects: OUD dx search

Query Output

Timeout: 300 sec

Object

- Client
 - Address
 - Alert
 - Alternative Doctor
 - Alternative Names
 - Appointment
 - Balance
 - Benefit Type
 - Capitation Info
 - Care Plan
 - Care Team
 - Case
 - Case Equip Loans
 - CDO EHCR
 - Client Card
 - Client Info Audit
 - Client Version
 - Clinical Details
 - EMR Audit
 - Encounter
 - Entity IDs
 - Ethnicity
 - Ethnicity 2
 - Ethnicity 3
 - Ethnicity 4
 - Ethnicity 5
 - Ethnicity 6
 - External Clinician 1
 - External Clinician 2
 - External Clinician 3
 - External Clinician 4
 - External Clinician 5
 - Family History Items
 - Form
 - Form (Registered)
 - Geo Info
 - Guarantor
 - Health Status
 - Home Language
 - Investination Orders

With Client: including Refnum or Filenum makes the client contextual

Select

Column	Name	Sort	Count	Sum	Avg	Min	Max
Client - Problem - Diagnosis - Code	Code	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Client - Problem - Dx Description	Dx Descripti	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Client - FileNum	FileNum	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Client - Date Last Seen	Date Last S	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Client - POS - Code	Code	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

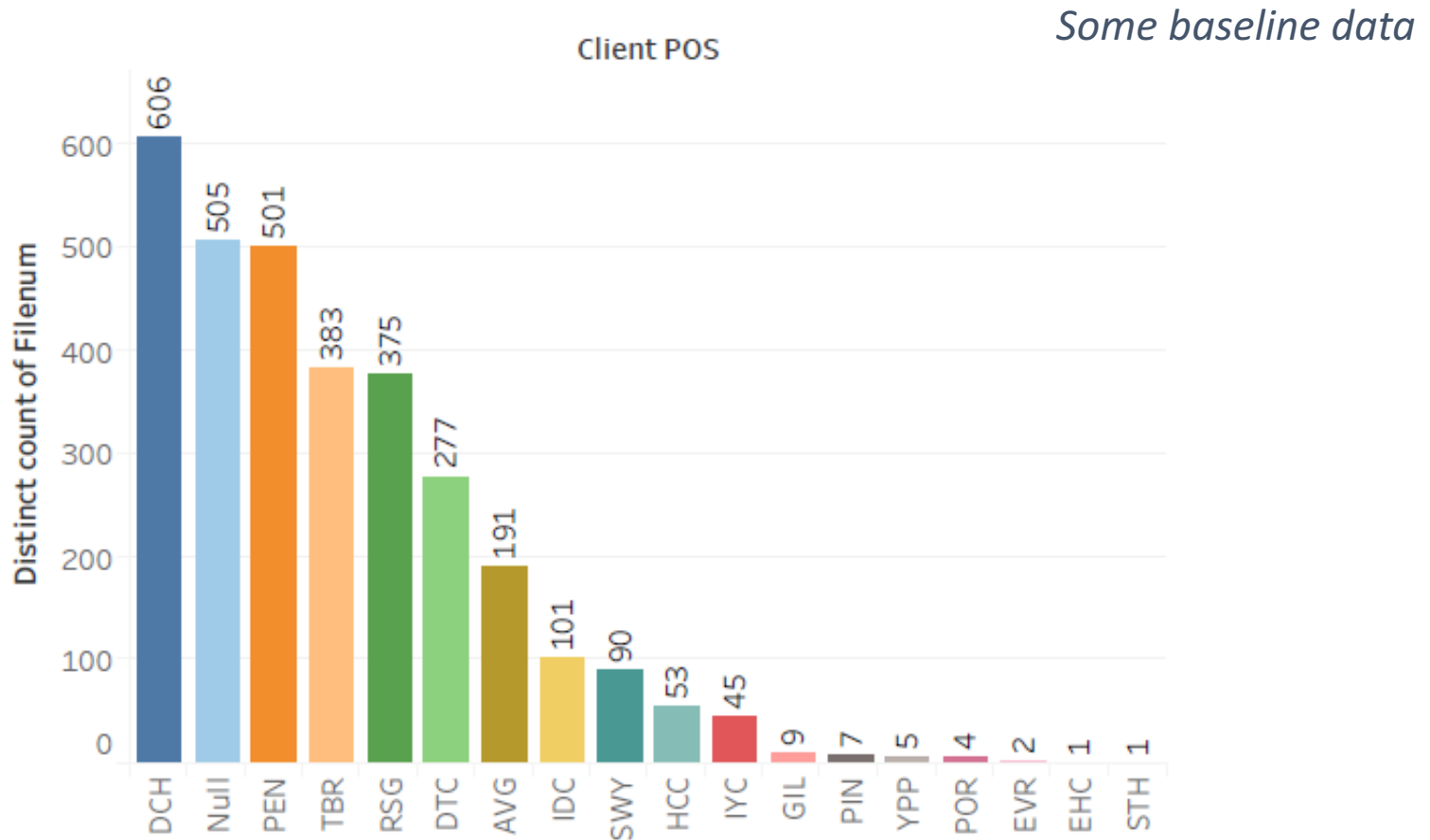
Group

Where

	Column	Name	Condition	Value
	Client - Problem - Dx Description	Dx Description	contains	OUD
or	Client - Problem - Dx Description	Dx Description	contains	opiate
or	Client - Problem - Dx Description	Dx Description	contains	opioid
or	Client - Problem - Dx Description	Dx Description	contains	heroin
or	Client - Problem - Dx Description	Dx Description	contains	methadone
or	Client - Problem - Dx Description	Dx Description	is equal to	Suboxone
and	Client - Status	Status	is equal to	Active
and	Client - Date Last Seen	Date Last Seen	is greater than	08 Jul 2016

Population of focus (POF)

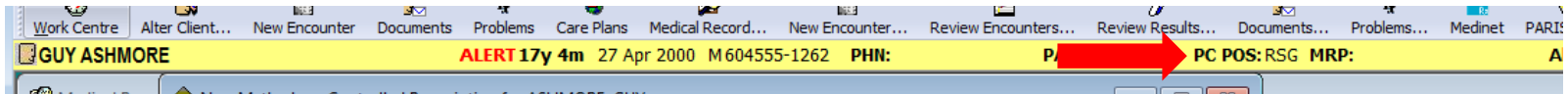
Population of focus



Population of focus (POF)

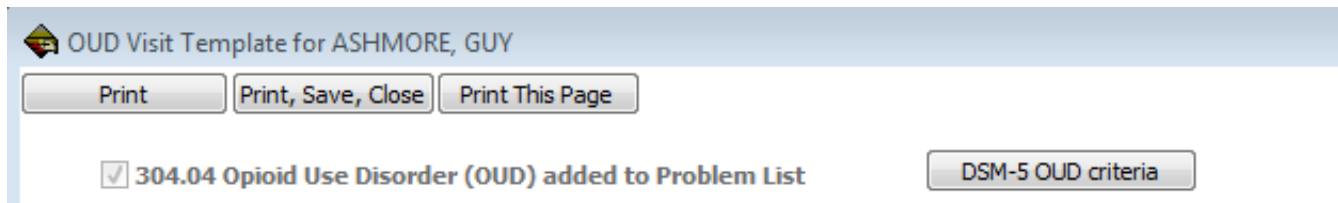
- Data clean-up

- Ensure POS and MRP are correct
- For patients who are no longer to be followed
 - Inactivate charts
 - Close PARIS referrals
 - Remove MRP designation



- Ensure 304.0 Opioid Use Disorder added to Problem List

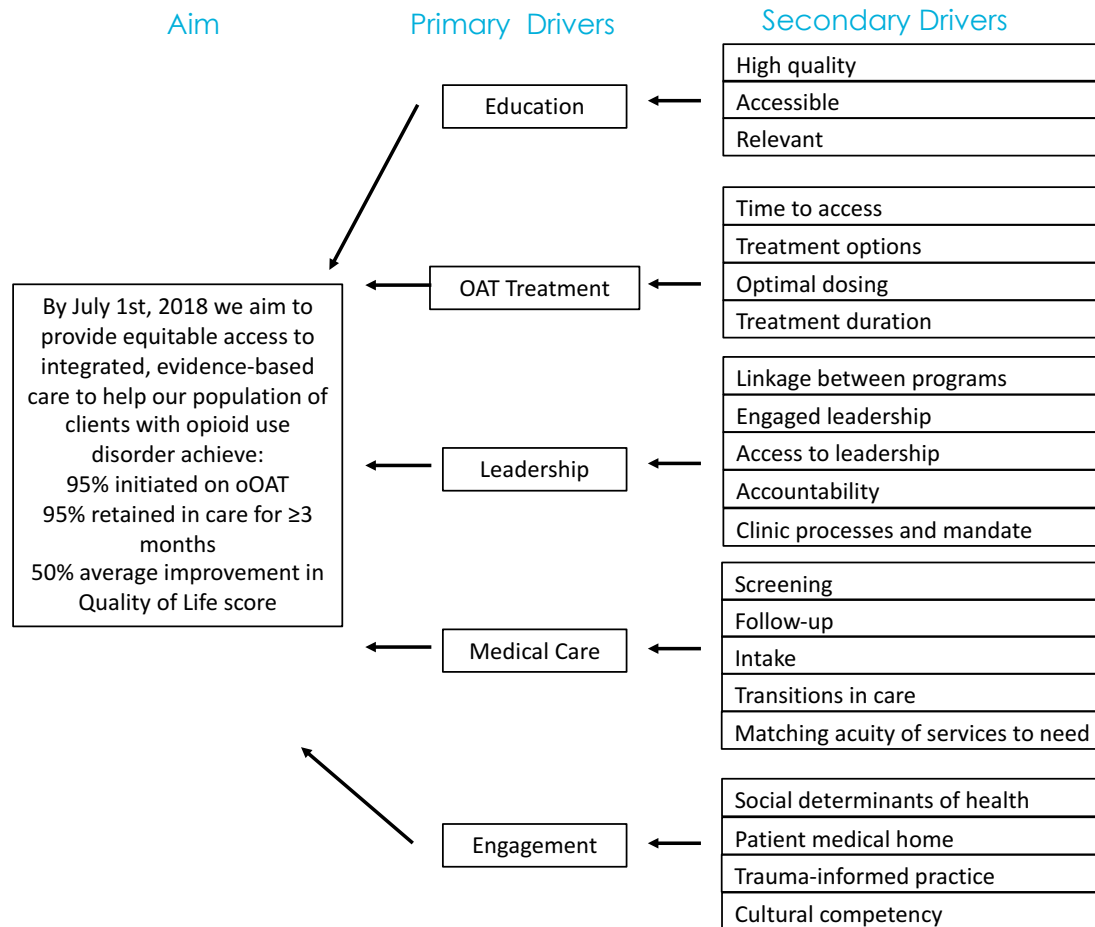
- Once added for all, will simplify query and give more accurate POF list (BOOST 1 POF 304.0)



Population of focus (POF)

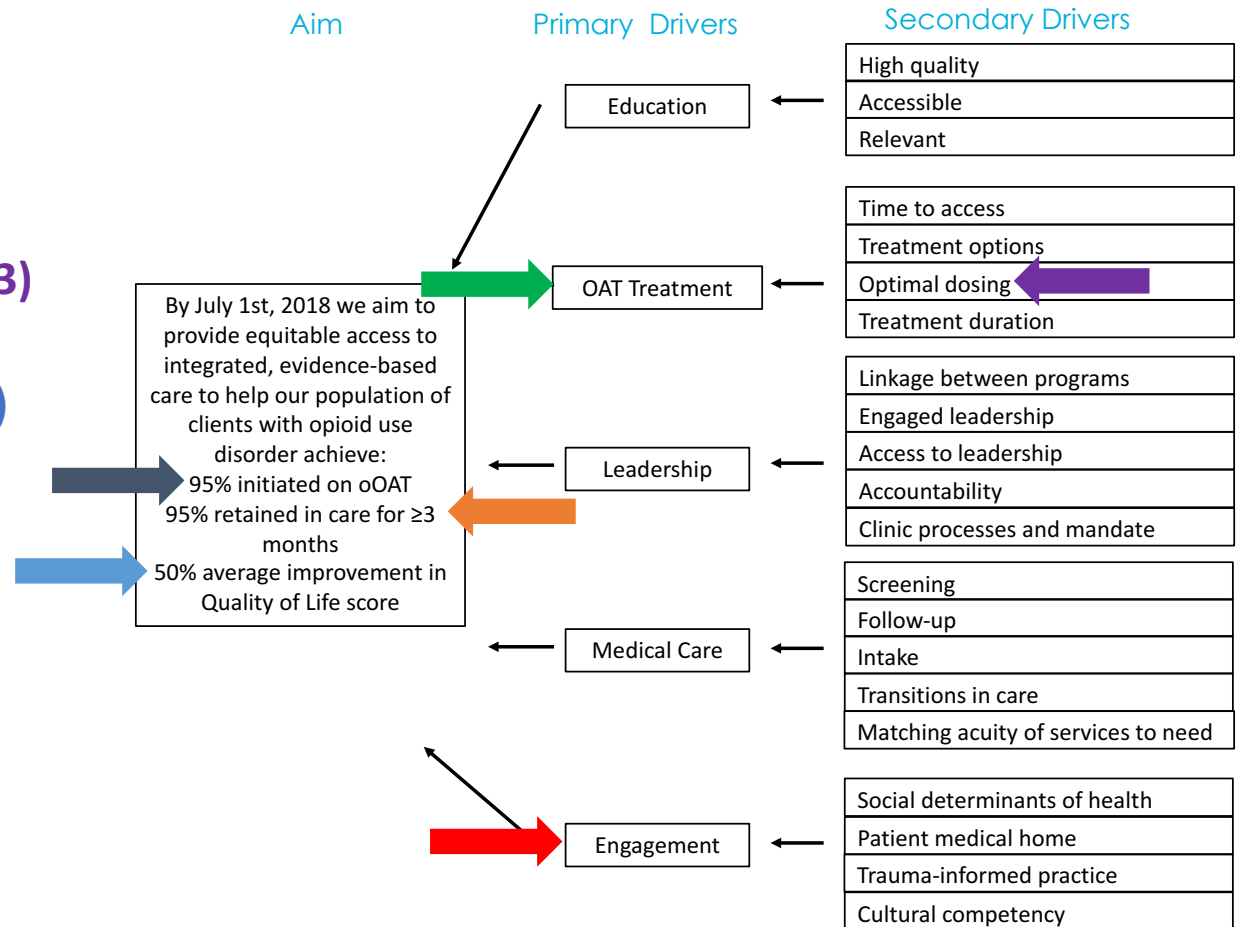
- Data clean-up
 - Patients who see us for one type of care but get their OAT elsewhere
 - Should we include these patients in POF?
 - Example: John Doe receives OAT from a private methadone clinic but follows up at our clinic for primary care
 - What do you think?

Driver diagram



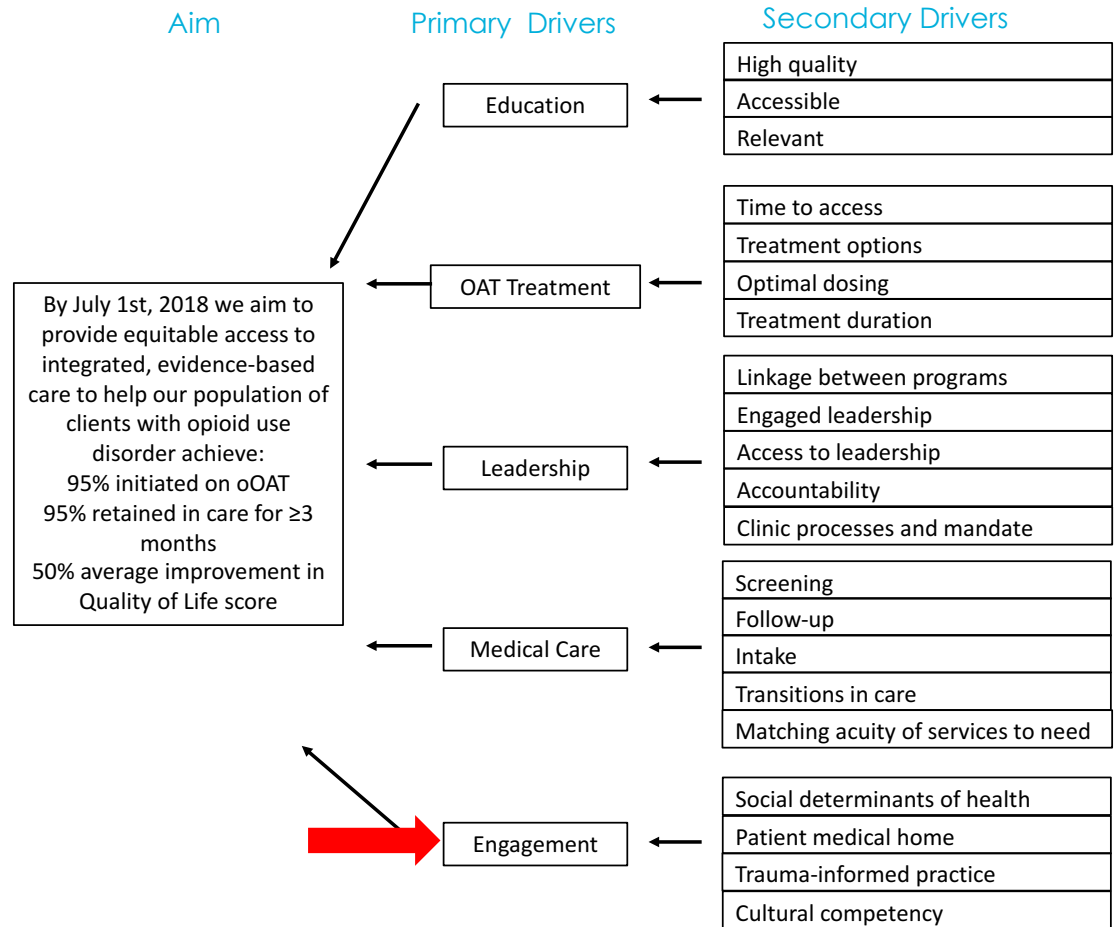
Key Metrics (Outcome Measures)

- Engagement (1.2)
- oOAT access (1.3)
- Active oOAT (2.2)
- Optimal oOAT dosing (2.3)
- Retention on oOAT (2.4)
- Quality of Life score (3.2)



Engagement

- Engagement (1.2)



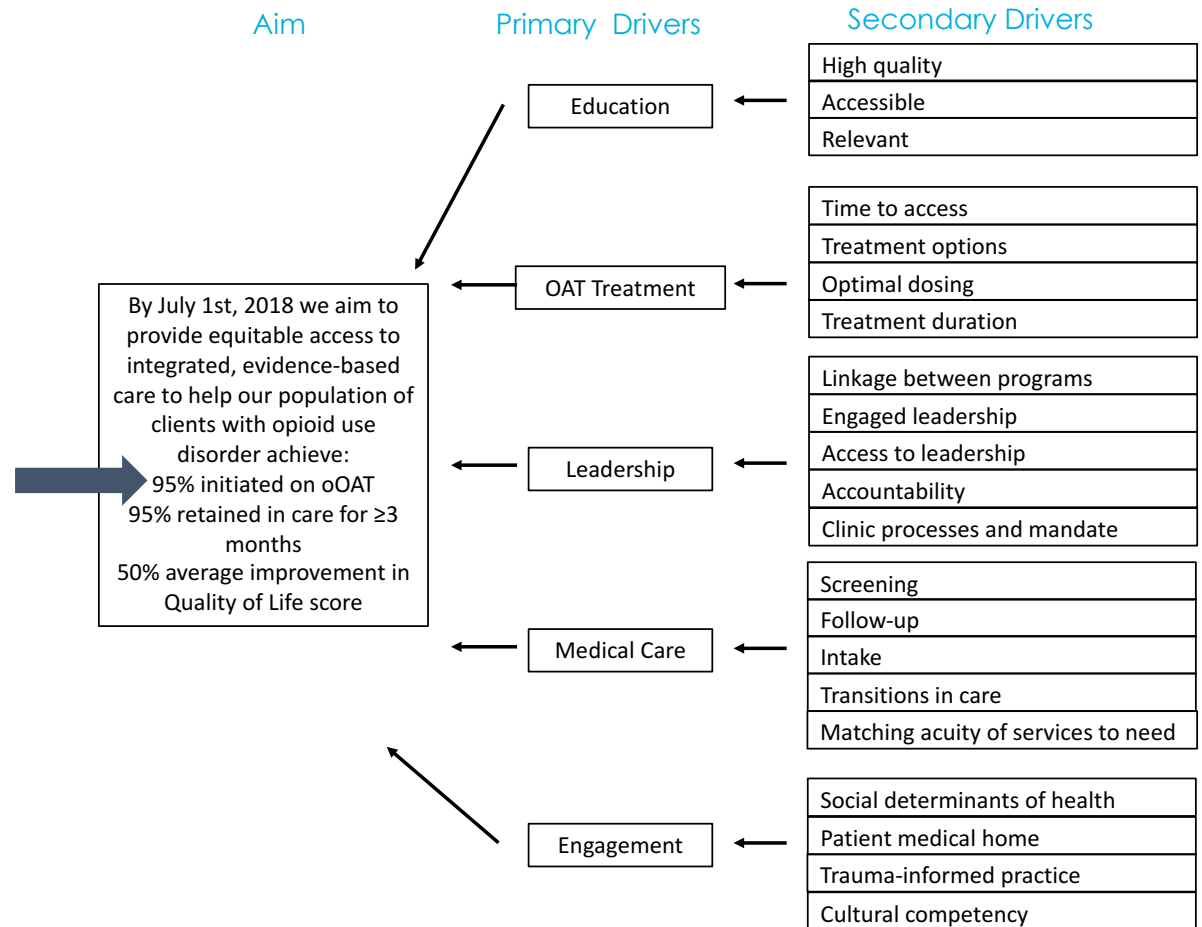
Engagement

- Engagement (1.2)

Numerator	Teams will determine their definition of “engagement” and/or “lost to care” based on their client population and program. For example, a team can define engaged in care as all clients with at least two care visits (with MD, NP, RN, etc.) in the last 12 months.
Denominator	POF
Calculation 1	$(\text{Numerator} / \text{Denominator}) \times 100\% = [\text{Proportion Engaged in Care}]$
Calculation 2	$100 - [\text{Proportion Engaged in Care}] = \text{Lost to Care}$
Suggested goal	95% Engaged in Care
Notes	Teams will work together to come up with a definition that is feasible and hopefully comparable between teams.
Profile EMR queries	BOOST 1.2N Engaged in care/lost to care BOOST 1.2D Engaged in care/lost to care = POF

oOAT Access

- oOAT access (1.3)



oOAT Access

- oOAT access (1.3)

Numerator	Number of clients with a treatment initiation date entered in OUD form (notNull)
Denominator	POF
Calculation	$(\text{Numerator}/\text{Denominator}) \times 100\%$
Suggested goal	95%
Notes	Using the new OUD visit template, providers will fill in approximate first OAT initiation date if person has ever been on OAT. This can then be used to accurately identify all those who have accessed treatment. This differs from baseline data presented that was based on having an OAT prescription in the EMR in the past 12 months.
Profile EMR queries	BOOST 1.3N oOAT access BOOST 1.3D oOAT access = POF

oOAT Access

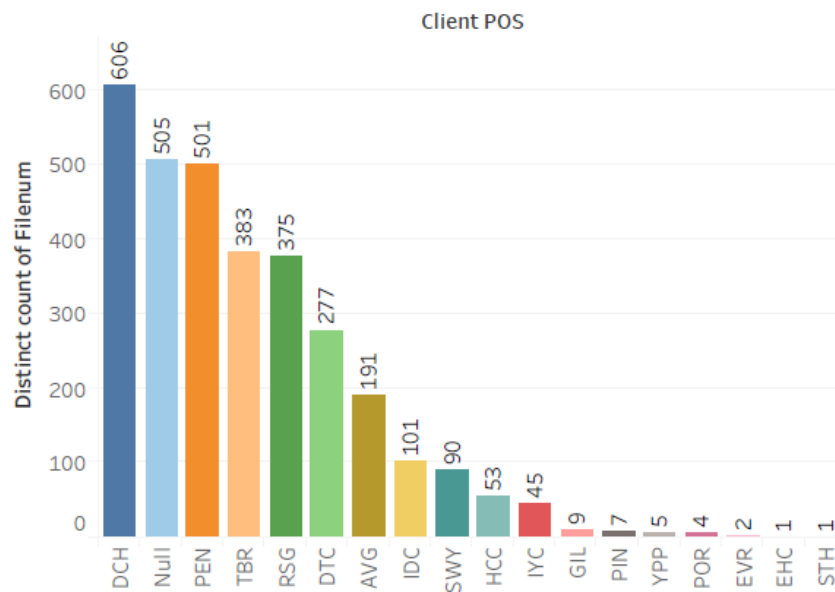
- **oOAT access (1.3)**
 - Baseline - Proportion of clients in POF who have at least one prescription for methadone, Kadian (SR0M), or Suboxone on EMR (any POS)
 - When new EMR form used – Proportion of clients with an OAT initiation date entered (notNull)
 - For baseline data - need to run query of ALL MMT and duplicate rx in the EMR, then link this data to OUD clients identified in POF query
 - Simpler query when new EMR form used

oOAT Access

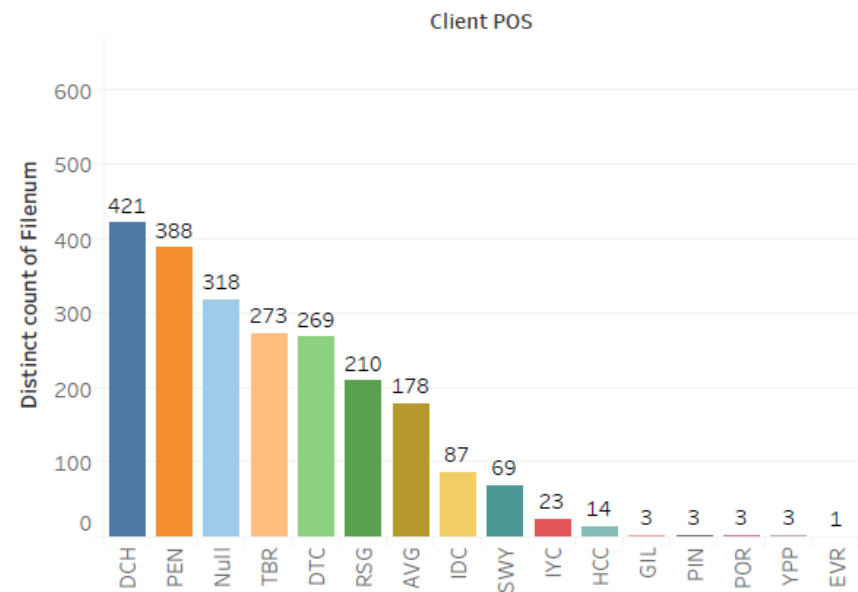
- oOAT access (1.3)

Some baseline data

Population of focus

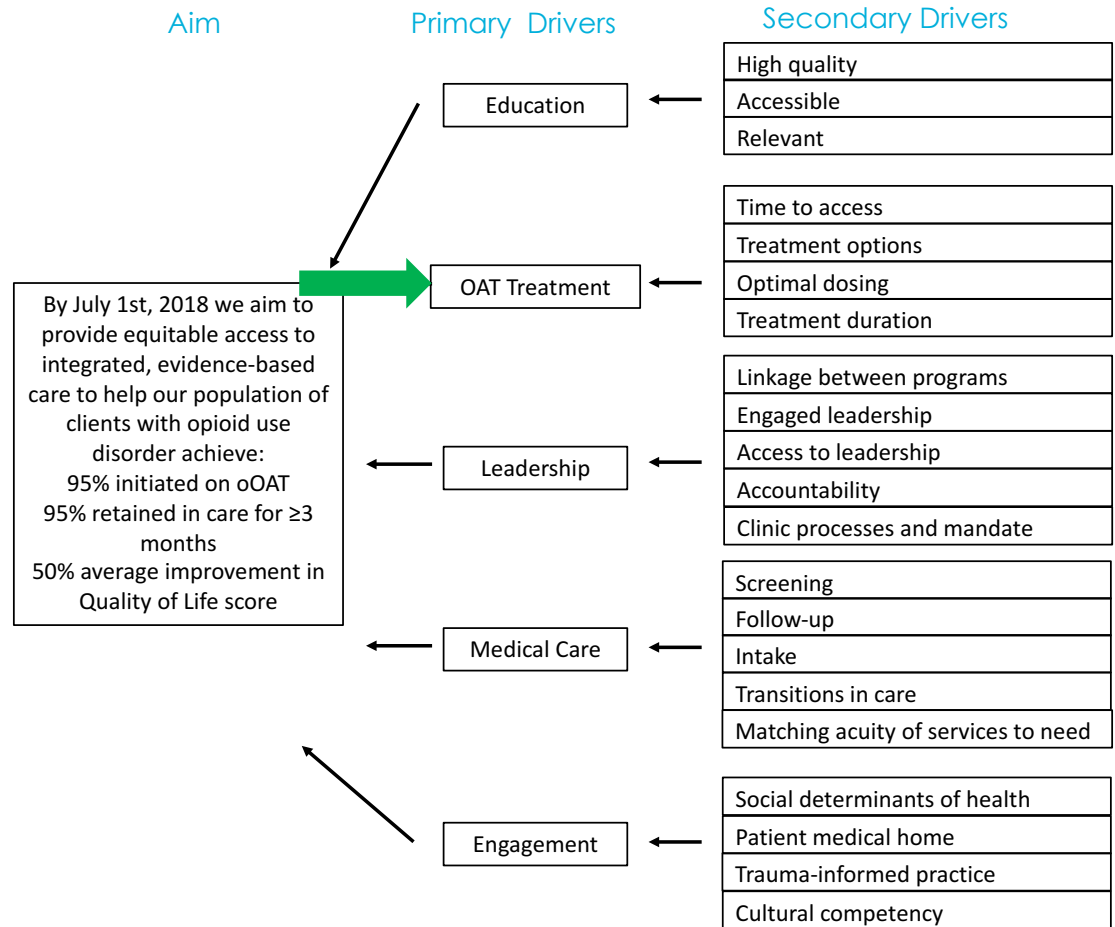


OAT accessed in past 12 months



Active oOAT

- Active oOAT (2.2)



Active oOAT

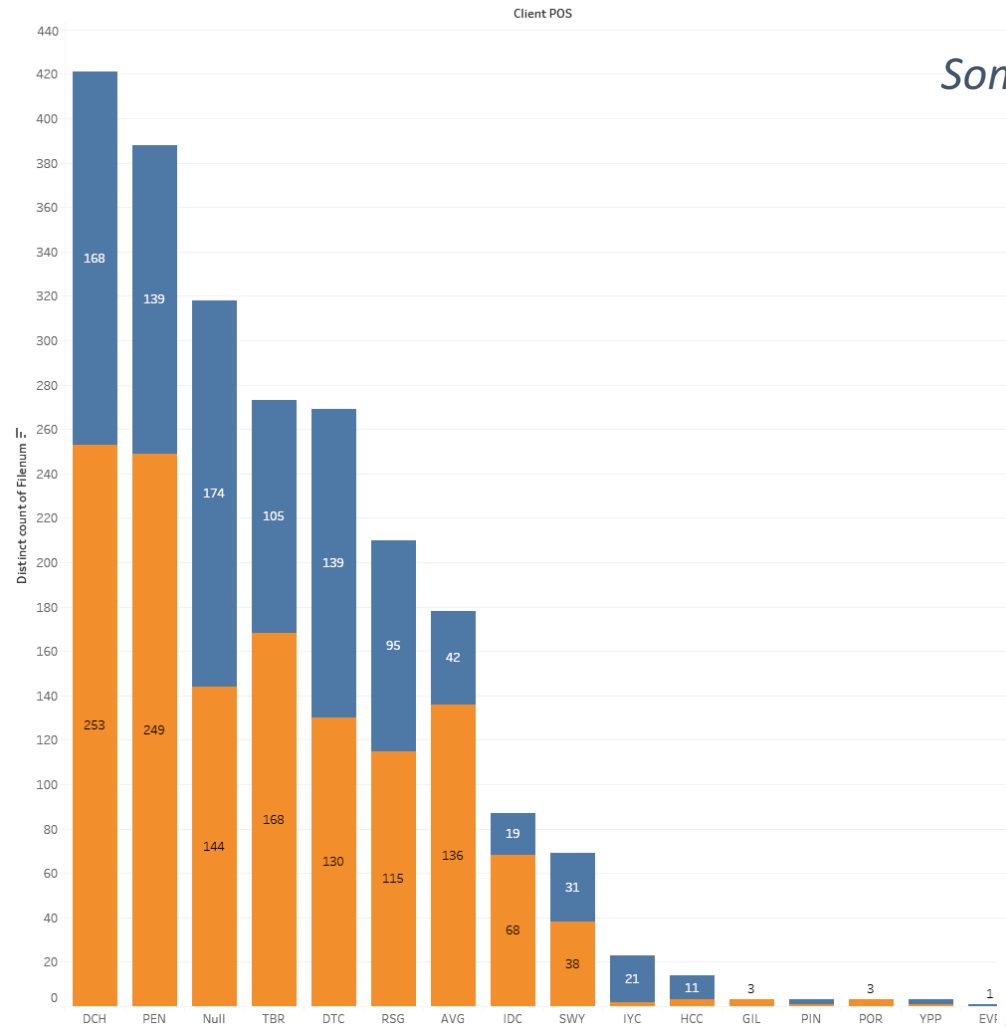
- Active oOAT (2.2)

Numerator	Number of clients who have an active (non-expired) prescription for Methadone, Kadian (SR0M), or Suboxone – operationally in EMR Profile this is number of clients with a Last Day in the Prescription Creator on the OUD visit template form that is greater than the refresh date of the QI/query environment
Denominator	POF
Calculation	$(\text{Numerator}/\text{Denominator}) \times 100\%$
Suggested goal	95%
Profile EMR queries	BOOST 2.2N Active oOAT BOOST 2.2D Active oOAT

Active oOAT

- Active oOAT (2.2)

Active OAT rx as subset of those with OAT in past 12 months

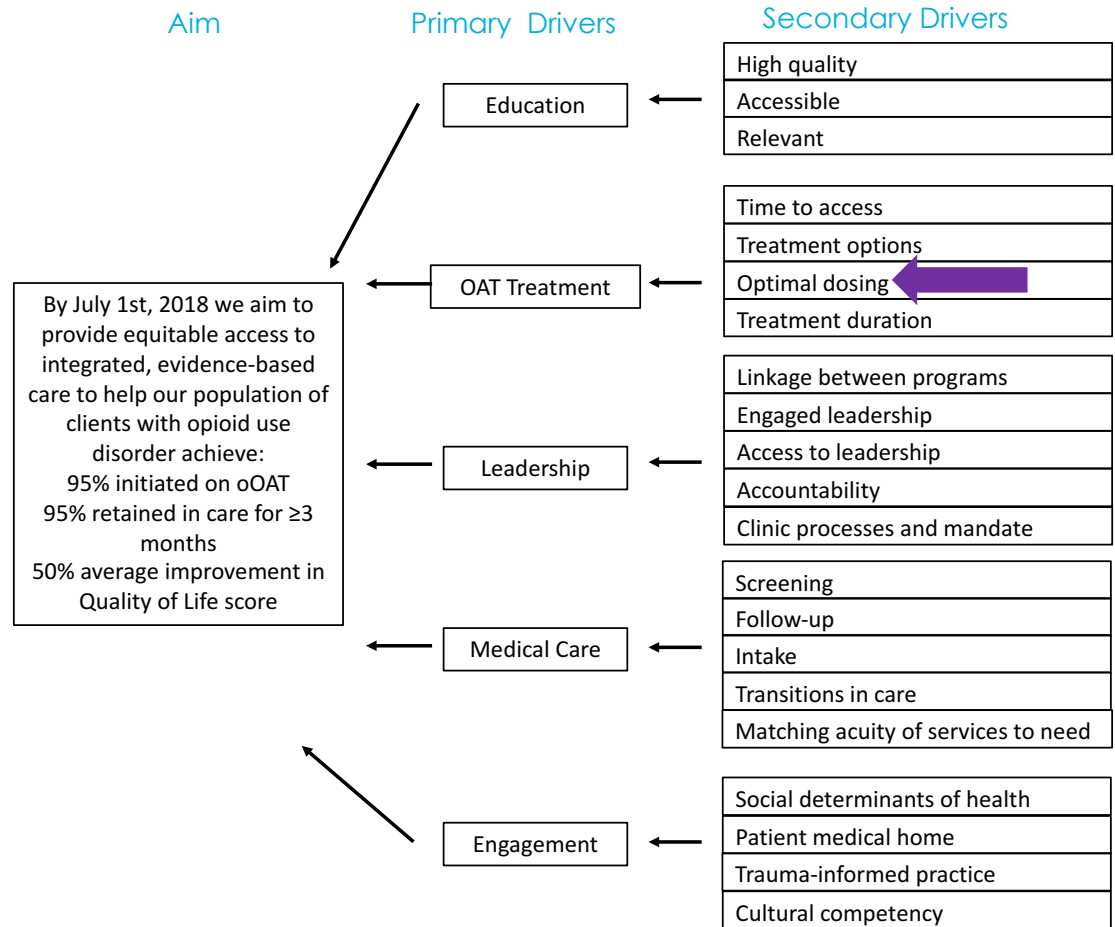


Some baseline data



Optimal oOAT dosing

- Optimal oOAT dosing (2.3)



Optimal oOAT dosing

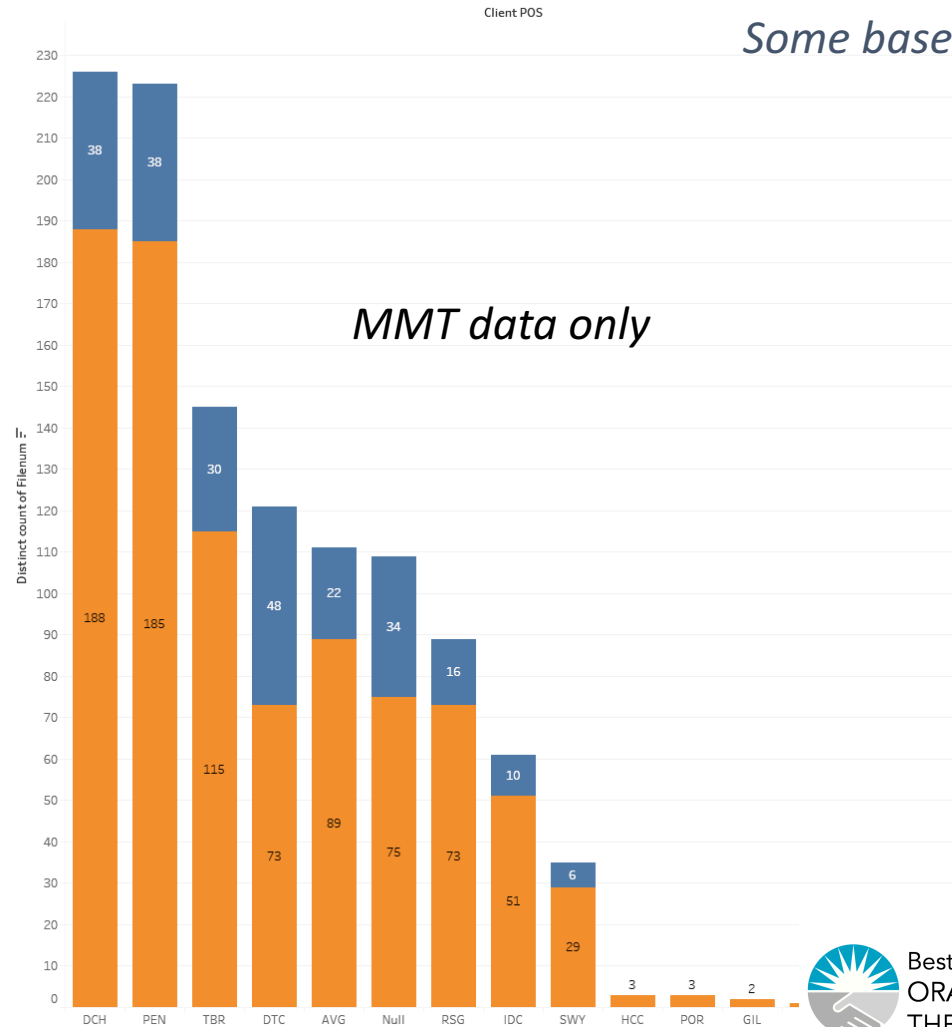
- **Optimal oOAT dosing (2.3)**

Numerator	Number of clients receiving at or above 60mg for Methadone and 16mg for buprenorphine
Denominator	Numerator from 2.2 Active oOAT excluding those clients on Kadian (SROM)
Calculation	$(\text{Numerator}/\text{Denominator}) \times 100\%$
Suggested goal	95%
Notes	*The denominator for this calculation is the numerator of the Active oOAT excluding those on Kadian (SROM) as there is no commonly accepted value for optimal dose
Profile EMR queries	BOOST 2.3N Optimal oOAT dosing BOOST 2.3D Optimal oOAT dosing

Optimal oOAT dosing

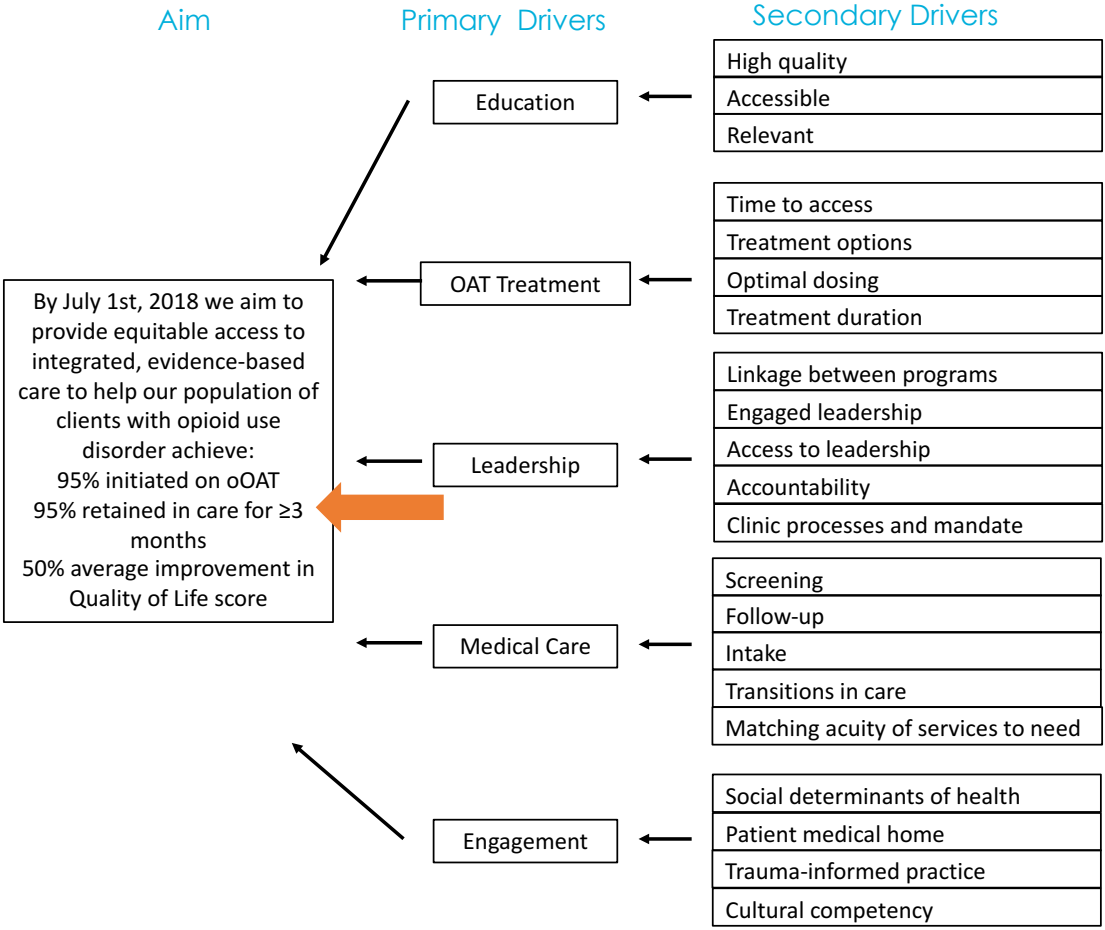
- Optimal oOAT dosing (2.3)

Clients on optimal dose MMT as subset of those with active MMT rx



Retention on oOAT

- Retention on oOAT (2.4)



Retention on oOAT

- Retention on oOAT (2.4)

Numerator	Number of clients with OAT duration > 90 days on OUD visit template form
Denominator	Numerator from 2.2 Active oOAT
Calculation	$(\text{Numerator}/\text{Denominator}) \times 100\%$
Suggested goal	95%
Profile EMR queries	BOOST 2.4N Retention on oOAT BOOST 2.4D Retention on oOAT

Retention on oOAT

- **Retention on oOAT (2.4)**

- For baseline data, can look over past year and calculate sum of all prescription durations for the client
- Difficult to do accurately because some people get multiple prescriptions on same day, or prescription durations overlap
- Prospectively, we built this into our EMR form so it is easier to track
 - Form will be able to show clinician how long client has been retained on treatment

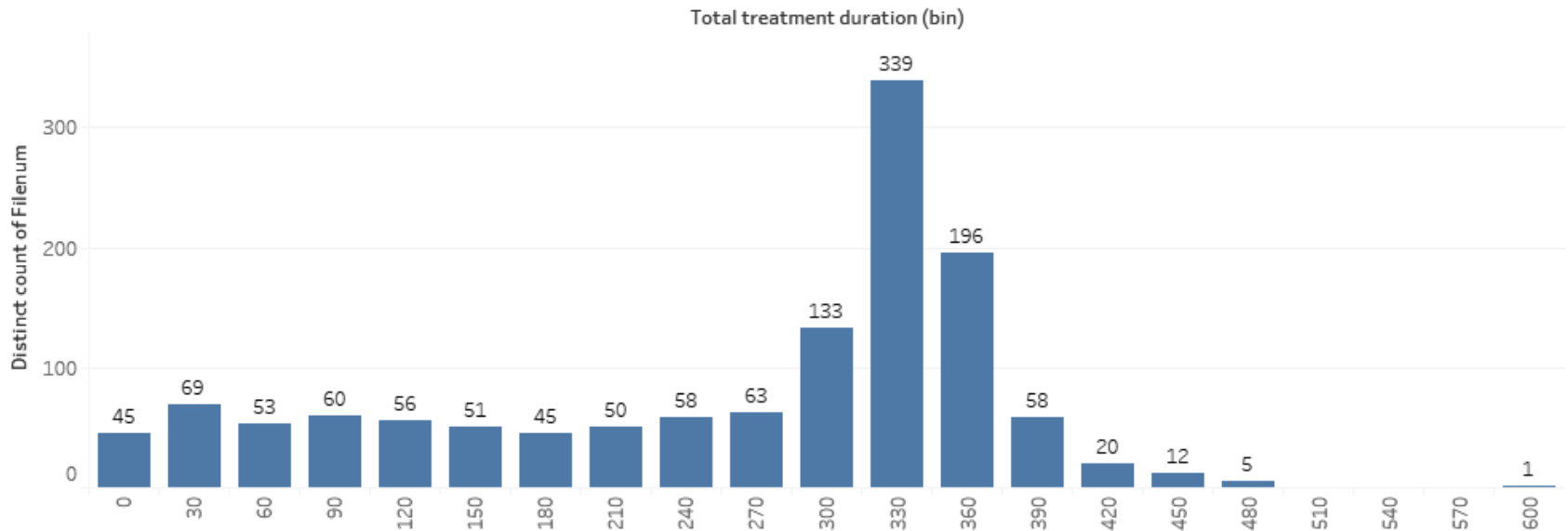
Treatment course	
Treatment stage	Stable dose
OAT initiation date	06 Sep 2016
Most recent OAT start date	12 Apr 2017
Stable dose date	12 Sep 2017
OAT duration	153

Retention on oOAT

- Retention on oOAT (2.4)

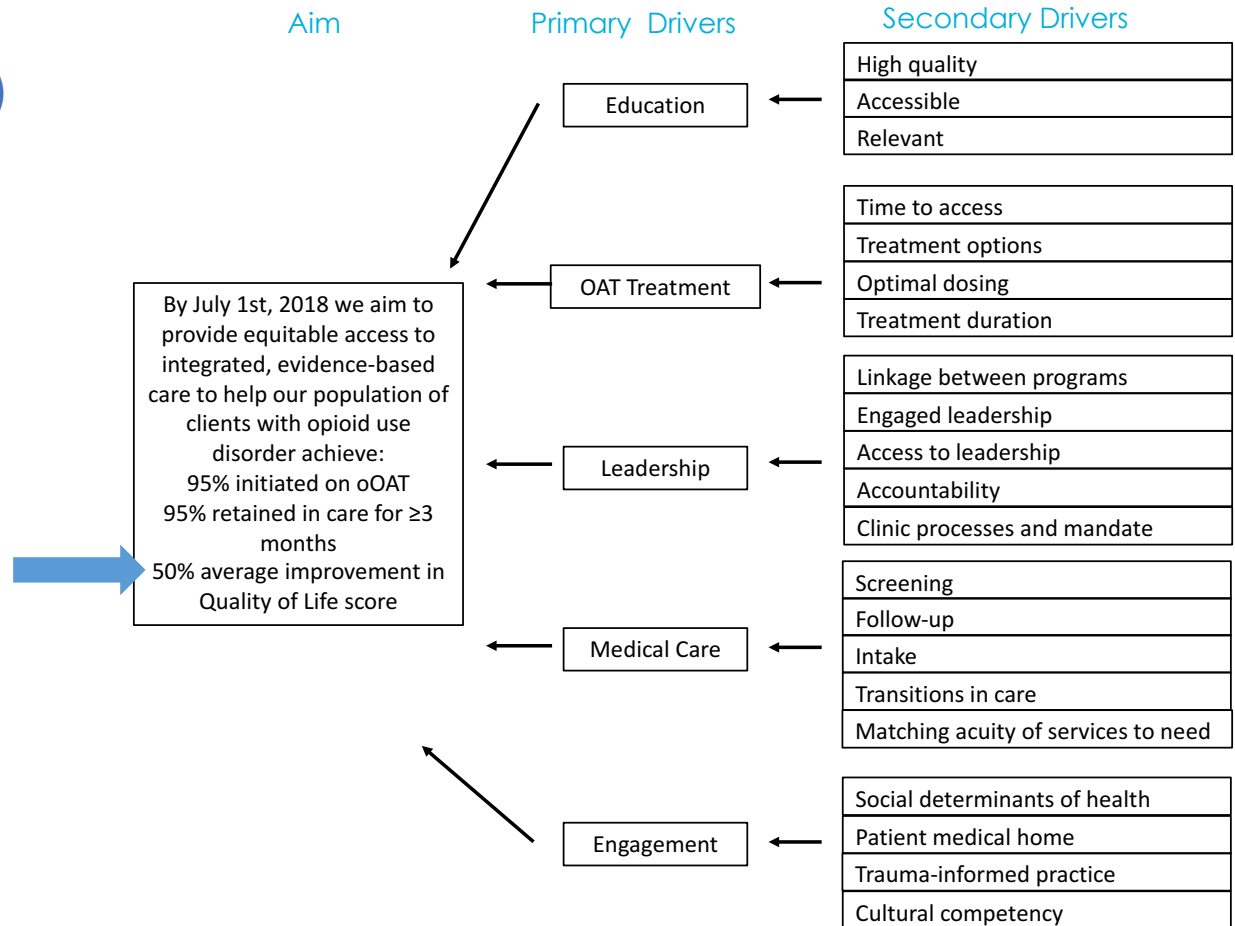
Some baseline data

Treatment duration histogram for those with active OAT prescription



Quality of Life score

- Quality of Life score (3.2)



Quality of Life score

- **Quality of Life score (3.2)**

Calculation	Using the PROMIS v1.1 scoring method for this 10 question Quality of Life scale, find the raw score out of 50 and then average all the results for most recent completed PROMIS forms
Suggested goal	Increase average score by 50%
Profile EMR queries	BOOST 3.2 Quality of life

Quality of Life score

- Quality of Life score (3.2)

DTES Connections PROMIS - Global Health for DONOTUSE-POST UPGRADE, DONOTUSEP

Page 1 Page 2

Print Print, Save, Close Print This Page Print Without Save

12 Sep 2017

PROMIS Scale v1.2 - Global Health

Global Health

Please respond to each question or statement by marking one box per row.

		Excellent	Very good	Good	Fair	Poor
Global01	In general, would you say your health is:	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Global02	In general, would you say your quality of life is:.....	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Global03	In general, how would you rate your physical health?	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1

No Privacy F

Look for: promis Find

Global Health - PROMIS (VCH/PHC EMR)

Optional Measures

Optional Measures
1.4 Outreach
1.5 Rate of THN training
1.6 Self-reported number of Ods
2.5 Time from Induction to Optimal Dose
2.6 Other Substance Use
3.3 HIV Screening Rate
3.4 HCV Screening Rate
3.5 Syphilis Screening Rate
3.6 Hep A and B Vaccinations
3.7 Depression Screening with PHQ-9