# *Teams at the frontlines of the opioid crisis are driving system change to improve care*

Tuesday, November 21

0800-0900h

# Speaker

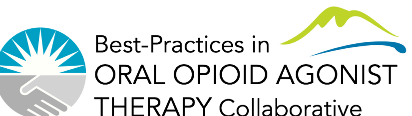
**Cole Stanley, MD, CCFP**

Medical Lead, BOOST Collaborative

Medical Lead, Continuous Quality Improvement, Vancouver Coastal Health (VCH) Community

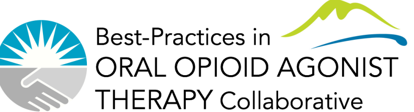
Family Physician, Raven Song Community Health Centre, VCH

Family Physician, John Ruedy Immunodeficiency Clinic, St. Paul's Hospital



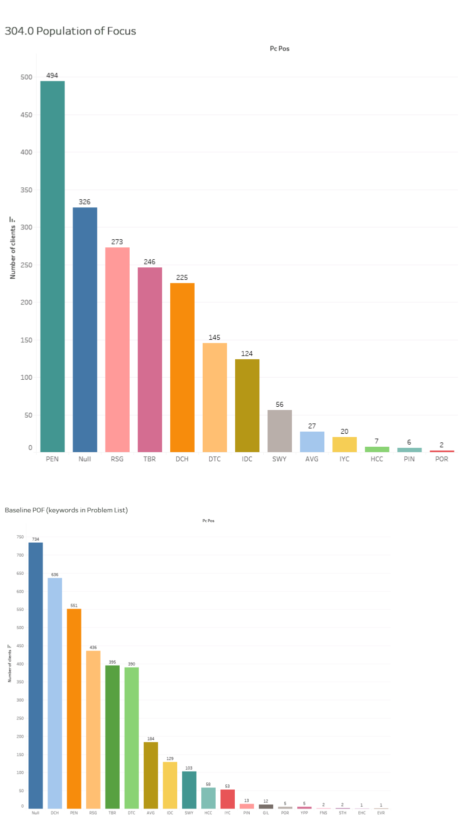
# Disclosures

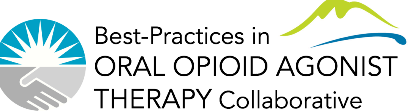
- Travel grants received for conference attendance from the following
  - 2017 – Gilead Sciences
  - 2016 – Canadian Association for HIV Research (with support from Viiv), Gilead Sciences
- Mitigating bias
  - No discussion of HIV or Hep C therapy in today's talk
- Data and graphs tend to excite me a tad more than the norm (according to some colleagues)



# Disclosures

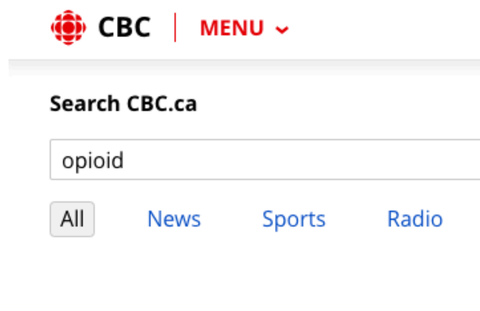
*Oh look, there's Cole nerding out with those graphs again!*



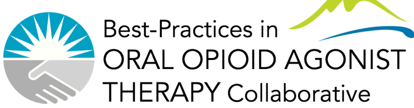
# Outline

- There is an **opioid crisis**
- A view from the frontlines
- Drivers of the crisis
  - **Internal** vs. external
- System gaps
- How do we fix these?
  - What works according to research?
  - How do we translate that scientific knowledge into practice?
- What progress are we making?
- What are the broader implications for this work?



# Objectives

- What is the BOOST Collaborative?
  - Aims
  - Measures
  - Change Ideas
  - Structure
  - Team involvement
  - Teams using QI methods (Model for Improvement)
- Importance of standardizing clinical data entry
- Things to think about:
  - How does this work relate to YOUR daily practice?
  - How could you apply QI and The Model for Improvement to care gaps in your own clinic setting?
  - What other clinical topics might be ready for a Collaborative approach?



# The current opioid crisis

**Illicit Drug Overdose Death Rates by Health Authority, 2007-2017**

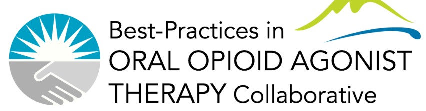
Rate per 100,000

45
40
35
30
25
20
15
10
5
0

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

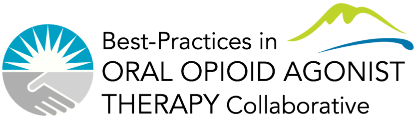
Interior, Fraser, Vancouver Coastal, Vancouver Island, Northern, BC

http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/death-investigation/statistical/illicit-drug.pdf



# Patient - Jake

- Pleasant male in 50s, history of opioid use disorder but reports being clean for past few years
- Suffers with chronic low back pain, but reports NSAIDs having some effect
- Working part-time and enjoys being productive, has goals to visit family in other province
- Call from coroner, found dead of suspected OD, fake “oxys” that are likely fentanyl are found on scene



# Patient - Paul

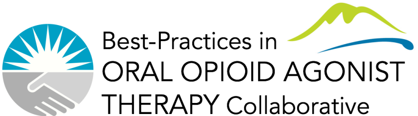
- Another pleasant male in his 40s, history of HIV, active hepatitis C, and opioid use disorder (previously on methadone), although does not report recent use
- Back to work, attending HIV clinic appointments, motivated to get curative hepatitis C therapy
- Start hep C treatment, but only 1.5 weeks in, his primary doc informs me that he died of OD

# Patient - Dan

- Male in his 20s, HIV+ MSM, quite marginalized, living on street
- History of alcohol and stimulant use, with recent onset of opiate use
- Difficulty with engagement
- One failed Suboxone start
- Expresses desire to STOP HIV outreach team to get off opiates and go to detox
- Found dead of OD only a few days later

# Patient - Sabrina

- Female in her 20s, using opiates for past year or two, otherwise healthy
- We get her on Suboxone a few times
- Work schedules conflict with her clinic appointments, and she misses some
- Reverts to opiate use, but we manage to get her restarted on Suboxone 8mg
- Picks up supply with a friend then they go to their separate homes and use – he doesn't wake up
- One of the first deaths linked to carfentanil

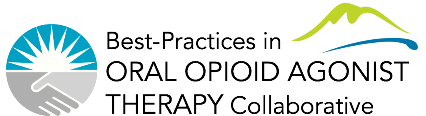


# Patient - Alex

- Male around my age
- Seen on weekend at Raven Song
- Comes in disheveled, no shoes, living on street, desperate to get off opiates
- Difficulties with engagement in past, some history of incarceration
- A slow clinic day, so I spend one hour with him, confident that at the end he will take his new methadone rx to the pharmacy and start
- Pharmanet check the next day – rx was never filled

# Looking back at these cases

- My initial reactions…
  - What could I have done for better patient outcomes?
  - How could I have prevented this?
- After some time and rational thinking…
  - I was but one part of the complex healthcare system and society these patients were trying to maneuver in
  - How can we change the system to get better outcomes for people like this?



# What is driving this crisis?

- External factors
  - Poisoned drug supply (predominantly fentanyl)
  - Harmful drug laws
  - Public health vs. Law enforcement approaches

- **Internal factors – our focus**
  - *What we CAN change, starting now*

# What is driving this crisis?

## The Opioid Overdose Crisis

### A call for better access to care for people who use drugs

Mark Tyndall, MD, ScD
Executive Medical Director, BCCDC
Professor, UBC School of Population & Public Health

# What can be done?

Engage peers in program development and leadership

Address contamination of the drug supply

Support appropriate pain management therapies

Build on the success of Overdose Prevention Sites

Expand and improve addiction treatment

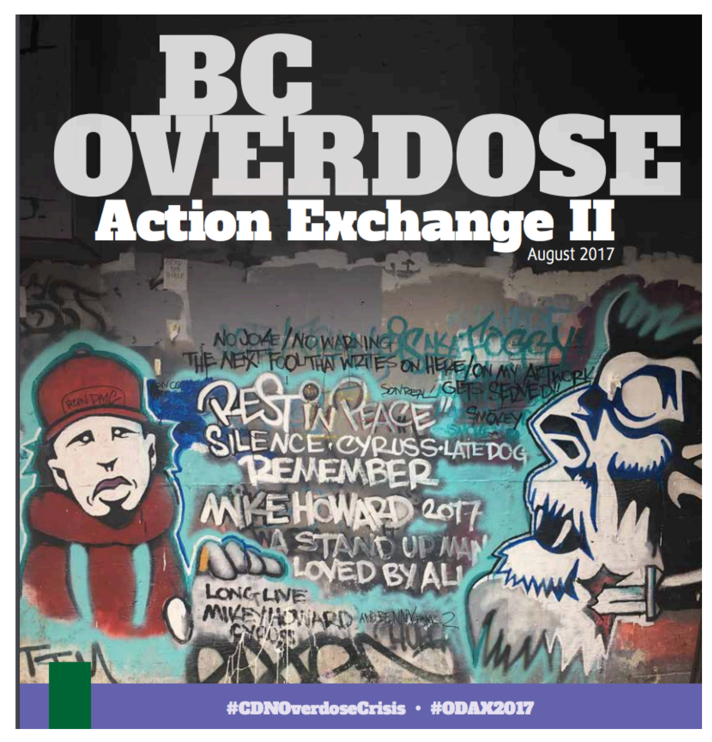
Align law enforcement efforts with public health

Reform drug laws

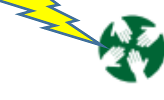
Address structural barriers and upstream factors

Counter stigma against people who use drugs

Implement targeted research, surveillance and evaluation initiatives



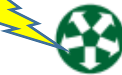
# What can our frontline teams start doing NOW?


Engage peers in program development and leadership

Address contamination of the drug supply

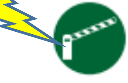
Support appropriate pain management therapies

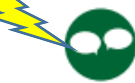
Build on the success of Overdose Prevention Sites


Expand and improve addiction treatment

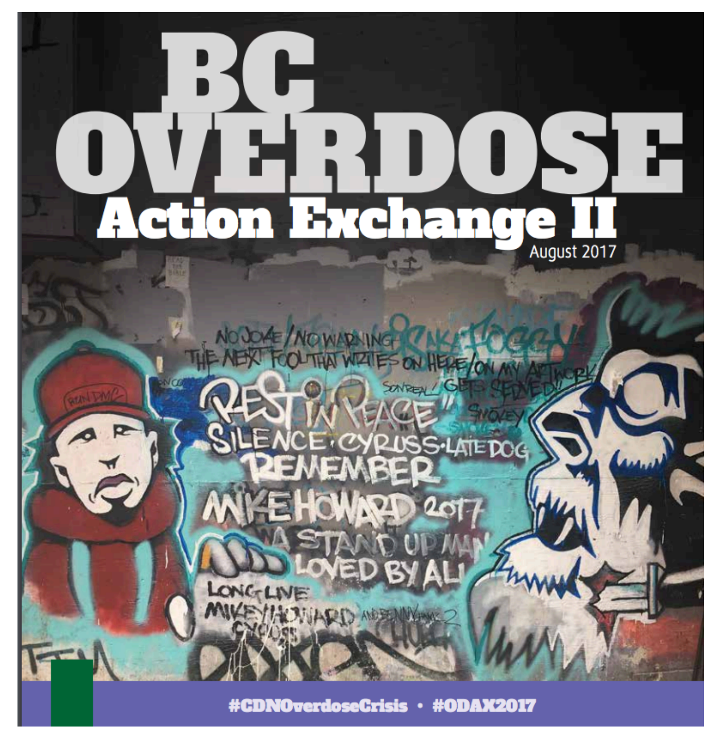
Align law enforcement efforts with public health

Reform drug laws


Address structural barriers and upstream factors


Counter stigma against people who use drugs

Implement targeted research, surveillance and evaluation initiatives



# System gaps

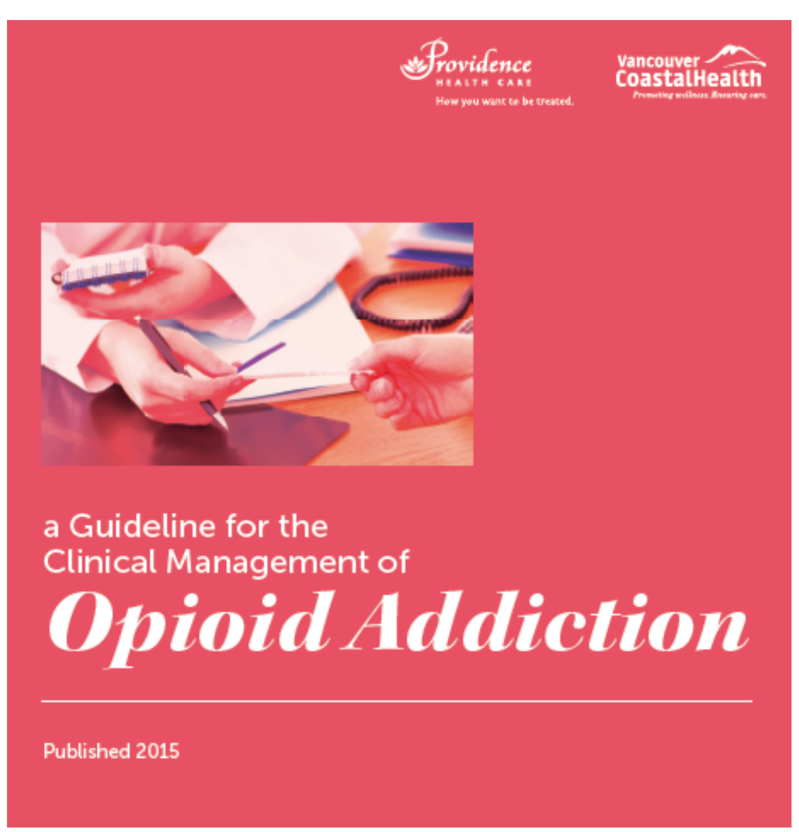
- Ask the patient
- Ask the family
- Ask the frontline staff

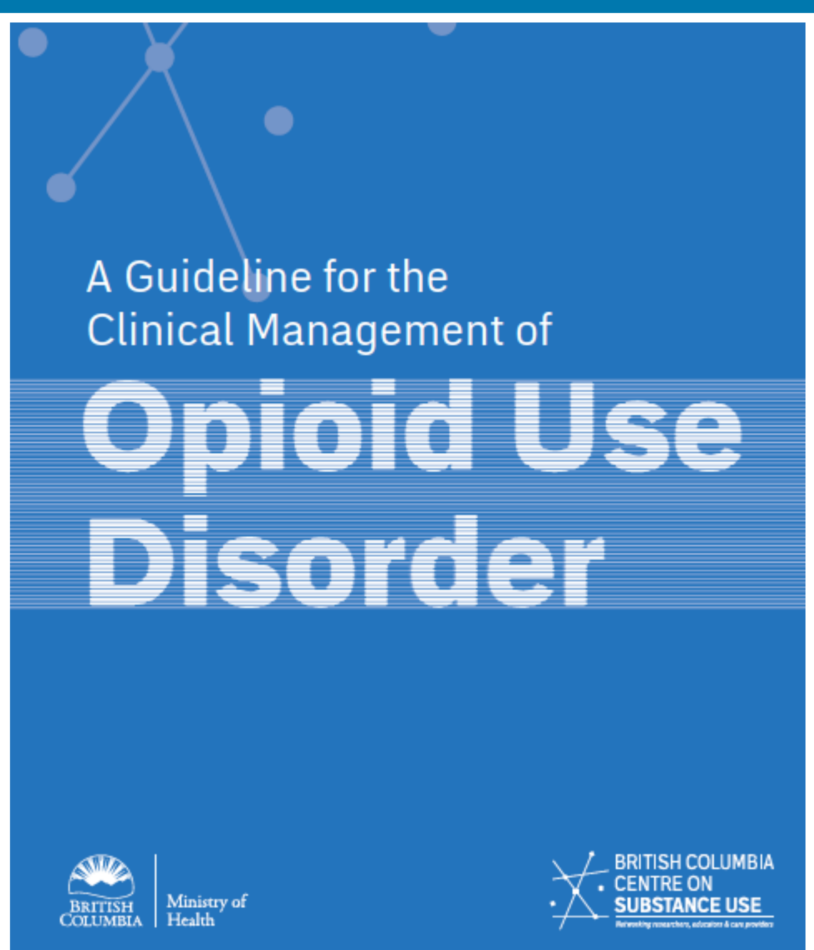
➢ *Inevitably a long list is created…*

***System opportunities***

# What does research tell us

*The science exists…*



# What does research tell us

**Outcomes associated with methadone and buprenorphine**

- Treatment retention
- Withdrawal suppression
- Decreased illicit opioid (and cocaine) use
- Reduced risk of HCV/HIV
- Increased antiretroviral adherence, lower HIV viral load
- Decreased criminal activity
- Significantly reduced mortality (both all-cause and substance-related)

# What does research tell us

OPEN ACCESS

## Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies

Luis Sordo,[1,2,3] Gregorio Barrio,[4] Maria J Bravo,[1,2] B Iciar Indave,[1,2] Louisa Degenhardt,[5,6] Lucas Wiessing,[7] Marica Ferri,[7] Roberto Pastor-Barriuso[1,2]

[1]National Centre for Epidemiology, Carlos III Institute of Health, Madrid, Spain
[2]Consortium for Biomedical Research in Epidemiology and Public Health (CIBERESP), Madrid, Spain
[3]Department of Preventive Medicine and Public Health, Faculty of Medicine, Complutense University, Madrid, Spain
[4]National School of Public Health, Carlos III Institute of Health, 28029 Madrid, Spain
[5]National Drug and Alcohol

Accepted: 17 March 2017

**ABSTRACT**

**OBJECTIVE**

To compare the risk for all cause and overdose mortality in people with opioid dependence during and after substitution treatment with methadone or buprenorphine and to characterise trends in risk of mortality after initiation and cessation of treatment.

**DESIGN**

Systematic review and meta-analysis.

**DATA SOURCES**

Medline, Embase, PsycINFO, and LILACS to September 2016.

**STUDY SELECTION**

...s in people ...aths from all ...ods in and out ...hadone or

...ta extraction ...es in and out ...s methadone ...ariate

...22 885 people ...s and 15 831 ...1-4.5 years. ...and 36.1 per 1000 person years in and out of methadone treatment (unadjusted out-to-in rate ratio 3.20, 95% confidence interval 2.65 to 3.86) and reduced to 4.3 and 9.5 in and out of buprenorphine treatment (2.20, 1.34 to 3.61). In pooled trend analysis, all cause mortality dropped sharply over the first four weeks of methadone treatment and decreased gradually two weeks after leaving treatment. All cause mortality remained stable during induction and remaining time on buprenorphine treatment. Overdose mortality evolved similarly, with pooled overdose mortality rates of 2.6 and 12.7 per 1000 person years in and out of methadone treatment (unadjusted out-to-in rate ratio 4.80, 2.90 to 7.96) and 1.4 and 4.6 in and out of buprenorphine treatment.

**CONCLUSIONS**

Retention in methadone and buprenorphine treatment is associated with substantial reductions in the risk for all cause and overdose mortality in people dependent on opioids. The induction phase onto methadone treatment and the time immediately after leaving treatment with both drugs are periods of particularly increased mortality risk, which should be dealt with by both public health and clinical strategies to mitigate such risk. These findings are potentially important, but further research must be conducted to properly account for potential confounding and selection bias in comparisons of mortality risk between opioid substitution treatments, as well as throughout periods in and out of each treatment.

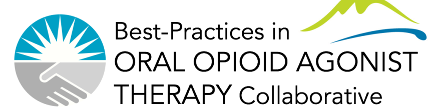
**Introduction**

Opioid dependence is a rising drug use disorder with substantial contribution to the global disease burden. The absolute number (age standardised prevalence) of people with opioid dependence worldwide increased from 10.4 million (0.20%) in 1990 to 15.5 million (0.22%)

Retention in methadone and buprenorphine is associated with substantial reductions in the rate of all cause and overdose mortality

The induction phase and the time immediately after leaving treatment with both drugs are periods of particularly increased mortality risk.

http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/death-investigation/statistical/illicit-drug.pdf



# System gaps/opportunities

**BC OPIOID SUBSTITUTION TREATMENT SYSTEM**

***Performance Measures 2014/2015 - 2015/2016***

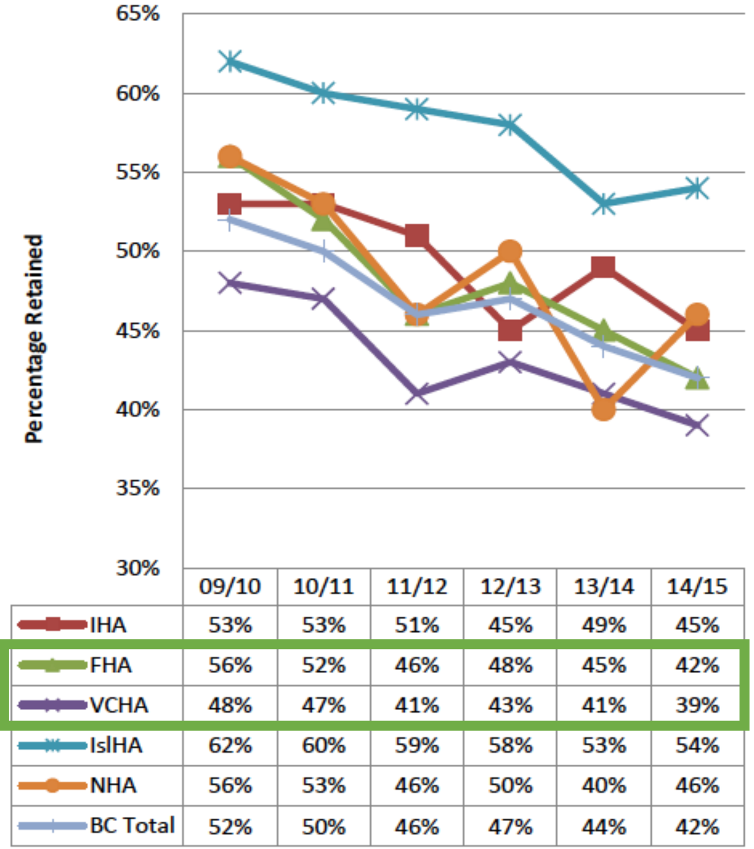
**Office of the Provincial Health Officer**

**With contributions by:**

Medical Beneficiary & Pharmaceutical Services Division &
Population and Public Health Division
British Columbia Ministry of Health

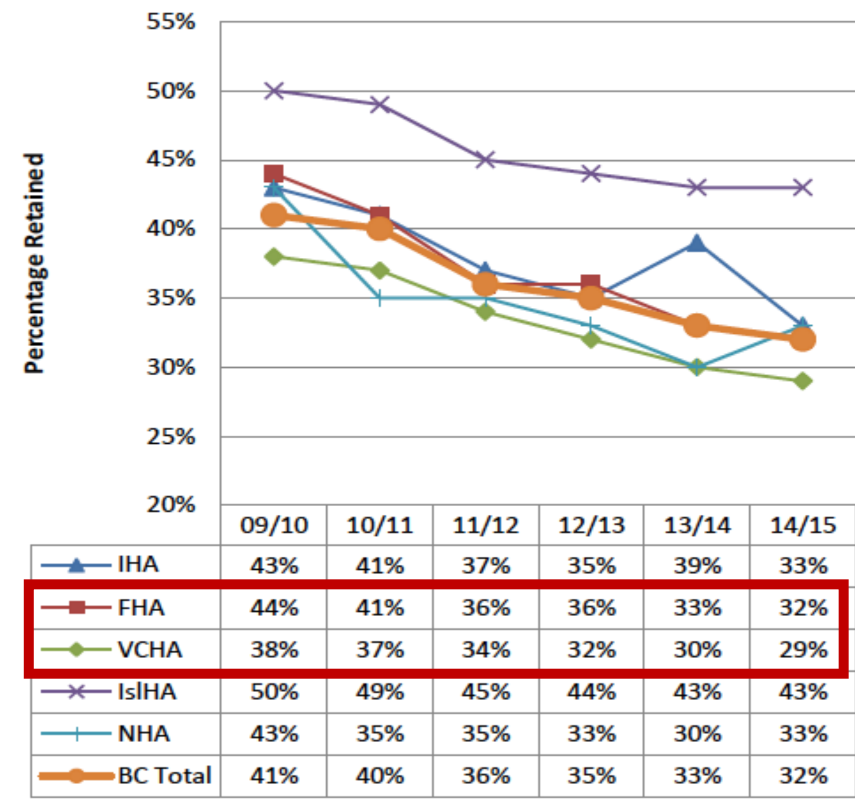
**March 2017**

# System gaps/opportunities



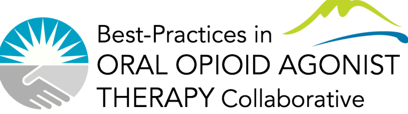

| | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 |
|---|---|---|---|---|---|---|
| IHA | 53% | 53% | 51% | 45% | 49% | 45% |
| FHA | 56% | 52% | 46% | 48% | 45% | 42% |
| VCHA | 48% | 47% | 41% | 43% | 41% | 39% |
| IslHA | 62% | 60% | 59% | 58% | 53% | 54% |
| NHA | 56% | 53% | 46% | 50% | 40% | 46% |
| BC Total | 52% | 50% | 46% | 47% | 44% | 42% |

*Figure 15a. Percentage of People Started on Methadone Maintenance Treatment Retained at 6 Months, by Health Authority, BC, 2009/2010 to 2014/2015*

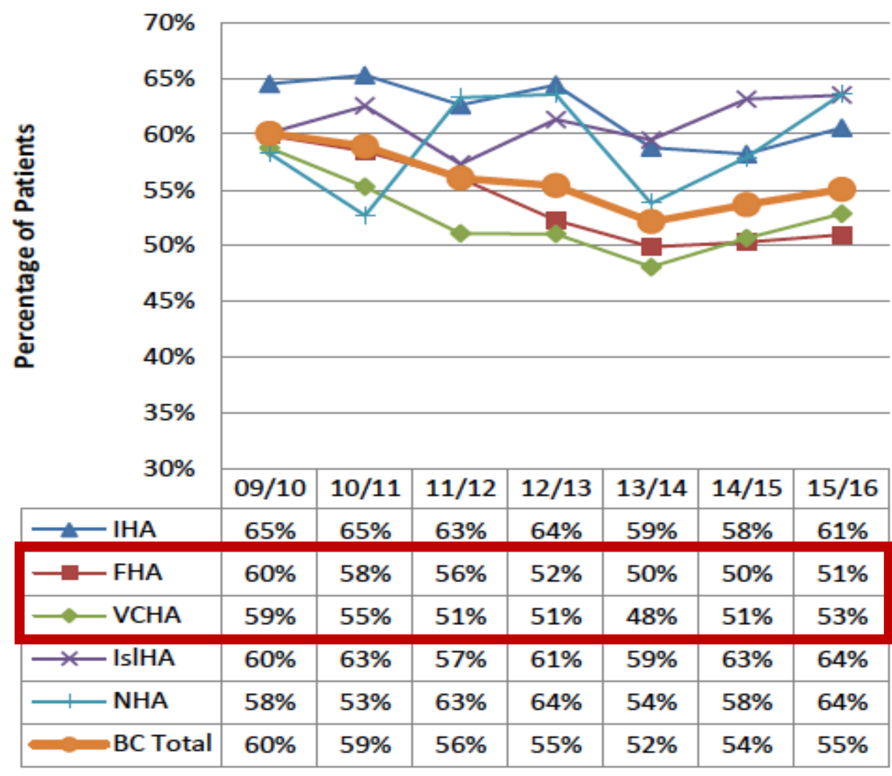



| | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 |
|---|---|---|---|---|---|---|
| IHA | 43% | 41% | 37% | 35% | 39% | 33% |
| FHA | 44% | 41% | 36% | 36% | 33% | 32% |
| VCHA | 38% | 37% | 34% | 32% | 30% | 29% |
| IslHA | 50% | 49% | 45% | 44% | 43% | 43% |
| NHA | 43% | 35% | 35% | 33% | 30% | 33% |
| BC Total | 41% | 40% | 36% | 35% | 33% | 32% |

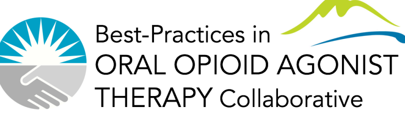
*Figure 15b. Percentage of People Started on Methadone Maintenance Treatment Retained at 12 Months, by Health Authority, BC, 2009/2010 to 2014/2015[h]*



# System gaps/opportunities




| | 09/10 | 10/11 | 11/12 | 12/13 | 13/14 | 14/15 | 15/16 |
|---|---|---|---|---|---|---|---|
| IHA | 65% | 65% | 63% | 64% | 59% | 58% | 61% |
| FHA | 60% | 58% | 56% | 52% | 50% | 50% | 51% |
| VCHA | 59% | 55% | 51% | 51% | 48% | 51% | 53% |
| IslHA | 60% | 63% | 57% | 61% | 59% | 63% | 64% |
| NHA | 58% | 53% | 63% | 64% | 54% | 58% | 64% |
| BC Total | 60% | 59% | 56% | 55% | 52% | 54% | 55% |



# How do we fix this?

- Use a “Collaborative” approach
- It’s been done before
  - HIV Collaborative in B.C.
  - NIATx Collaborative

  - Many more in the literature

**Implementation of HIV treatment as prevention strategy in 17 Canadian sites: immediate and sustained outcomes from a 35-month Quality Improvement Collaborative**

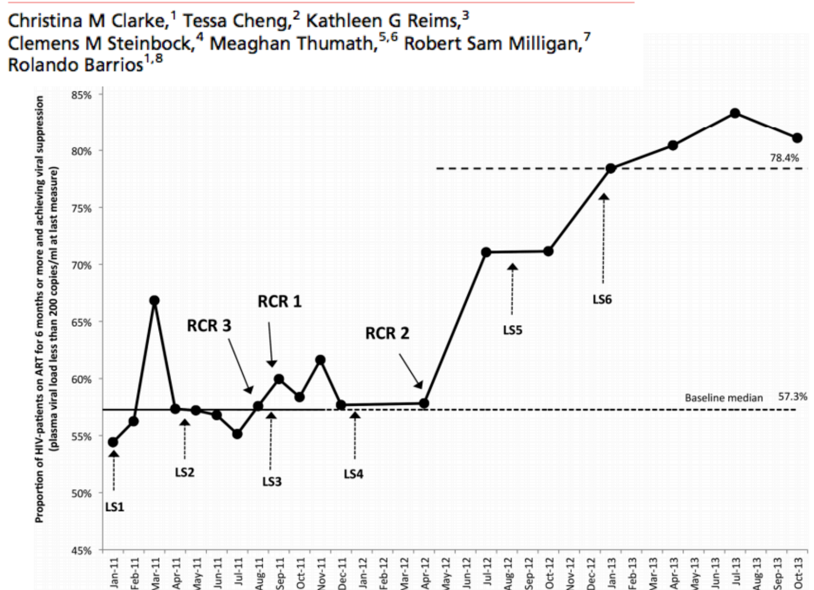



Figure 5 Antiretroviral therapy (ART) uptake for ≥6 months and achieving viral suppression. LS, learning session; RCR, run chart rule.

# Structured Learning Collaborative

Enroll Participants

Select Topic

Prework

Recruit Faculty

Develop Framework and Changes

LS1 → AP1 → LS2 → AP2 → LS3 → AP3 → Summative Congresses and Publications

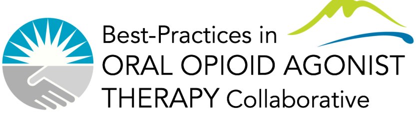
P D S A (cycles)

Institute *for* Healthcare Improvement

LS1: Learning Session
AP: Action Period
P-D-S-A: Plan-Do-Study-Act

**Supports:**
Email • Visits • Phone Conferences • Monthy Team Reports • Assessments

http://www.ihi.org/resources/pages/ihiwhitepapers/thebreakthroughseriesihiscollaborativemodelforachievingbreakthroughimprovement.aspx



# BOOST Collaborative

PREPARATION

ORAL OPIOID AGONIST THERAPY COLLABORATIVE

COMMUNITY OF PRACTICE (SUSTAINABILITY)

**Gap in Care**

A clear gap between evidence and current practice is observed

**Participants**

Sites form improvement teams and begin to align their aims with the shared Collaborative aims

**LEARNING SESSIONS 1, 2 & CLOSING CONGRESS**

In-person learning, sharing, networking and planning events

Additional activities designed to help teams stay connected, sustain performance improvements, and continue to progress towards improving care

JUL — SEP — Prep — DEC — MAR — JUN

OCT-NOV — JAN-FEB — APR-MAY

**WORKING GROUP MEETING**

Expert ideas shape the shared aims, measures, and evidence-based change ideas

**LAUNCH**

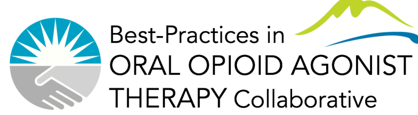
First in-person meeting provides an orientation to aims, methods, and expectations

**ACTION PERIODS 1/PREP, 2 & 3**

Teams plan and test changes using PDSA cycles, measure progress, and participate in activities (monthly coaching calls, 1:1 coaching on monthly quality reports, website, site visits, etc.)

Activities are less frequent and more self-directed

Adapted from The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement. IHI Innovation Series white paper. Boston: Institute for Healthcare Improvement; 2003. (Available at IHI.org)



# BOOST Collaborative – Core Team

**Danielle Cousineau, RN**

Quality Improvement Consultant, BC Centre for Excellence in HIV/AIDS

**Cole Stanley, MD**

Medical Lead, Continuous Quality Improvement, Vancouver Coastal Health (VCH) Community

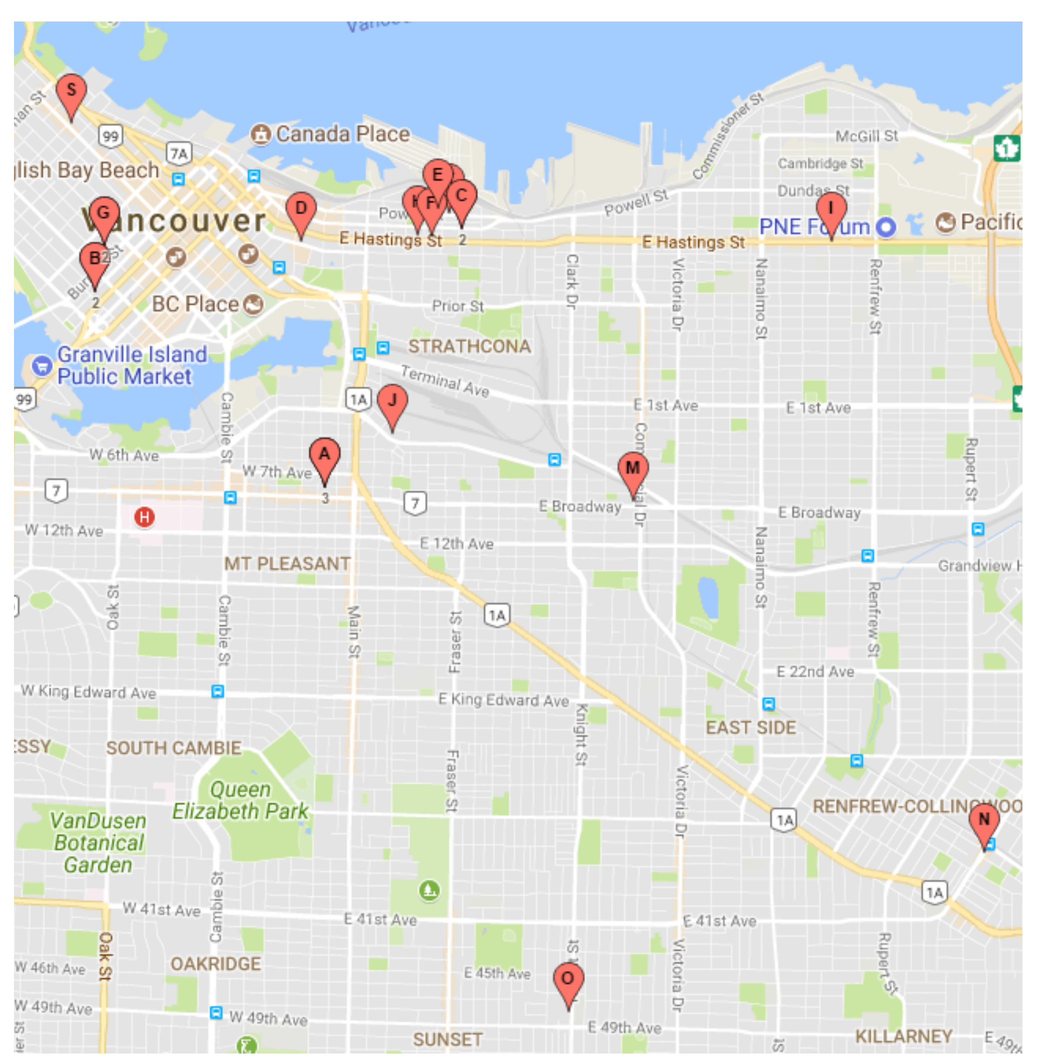
**Laura Beamish, MSc**

Quality Improvement Coordinator, BC Centre for Excellence in HIV/AIDS

**Angie Semple**

Program Assistant, BC Centre for Excellence in HIV/AIDS

# BOOST Collaborative Teams



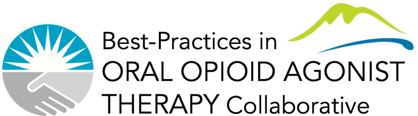

A - Raven Song Primary Care
B - Three Bridges Primary Care
D - Pender Community Health Centre
E - Downtown Community Health Centre
F - Sheway
G - Immunodeficiency Clinic
H - Vancouver Native Health Society
I - Reach Community Health Centre
J - Vancouver Detox
K - DTES Connections
L - Rapid Access and Assessment Centre
M - Substance Use Treatment and Response Team
N - Evergreen Substance Use
O - South Substance Use
P - Three Bridges Substance Use
Q - Raven Song Substance Use
S - West End Mental Health
T - Raven Song Mental Health

# BOOST Collaborative

- Launched in September with engaged leadership

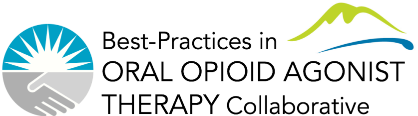
**B.C. support plan for opioid users modelled after HIV/AIDS strategy**

Rolando Barrios, assistant director at the BC-CfE and senior medical director at Vancouver Coastal Health, estimates the program will reach about 3,000 patients in Vancouver currently receiving suboptimal treatment.



# BOOST Collaborative

- **Goal – data-driven improvement at the frontlines**
  - **Specifically - Improving the care of our clients living with opioid use disorder**
  - **Uses QI and The Model for Improvement**
- Other benefits
  - Collaboration and pooled resources and expertise
  - Chance for advocating for broader system changes



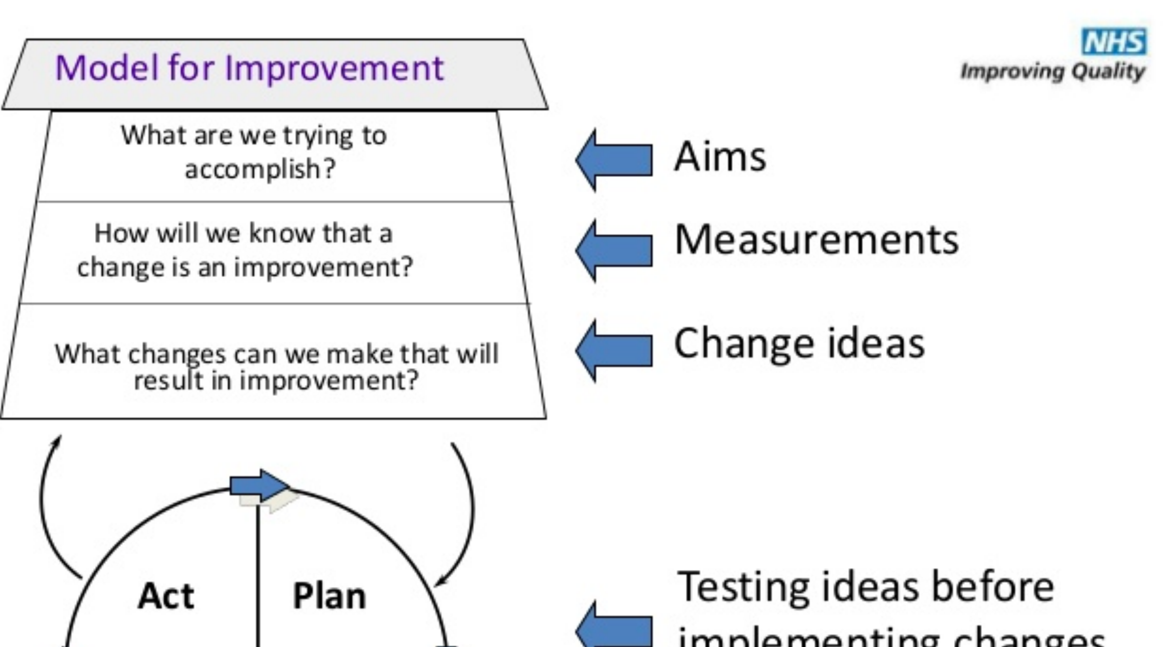
# QI and The Model for Improvement

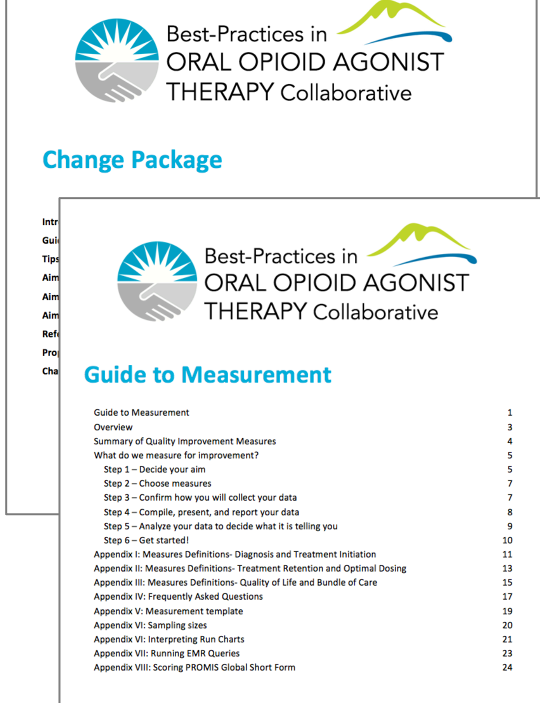
- What are our teams actually doing
  - PDSA cycles
  - Monthly quantitative and narrative reports

- Reduce lag from guideline to implementation

- Not enough time to follow all guidelines for our complex patients
  - Need to change the system
  - Team-based care

# QI and The Model for Improvement



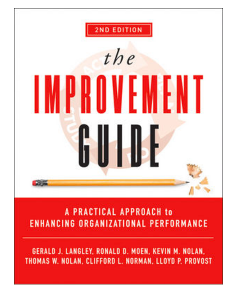


Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

Change Package

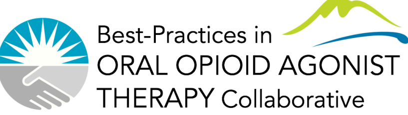
Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

Guide to Measurement


Guide to Measurement 1
Overview 3
Summary of Quality Improvement Measures 4
What do we measure for improvement? 5
Step 1 – Decide your aim 5
Step 2 – Choose measures 7
Step 3 – Confirm how you will collect your data 7
Step 4 – Compile, present, and report your data 8
Step 5 – Analyze your data to decide what it is telling you 9
Step 6 – Get started! 10
Appendix I: Measures Definitions- Diagnosis and Treatment Initiation 11
Appendix II: Measures Definitions- Treatment Retention and Optimal Dosing 13
Appendix III: Measures Definitions- Quality of Life and Bundle of Care 15
Appendix IV: Frequently Asked Questions 17
Appendix V: Measurement template 19
Appendix VI: Sampling sizes 20
Appendix VI: Interpreting Run Charts 21
Appendix VII: Running EMR Queries 23
Appendix VIII: Scoring PROMIS Global Short Form 24


*The Improvement Guide*
*Langley et al (1996)*



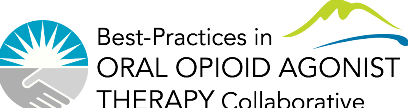
# QI and The Model for Improvement

**QI is NOT …**

- X Evaluation / Performance Assessment
- X Quality Control
- X Research

**QI is …**

- ✓ A bottom-up approach that employs the frontline team as the drivers for change to the healthcare system they work in
- ✓ A systems approach
- ✓ Where small changes are tested first, then scope and scale are expanded



# Quality Improvement Example

## 4 Optimal Dosing

Proportion of patients who are receiving optimal dose OAT

Aim: Increase proportion of patients on optimal dose

# Aim re: Optimal dosing

- **Aim**: We will increase the percentage of our OAT clients on optimal OAT dosing from 50% to 90% over the next six months

- **What?** *Percentage on optimal dosing*
- **For whom?** *OAT clients*
- **By how much?** *50% to 90%*
- **By when?** *Six months from now*

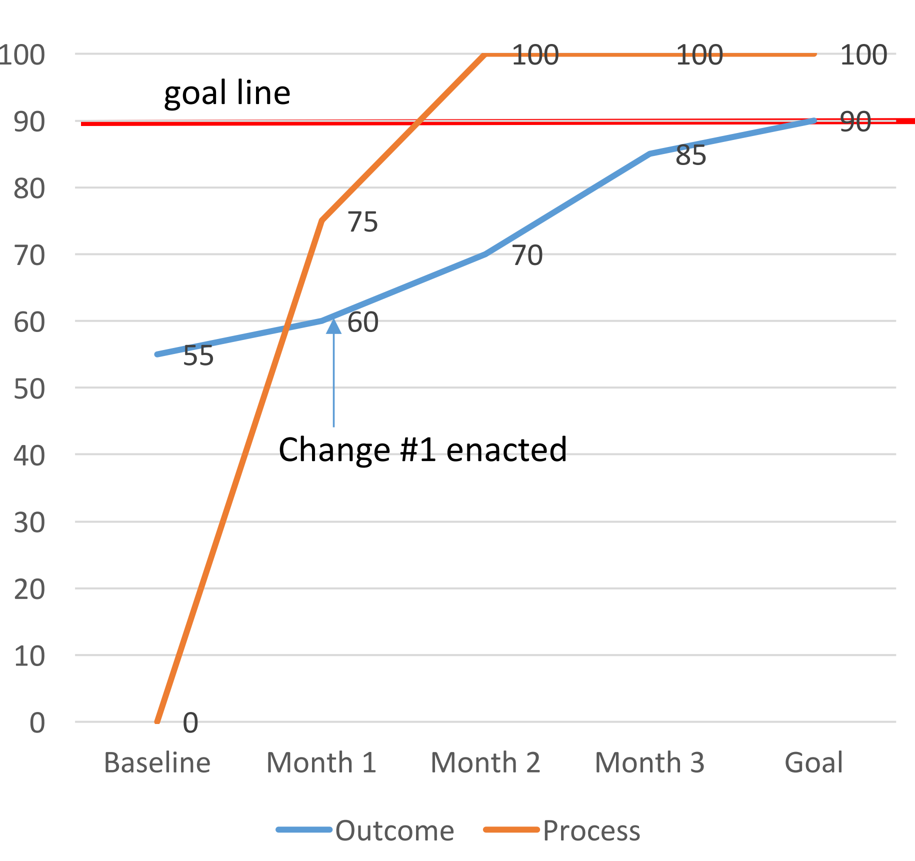
# Change Idea

- RN on team runs weekly list of OAT clients and flags those on non-optimal doses for MD/NP review and comment on

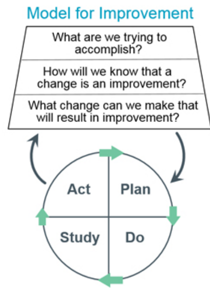
# Measures

- How will we know that our changes resulted in an improvement?
- **Outcome measures**: what are we trying to achieve?
  - Our example – proportion on optimal dosing
- **Process measures**: Are we doing the right things to get there?
  - Our example - Percentage of weeks that RN actually runs the list
- **Balancing measures**: Are our changes causing problems to other parts of the system?
  - Our example - Time taken to do the work

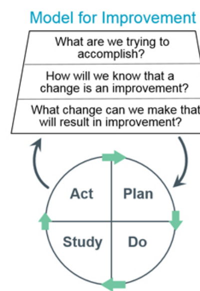
# Tracking progress

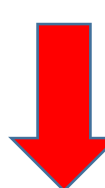


# PDSA cycles and BOOST

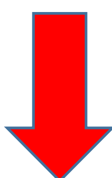



Teams testing changes (PDSA-level measures)



Site-specific aims



Collaborative aims (Collaborative-level measures)

Collaborative outcomes

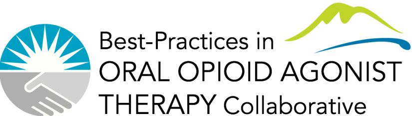
# BOOST Aim Statement

By July 1st, 2018 we aim to provide equitable access to integrated, evidence-based care to help our population of clients with opioid use disorder achieve:

95% initiated on oOAT

95% retained in care for ≥3 months

50% average improvement in Quality of Life score



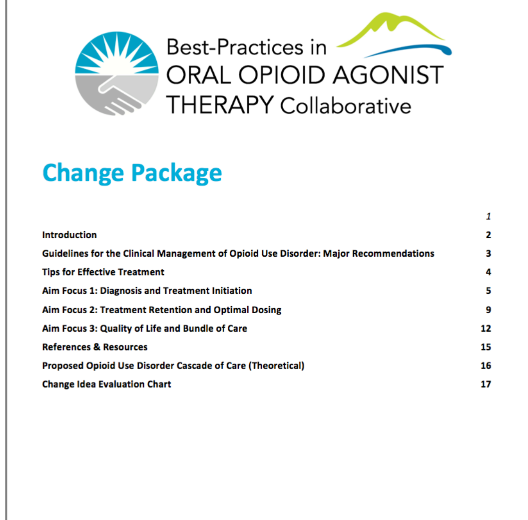
# BOOST Driver Diagram

**Aim**

By July 1st, 2018 we aim to provide equitable access to integrated, evidence-based care to help our population of clients with opioid use disorder achieve:
95% initiated on oOAT
95% retained in care for ≥3 months
50% average improvement in Quality of Life score

**Primary Drivers** ← **Secondary Drivers**

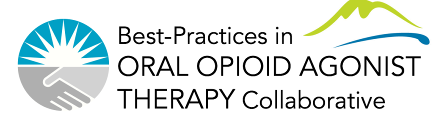
- Education ← High quality; Accessible; Relevant
- OAT Treatment ← Time to access; Treatment options; Optimal dosing; Treatment duration
- Leadership ← Linkage between programs; Engaged leadership; Access to leadership; Accountability; Clinic processes and mandate
- Medical Care ← Screening; Follow-up; Intake; Transitions in care; Matching acuity of services to need
- Engagement ← Social determinants of health; Patient medical home; Trauma-informed practice; Cultural competency




## Change Package


| | 1 |
|---|---|
| Introduction | 2 |
| Guidelines for the Clinical Management of Opioid Use Disorder: Major Recommendations | 3 |
| Tips for Effective Treatment | 4 |
| Aim Focus 1: Diagnosis and Treatment Initiation | 5 |
| Aim Focus 2: Treatment Retention and Optimal Dosing | 9 |
| Aim Focus 3: Quality of Life and Bundle of Care | 12 |
| References & Resources | 15 |
| Proposed Opioid Use Disorder Cascade of Care (Theoretical) | 16 |
| Change Idea Evaluation Chart | 17 |


*What will it take to reach our aims?*



# BOOST Driver Diagram – Measuring Outcomes

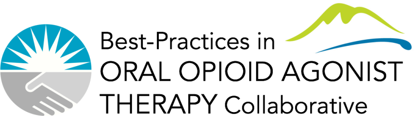
***Collaborative-level Measures***

- **Engagement**
- **oOAT access**
- **Active oOAT**
- **Optimal oOAT dosing**
- **Retention on oOAT**
- **Quality of Life score**

**Aim**

By July 1st, 2018 we aim to provide equitable access to integrated, evidence-based care to help our population of clients with opioid use disorder achieve:
95% initiated on oOAT
95% retained in care for ≥3 months
50% average improvement in Quality of Life score

| Primary Drivers | Secondary Drivers |
| --- | --- |
| Education | High quality; Accessible; Relevant |
| OAT Treatment | Time to access; Treatment options; Optimal dosing; Treatment duration |
| Leadership | Linkage between programs; Engaged leadership; Access to leadership; Accountability; Clinic processes and mandate |
| Medical Care | Screening; Follow-up; Intake; Transitions in care; Matching acuity of services to need |
| Engagement | Social determinants of health; Patient medical home; Trauma-informed practice; Cultural competency |

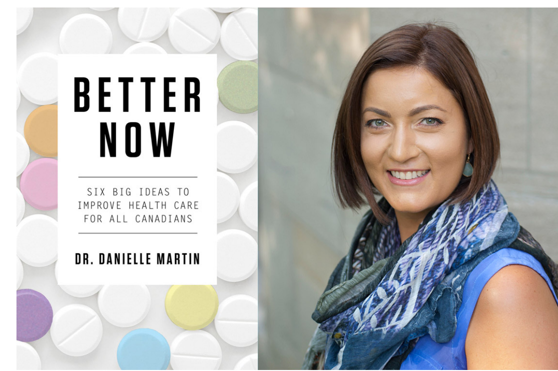


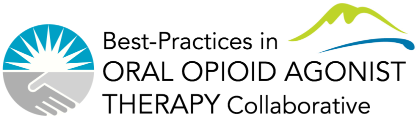
# But wait, first things first…

- Empanelment – ***Who is our panel of patients?***
  - Clinic/Point of Care (In Profile EMR = POS)
  - Most Responsible Provider
  - Active clients only
- Accurate Problem Lists – ***Who has OUD?***
  - 304.0 Opioid Use Disorder chosen as standard dx code
- **Standardizing clinical data entry**
  - OUD form
  - Data-driven improvement

**Population of Focus**

*"But I hate EMR forms…"*



# OUD form

*Goal: Use OUD form periodically for all clients with hx of OUD*

Print | Print, Save, Close | Print This Page

304.04 Opioid Use Disorder (OUD) added to Problem List

DSM-5 OUD criteria

**Prescription Creator**

| | | Last Entry1 | Last Entry2 |
|---|---|---|---|
| OAT | methadone | 11 Sep 2017 | 11 Sep 2017 |
| Daily dose (mg) | 100 | 110 Qty: 770 | 100 Qty: 800 |
| Start Day: | 12 Sep 2017 | 19 Sep 2017 | 11 Sep 2017 |
| Last Day: | 18 Sep 2017 | 25 Sep 2017 | 18 Sep 2017 |
| Rx Duration (days) | 7 | | |
| Carry Directions: | DWI / CARRIES | DWI | DWI |
| Witnessed Ingestion: | 7 (SEVEN) | | |
| Direction For Use | | | |

Copy From Last Entries

Create Rx

**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 |

**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:

PROMIS Quality of Life 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** Cumulative View

| | | | 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: | | | |

Print | Defaults | Set | Reset | 7

PLEASE PRINT

PERSONAL HEALTH NO.

PRESCRIBING DATE 12 Sep 2017

PATIENT NAME: GUY ASHMORE

ADDRESS: 2119 GUELPH ST, VANCOUVER, BC

DATE OF BIRTH: 27 Apr 2000

Rx: DRUG NAME AND STRENGTH: METHADONE 10 mg/ml

QUANTITY: 700 mg SEVEN HUNDRED mg

START DAY: 12 Sep 2017 LAST DAY: 18 Sep 2017

100 mg/day

CIRCLE ONE DWI or CARRIES

DIRECTIONS FOR USE: METHADONE

7 (SEVEN)

PRESCRIBER'S INFORMATION

CPSID

FOLIO

PHARMACY USE ONLY

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

PRESS HARD

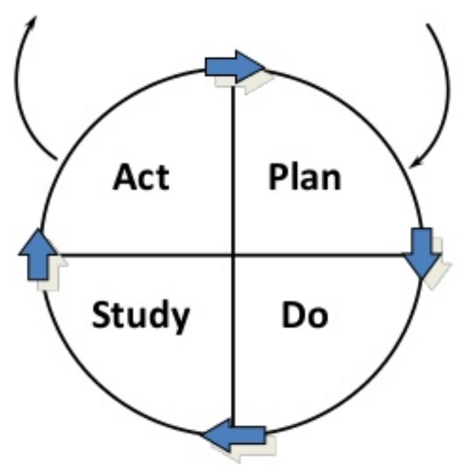
YOU ARE MAKING 2 COPIES

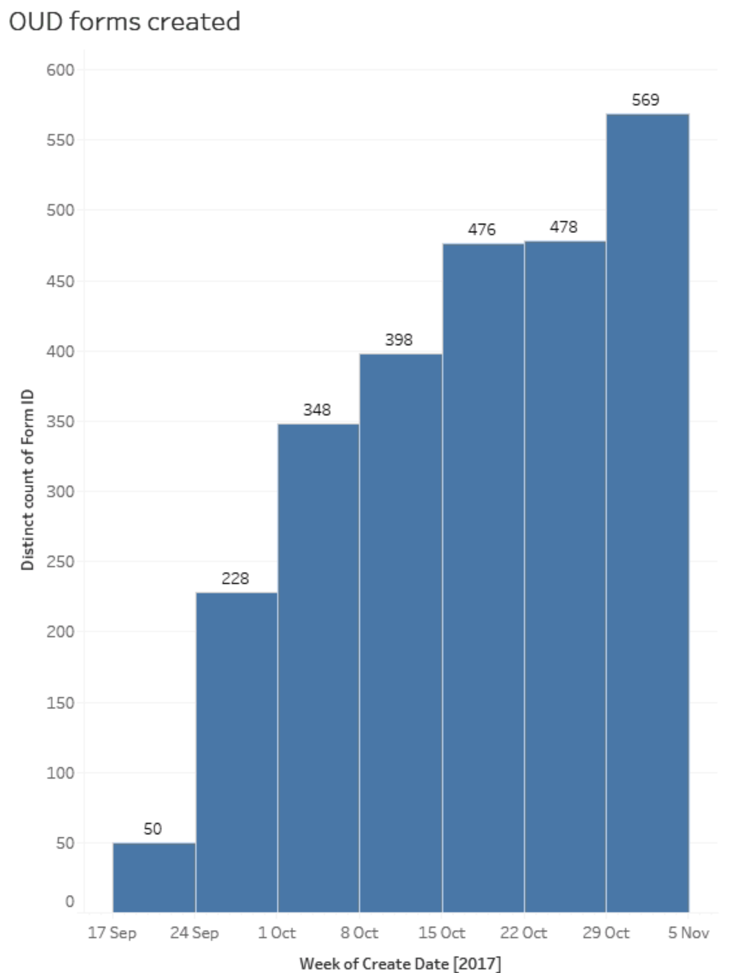
PRINTED IN BRITISH COLUMBIA

Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

# OUD form

- OUD form PDSAs

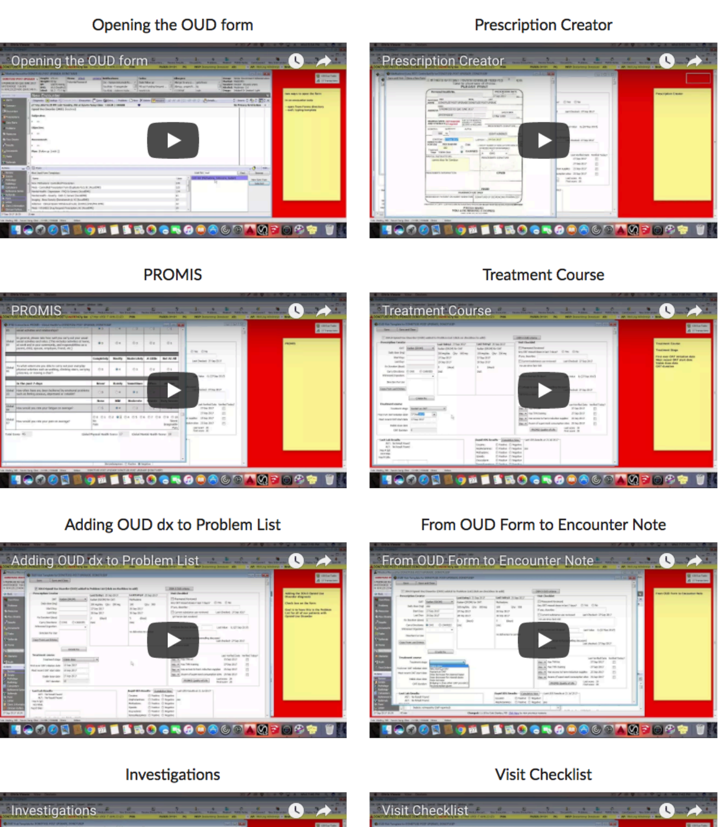



*Has been used over 3000 times in just over a month*

# OUD form

- Profile EMR OUD Form How-To Videos
  - http://stophivaids.ca/profile-emr-how-to-videos/.
- Email us to get the password
  - boostcollaborative@cfenet.ubc.ca



# OUD form

Suboxone and Kadian (SROM) prescriptions created using the OUD form (blue) vs. others (grey)

Number of Suboxone and Kadian (SROM) prescriptions created

240
220
200
180
160
140
120
100
80
60
40
20
0

228
211
217
188
131

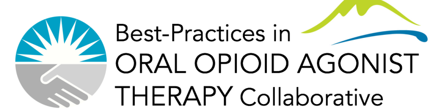
95
110
106
127
160

1 Oct
8 Oct
15 Oct
22 Oct
29 Oct

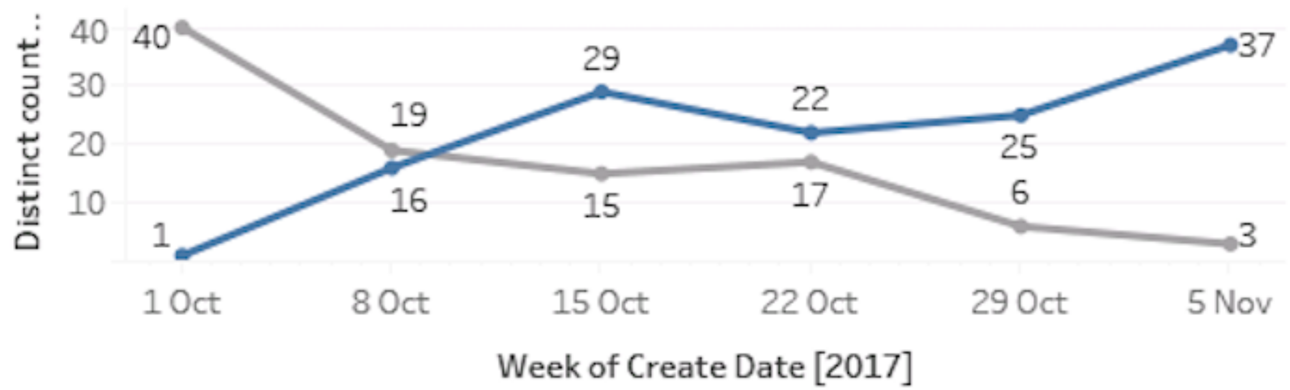
Week of Create Date [October-2017]

**Created with OUD form (IN), without OUD form (OUT)**

In
Out



# OUD form – A Shining Example



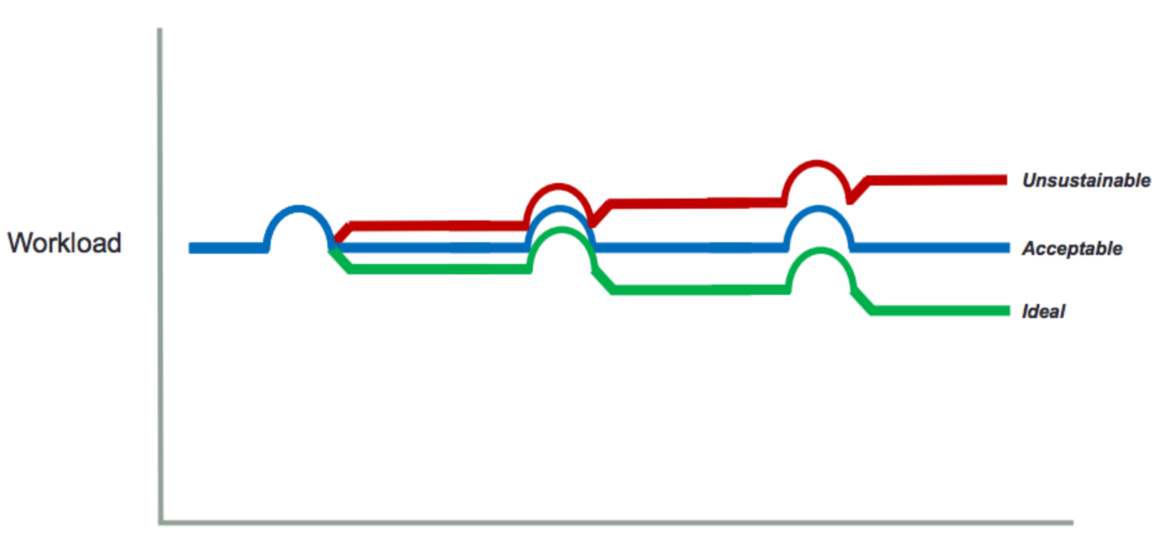

One team with great OUD form uptake shared their advice on the LISTSERV:

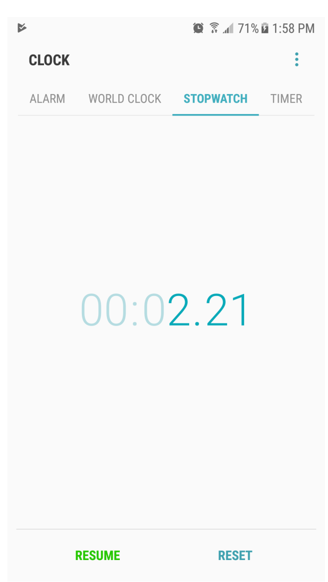
- Regular communication about BOOST to clinic staff
- Training on OUD form usage where needed
- Reminders at morning rounds and team meetings

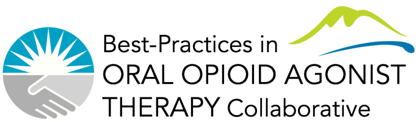
# OUD form and Highly Adoptable QI

- Highly adoptable QI

http://www.highlyadoptableqi.com/



# Empanelment

- Empanelment – ***Who is our panel of patients?***
  - Clinic/Point of Care (In Profile EMR = POS)
  - Most Responsible Provider
  - Active clients only
- Accurate Problem Lists – ***Who has OUD?***
  - 304.0 Opioid Use Disorder chosen as standard dx code
- **Standardizing clinical data entry**
  - OUD form
  - Data-driven improvement

**Population of Focus**

# Empanelment – A shining example

- ***Who is our panel of patients?***
- Pender CHC

# Empanelment – A shining example

Pender data as of Nov 9

| Category | Value |
|---|---|
| 1 | 100% |
| 2 | 90% |
| 3 | 57% |
| 4 | 27% |
| 5 | 51% |
| 6 | 69% |
| 7 | 12% |
| 8 | 4% |

| | |
|---|---|
| 1 | POF baseline (n=551) |
| 2 | Proportion with 304.0 |
| 3 | Proportion of those with 304.0 who have OUD form created |
| 4 | Proportion of those with form created who have First OAT Initiation Date entered |
| 5 | Proportion of those with 304.0 who have an active OAT prescription |
| 6 | Proportion of those on Suboxone and methadone who are on optimal doses |
| 7 | Proportion with active OAT prescription who have Most Recent OAT start date entered |
| 8 | Proportion with active OAT prescription and recorded retention >90 days |

# Population of focus

Baseline POF (keywords in Problem List)

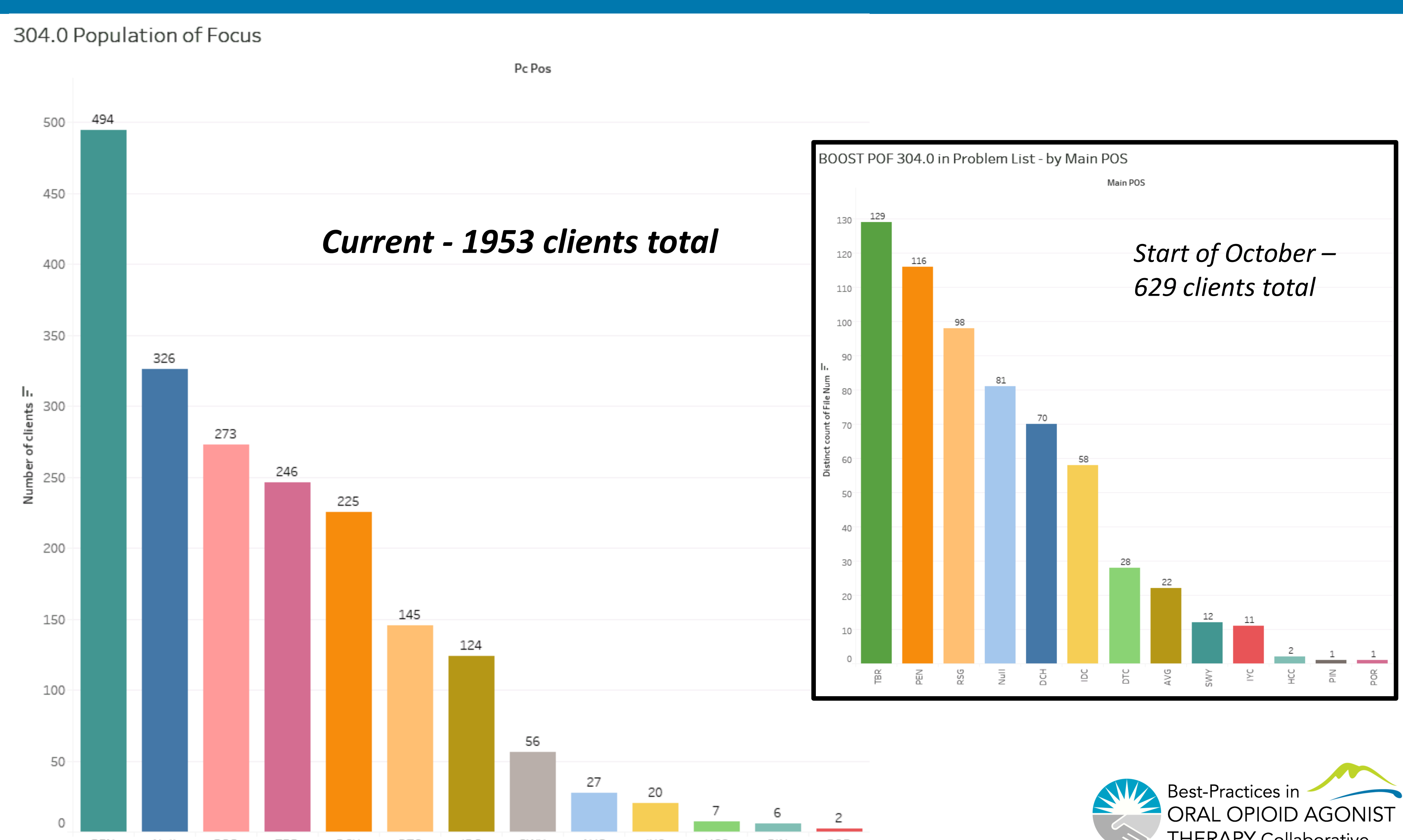
Pc Pos

| Category | Number of clients |
|---|---|
| Null | 734 |
| DCH | 636 |
| PEN | 551 |
| RSG | 436 |
| TBR | 395 |
| DTC | 390 |
| AVG | 184 |
| IDC | 129 |
| SWY | 103 |
| HCC | 58 |
| IYC | 53 |
| PIN | 13 |
| GIL | 12 |
| POR | 5 |
| YPP | 5 |
| FNS | 2 |
| STH | 2 |
| EHC | 1 |
| EVR | 1 |

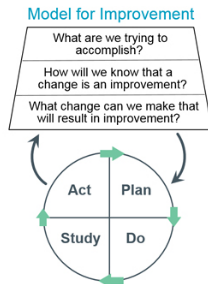
***3710 clients total***

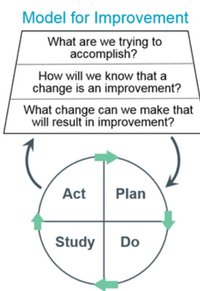
*(up from 3156 in July 2017)*

# Population of focus



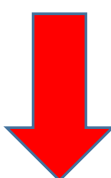
# Our first Action Period




Teams testing changes (PDSA-level measures)

Site-specific aims



Collaborative aims (Collaborative-level measures)

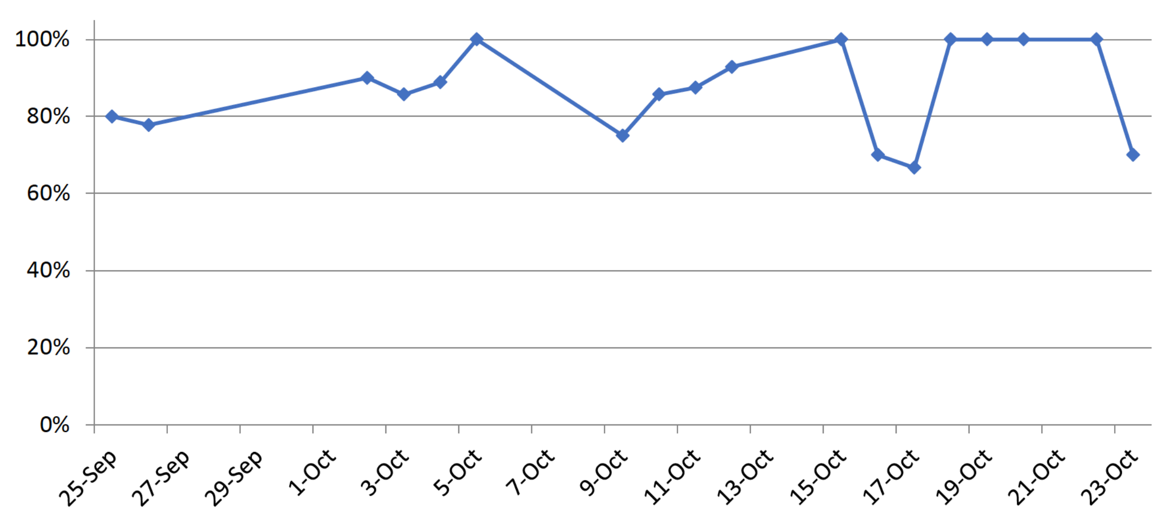
Collaborative outcomes

# Example from a pair of teams

- IDC and Raven Song - Proactive follow-up for expiring Rx
  - Reminder list of patients due for MMT renewal generated daily and reminder calls made 1 day prior or liaise/task STOP team member on care team

<u>PDSA-level measures</u>

- Proportion of clients who attended clinic when rx due
- Number of phone calls made
- Number calls answered
- Time taken to do the work



# BOOST Driver Diagram – Measuring Outcomes

- **Engagement**
- **Active oOAT**
- **Optimal oOAT dosing**
- **Retention on oOAT**
- **Quality of Life score**

Aim

By July 1st, 2018 we aim to provide equitable access to integrated, evidence-based care to help our population of clients with opioid use disorder achieve:
95% initiated on oOAT
95% retained in care for ≥3 months
50% average improvement in Quality of Life score

| Primary Drivers | Secondary Drivers |
|---|---|
| Education | High quality; Accessible; Relevant |
| OAT Treatment | Time to access; Treatment options; Optimal dosing; Treatment duration |
| Leadership | Linkage between programs; Engaged leadership; Access to leadership; Accountability; Clinic processes and mandate |
| Medical Care | Screening; Follow-up; Intake; Transitions in care; Matching acuity of services to need |
| Engagement | Social determinants of health; Patient medical home; Trauma-informed practice; Cultural competency |

# Some shining examples

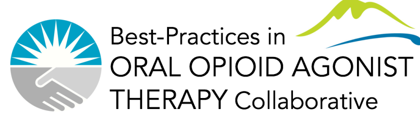
| Assessment/Description | Definition |
|---|---|
| 1.0<br>Forming team | Team has been formed; target population identified; aim determined and baseline measurement begun. |
| 1.5<br>Planning for the project has begun | Team is meeting, discussion is occurring. Plans for the project have been made. |
| 2.0<br>Activity, but no changes | Team actively engaged in development, research, discussion but no changes have been tested. |
| 2.5<br>Changes tested, but no improvement | Components of the model being tested but no improvement in measures. Data on key measures are reported. |
| 3.0<br>Modest improvement | Initial test cycles have been completed and implementation begun for several components. Evidence of moderate improvement in process measures. |
| 3.5<br>Improvement | Some improvement in outcome measures, process measures continuing to improve, PDSA test cycles on all components of the Change Package, changes implemented for many components of the Change Package. |
| 4.0<br>Significant improvement | Most components of the Change Package are implemented for the population of focus. Evidence of sustained improvement in outcome measures, halfway toward accomplishing all of the goals. Plans for spread the improvement are in place. |
| 4.5<br>Sustainable improvement | Sustained improvement in most outcomes measures, 75% of goals achieved, spread to a larger population has begun. |
| 5.0<br>Outstanding sustainable results | All components of the Change Package implemented, all goals of the aim have been accomplished, outcome measures at national benchmark levels, and spread to another facility is underway. |

Collaborative Assessment Scale

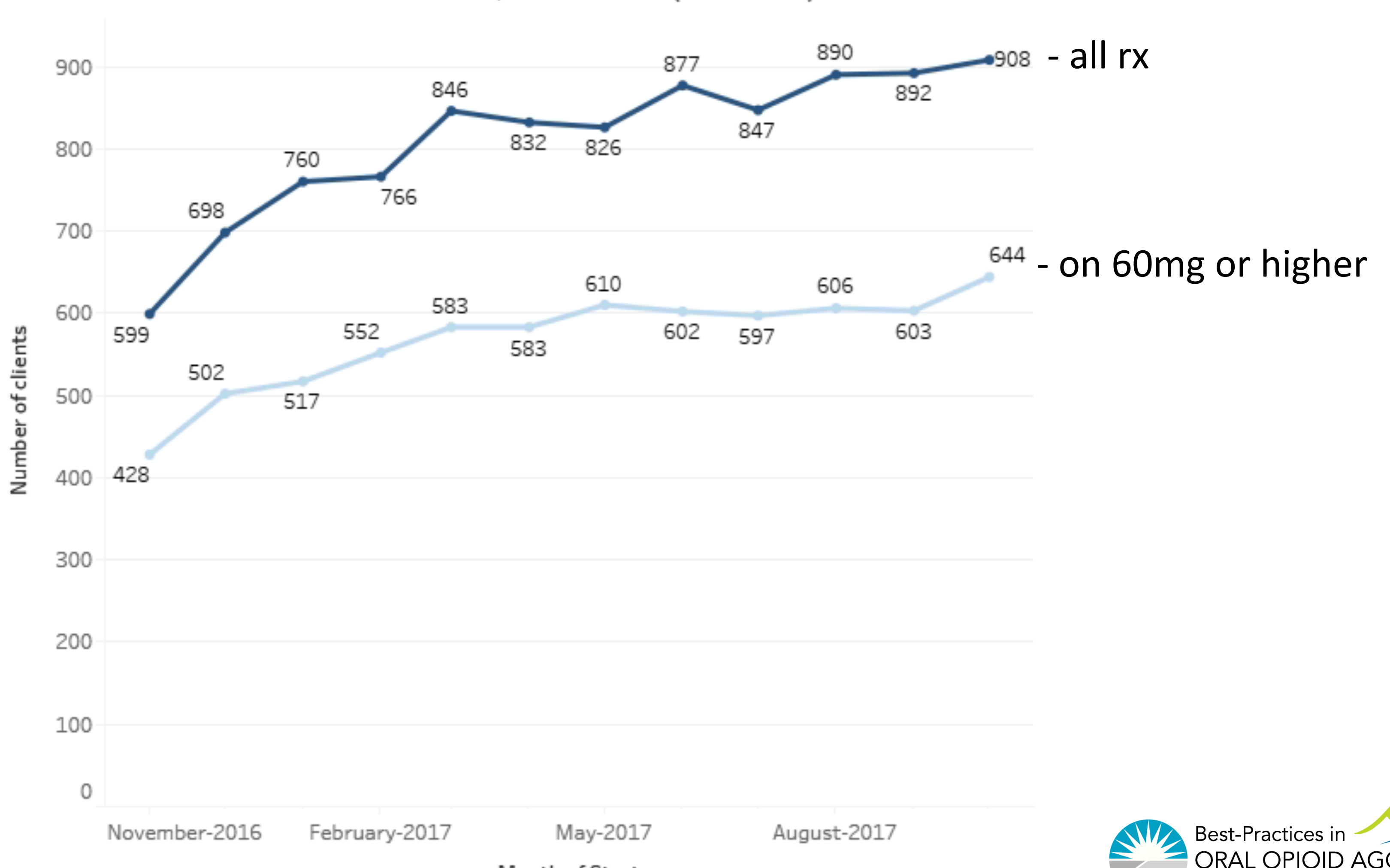
## Assessment Scale for Collaboratives

This scale gives information on how to assess a team's progress throughout a Collaborative Improvement Project.

| Score |
|---|
| 2.5 |
| n/a |
| n/a |
| 2.5 |
| 1.5 |
| 2.5 |
| 2.5 |
| 2.0 |
| 2.0 |
| 1.5 |
| n/a |
| 2.5 |
| 2.5 |
| 1.5 |
| 2.0 |
| 2.0 |
| 2.0 |



# Some initial BOOST data – optimal dosing




- all rx

- on 60mg or higher

Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

# Some initial data – optimal dosing

## Proportion on methadone 60mg or higher dose

| Month | Approx. value |
|---|---|
| Nov-16 | |
| Dec-16 | |
| Jan-17 | |
| Feb-17 | |
| Mar-17 | |
| Apr-17 | |
| May-17 | |
| Jun-17 | |
| Jul-17 | |
| Aug-17 | |
| Sep-17 | |
| Oct-17 | |

Y-axis: 0%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%

1779 Active rx as of Nov 9
784 (66%) with 60mg or higher dose

# Some initial data – optimal dosing

Print | Defaults | Set | Reset | 7

PLEASE PRINT

PERSONAL HEALTH NO.

PRESCRIBING DATE: 12 Sep 2017

PATIENT NAME: GUY ASHMORE

ADDRESS: 2119 GUELPH ST, VANCOUVER, BC

DATE OF BIRTH: 27 Apr 2000

Rx: DRUG NAME AND STRENGTH: METHADONE 10 mg/ml

QUANTITY: 700 mg, SEVEN HUNDRED mg

START DAY: 12 Sep 2017 LAST DAY: 18 Sep 2017

100 mg/day

CIRCLE ONE: CARRIES

SPECIFY NUMBER OF DAYS PER WEEK OF WITNESSED INGESTION IN PHARMACY: 7 (SEVEN)

DIRECTIONS FOR USE: METHADONE

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

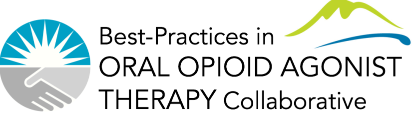
PRESS HARD

YOU ARE MAKING 2 COPIES

PRINTED IN BRITISH COLUMBIA

Methadone form has a standard Daily dose field, whereas the duplicate forms used for Suboxone and Kadian do NOT

Solution – use the OUD form and enter daily dose there



# Some initial data – optimal dosing

Suboxone dosing

Daily Dose - Split 1 (bin)

Number of clients

60
50
40
30
20
10
0

56
43
42
35
23
20
18
11
10
8
5
5
3
2
2
1

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32

Only showing data from rx created with OUD form

# Some initial data – optimal dosing

Daily Dose - Split 1 (bin) 2

Number of clients

40
35
30
25
20
15
10
5
0

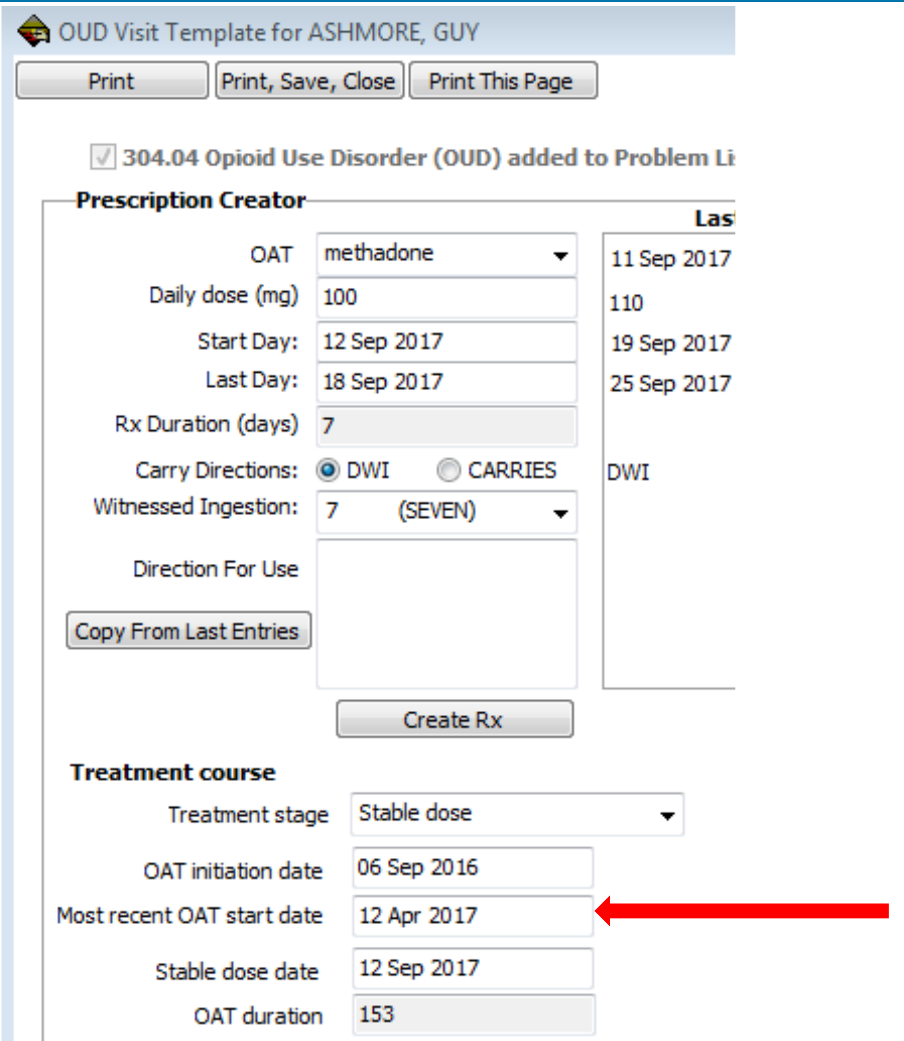
32 29 36 18 24 14 11 8 9 5 3 2 2 2

0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300

Only showing data from rx created with OUD form (for OAT)

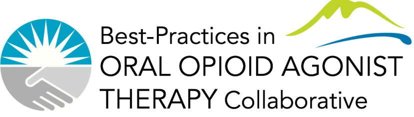
No agreement on “optimal dosing” for Kadian (SROM) for OAT

# Measuring access and retention on OAT



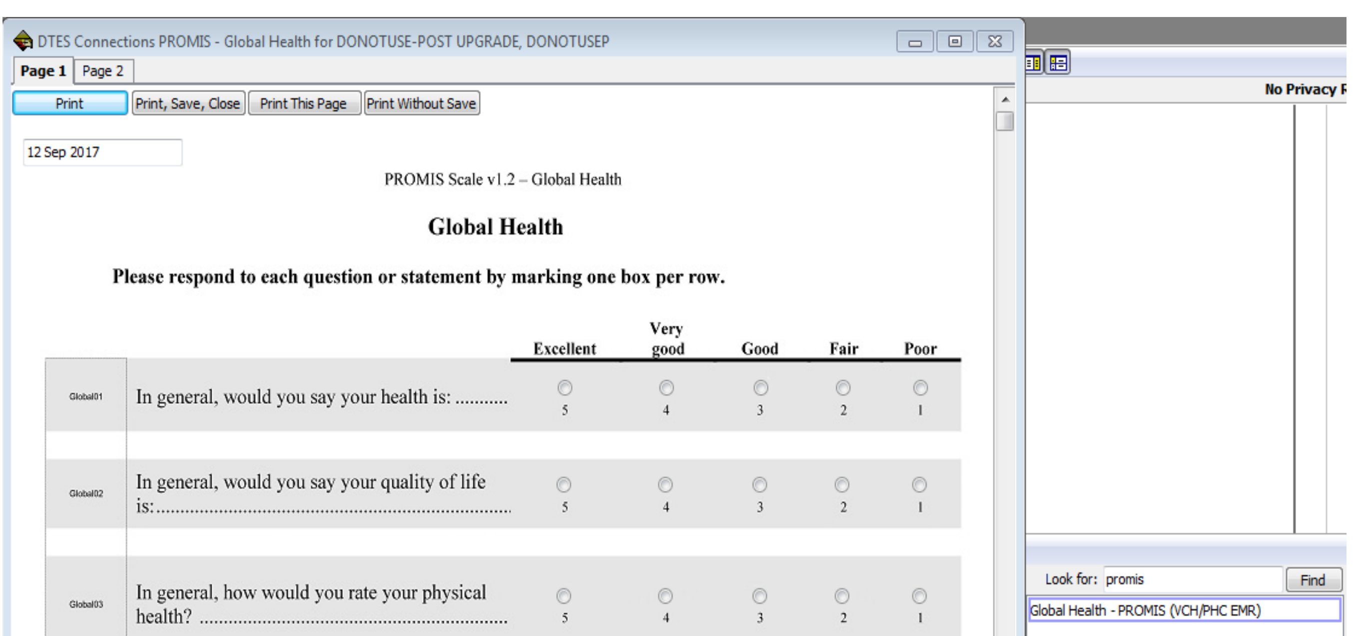

Need to know when their most recent OAT start date is

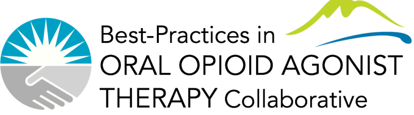
Only need to enter it once, and entered automatically for new starts or restarts



# Measuring Quality of Life

10 questions, broad-ranging, score out of 50



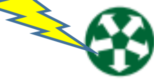
# Thinking back to my own patients

Engage peers in program development and leadership

Address contamination of the drug supply

Support appropriate pain management therapies

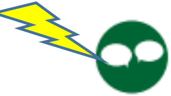
Build on the success of Overdose Prevention Sites


Expand and improve addiction treatment

Align law enforcement efforts with public health

Reform drug laws

Address structural barriers and upstream factors


Counter stigma against people who use drugs

Implement targeted research, surveillance and evaluation initiatives

- Jake – male in his 50s with back pain, OD with fake "oxys"
- Paul – male in his 40s who OD's one week into hep C treatment

Aim for a system that regularly reassesses client's OUD history and chronic pain, and provides necessary education (THN training, risk of OD from fentanyl, access to harm reduction supplies, etc)

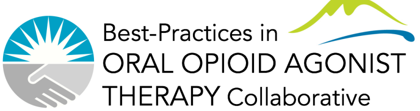
# Thinking back to my own patients

- Dan – marginalized male in his 20s who OD's after using opiates for little more than a few months
- Alex – marginalized male around my age who doesn't pick fill his new methadone prescription after 1h clinic visit

Aim for a system that places patient engagement as a top priority, and reduces barriers to getting started on OAT, offers outreach when indicated

- Sabrina – female in her 20s who loses a friend to carfentanil OD, a near miss for herself

Aim for a system that is accessible so patients can remain engaged and retained on OAT



# The road ahead

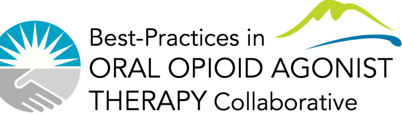
- Teams continue:
  - PDSA cycles
  - Empanelment work
  - OUD form use/promotion
- QI coaching from PSP and our core team
- Monthly narrative and quantitative reports
- Monthly webinars
- Email listserv
- Next learning session Dec 7

By July 1st, 2018 we aim to provide equitable access to integrated, evidence-based care to help our population of clients with opioid use disorder achieve:
95% initiated on oOAT
95% retained in care for ≥3 months
50% average improvement in Quality of Life score

# Objectives

- What is the BOOST Collaborative?
  - Aims
  - Measures
  - Change Ideas
  - Structure
  - Team involvement
  - Teams using QI methods (Model for Improvement)
- Importance of standardizing clinical data entry
- Things to think about:
  - How does this work relate to YOUR daily practice?
  - How could you apply QI and The Model for Improvement to care gaps in your own clinic setting?
  - What other clinical topics might be ready for a Collaborative approach?

By July 1st, 2018 we aim to provide equitable access to integrated, evidence-based care to help our population of clients with opioid use disorder achieve:
95% initiated on oOAT
95% retained in care for ≥3 months
50% average improvement in Quality of Life score



# The road ahead

- Plans for BOOST
  - Regional expansion
  - Coordination with BCCSU work on Community of Practice

- Want to get involved?

- Questions?

  - CONTACT US: boostcollaborative@cfenet.ubc.ca
  - VISIT THE WEBSITE: http://www.stophivaids.ca/oud-collaborative

# THANK-YOU!

CONTACT US: boostcollaborative@cfenet.ubc.ca

VISIT THE WEBSITE: http://www.stophivaids.ca/oud-collaborative

# References and Resources

- Collaborative Website: http://stophivaids.ca/oud-collaborative
- Hosp Q. 2003;7(1):73-82.The expanded Chronic Care Model: an integration of concepts and strategies from population health promotion and the Chronic Care Model. Barr VJ, Robinson S, Marin-Link B, Underhill L, Dotts A, Ravensdale D, Salivaras S. Source: Vancouver Island Health Authority.
- NIATx: https://niatx.net/
- BC Centre on Substance Use- Opioid Use Disorder Clinical Management Guidelines: http://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf
- IHI Open School courses: http://www.ihi.org