Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

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Outline:

- Continuum of Care
- Data – measuring for QI
- The Cascade of Care and the gaps
- Bridging the Gap
  - Structured Learning Collaborative
  - CQI Methodologies
  - Chronic Care Model
  - Proposed Intervention - BOOST

Continuum of Care

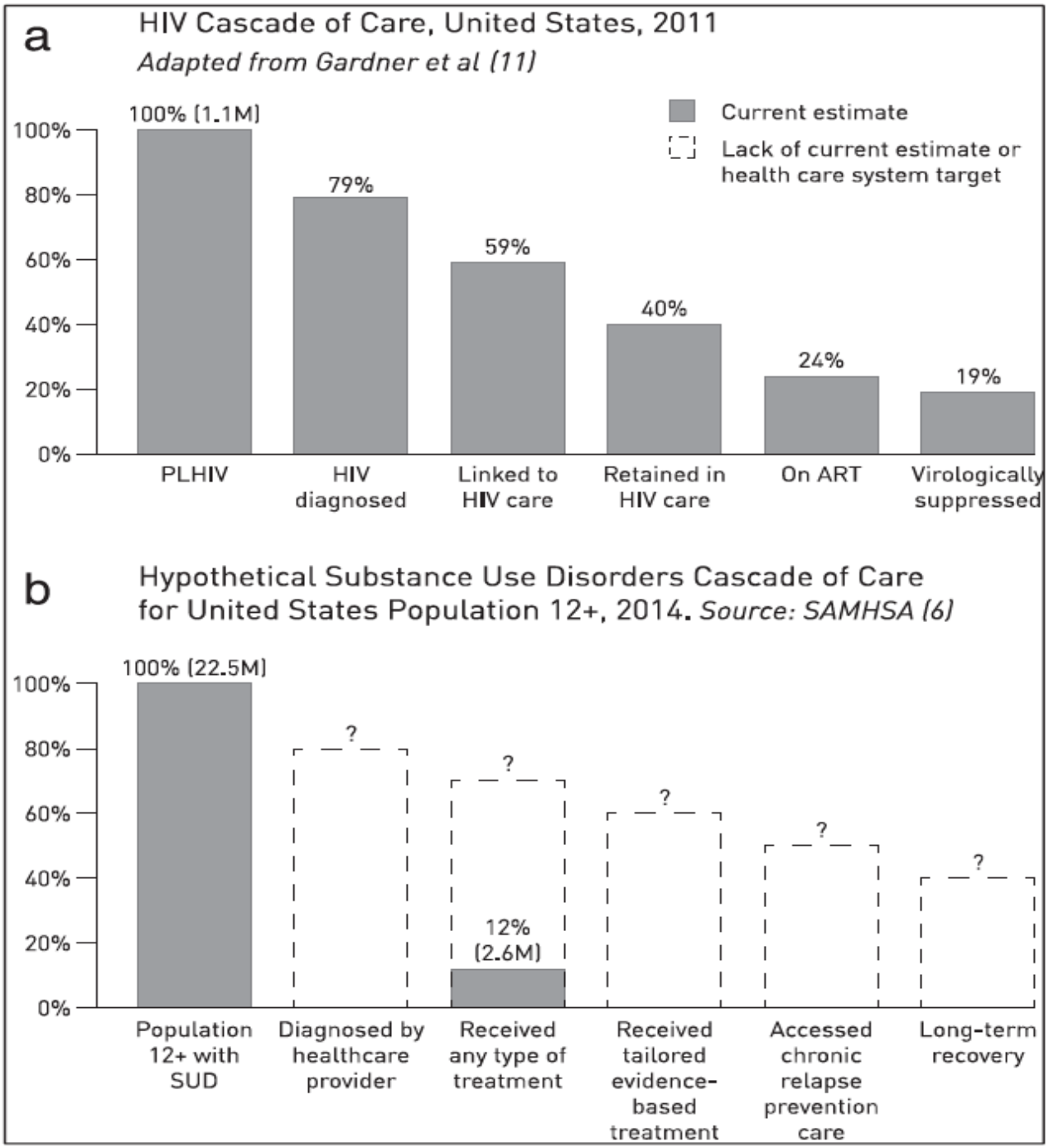
Unaware of diagnosis	Aware of the diagnosis (not in care)	Receiving some medical care but not specific for the diagnosis	Entered care for specific diagnosis but lost to follow up	Cyclical or intermittent user of medical care	Fully engaged in care

Adapted from: Giordano TP, Gifford AL, White AC Jr, et al. Retention in care: a challenge to survival with HIV infection. Clin Infect Dis 2007; 44:1493–9.
Modified from: Eldred L, Malitz F. Introduction [to the supplemental issue on the HRSA SPNS Outreach Initiative]. AIDS Patient Care STDS 2007; 21(Suppl 1):S1–S2.

Differences between QI, Performance Evaluation and Research

Characteristic	Judgement	Research	Improvement
Aim	Achievement of target	New knowledge	Improvement of service
Testing strategy	No tests	One large, blind test	Sequential, observable tests
Sample size	Obtain 100% of available, relevant data	'Just in case' data	'Just enough' data small, sequential samples
Hypothesis	No hypothesis	Fixed hypothesis	Hypothesis flexible; changes as learning takes place
Variation	Adjust measures to reduce variation	Design to eliminate unwanted variation	Accept consistent variation
Determining if change is an improvement	No change focus	Statistical tests (t-test, F-test, chi-square, p-values)	Run chart or statistical process control (SPC) charts

Adapted from: "The Three Faces of Performance Management: Improvement, Accountability and Research." Solberg, Leif I., Mosser, Gordon and McDonald, Susan Journal on Quality Improvement. March 1997, Vol23, No. 3.



Addiction, 111, 2079–2081

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

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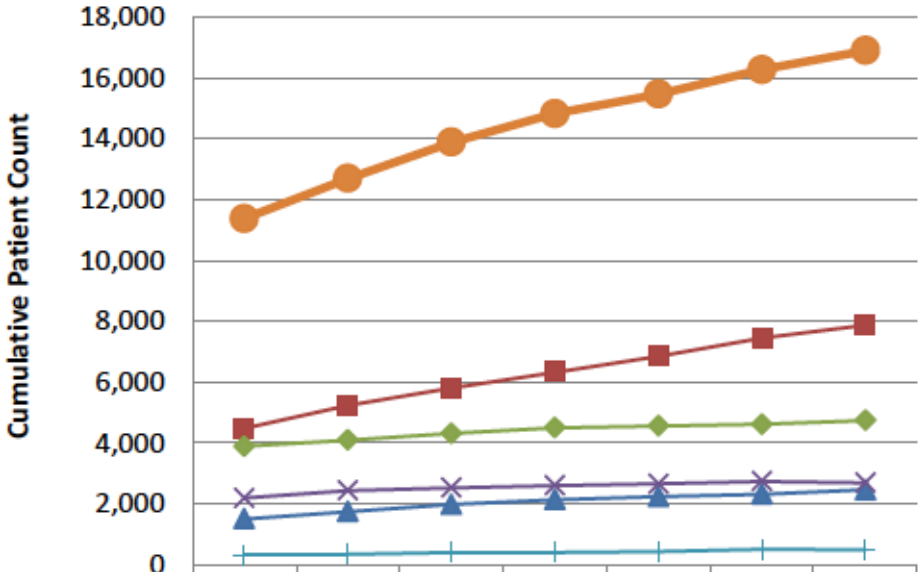
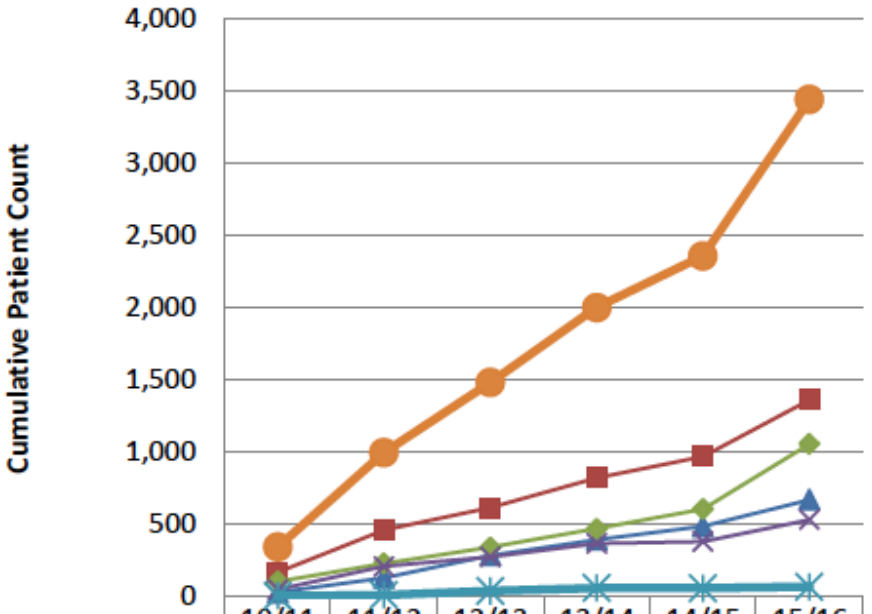
Figure 3. Methadone Substitution Treatment Patients, by Health Authority, BC, 2009/2010 to 2015/2016



	09/10	10/11	11/12	12/13	13/14	14/15	15/16
IHA	1,511	1,753	1,983	2,143	2,239	2,321	2,469
FHA	4,493	5,246	5,810	6,330	6,847	7,451	7,880
VCHA	3,898	4,104	4,317	4,508	4,568	4,623	4,748
IslHA	2,200	2,442	2,538	2,614	2,660	2,746	2,698
NHA	333	345	406	408	445	507	496
BC Total	11,378	12,697	13,891	14,830	15,466	16,274	16,900

Figure 4. Buprenorphine/Naloxone Treatment Patients, b Health Authority, BC, 2010/2011 to 2015/2016



	10/11	11/12	12/13	13/14	14/15	15/16
IHA	26	129	283	392	484	670
FHA	166	459	614	820	970	1,362
VCHA	103	228	339	469	605	1,057
IslHA	47	208	274	367	379	531
NHA	2	9	36	57	55	65
BC Total	341	997	1,482	2,002	2,360	3,445

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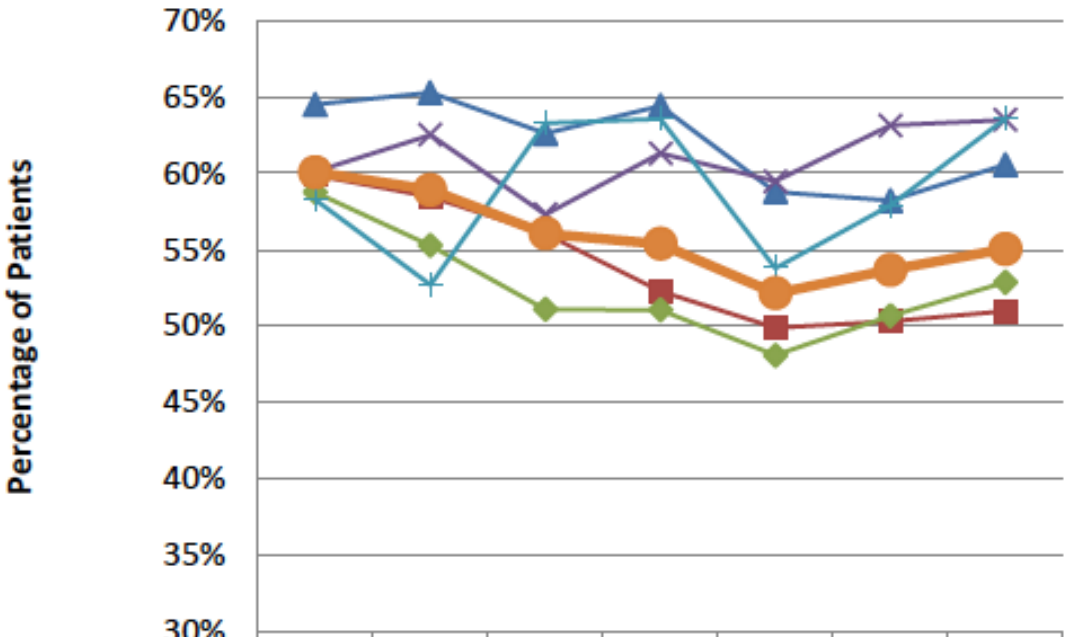
Figure 14. Percentage of Patients Receiving a Stabilization Dose of Methadone >60 mg, by Health Authority, BC, 2009/2010 to 2015/2016



	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%

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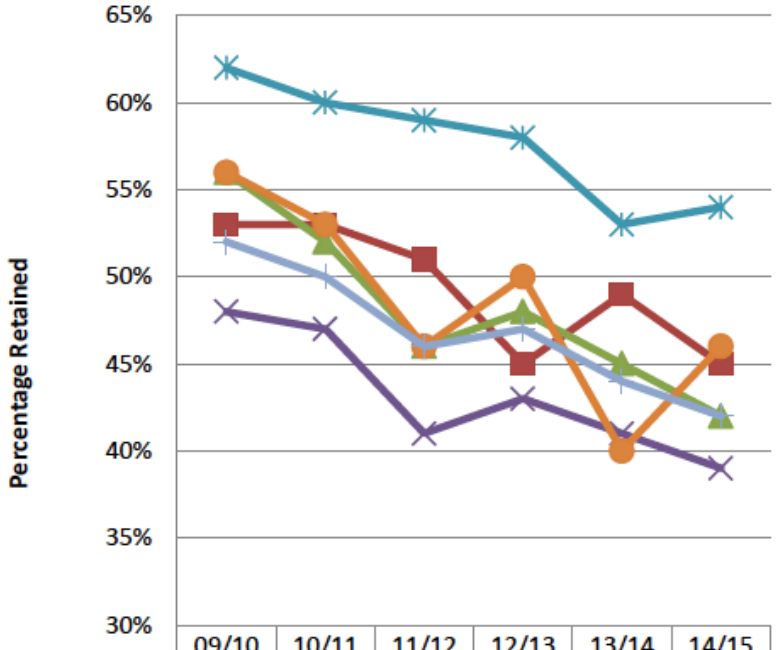
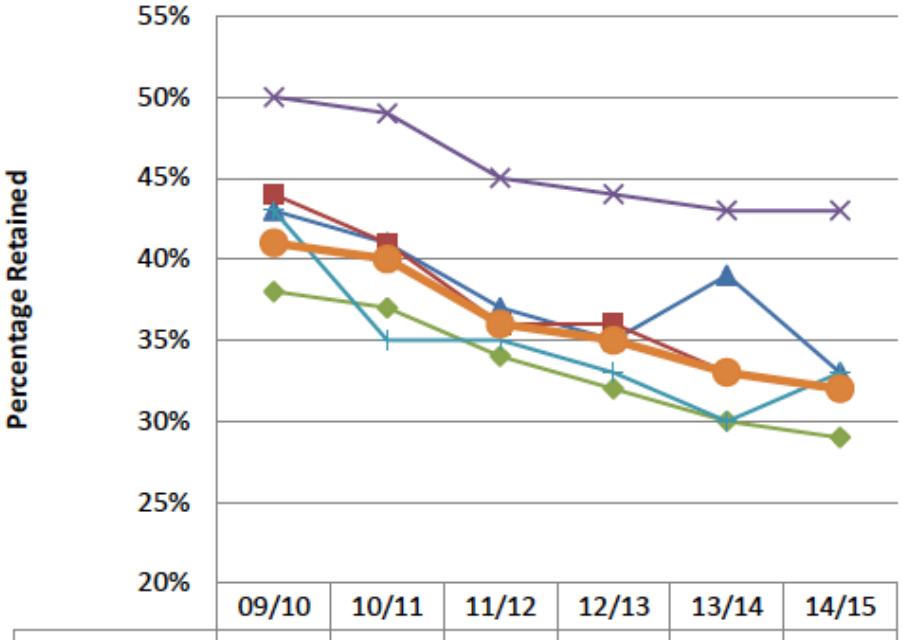
Figure 15a. Percentage of People Started on Methadone Maintenance Treatment Retained at 6 Months, by Health Authority, BC, 2009/2010 to 2014/2015



	09/10	10/11	11/12	12/13	13/14	14/15
IHA	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 15b. Percentage of People Started on Methadone Maintenance Treatment Retained at 12 Months, by Health Authority, BC, 2009/2010 to 2014/2015[h]



	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%

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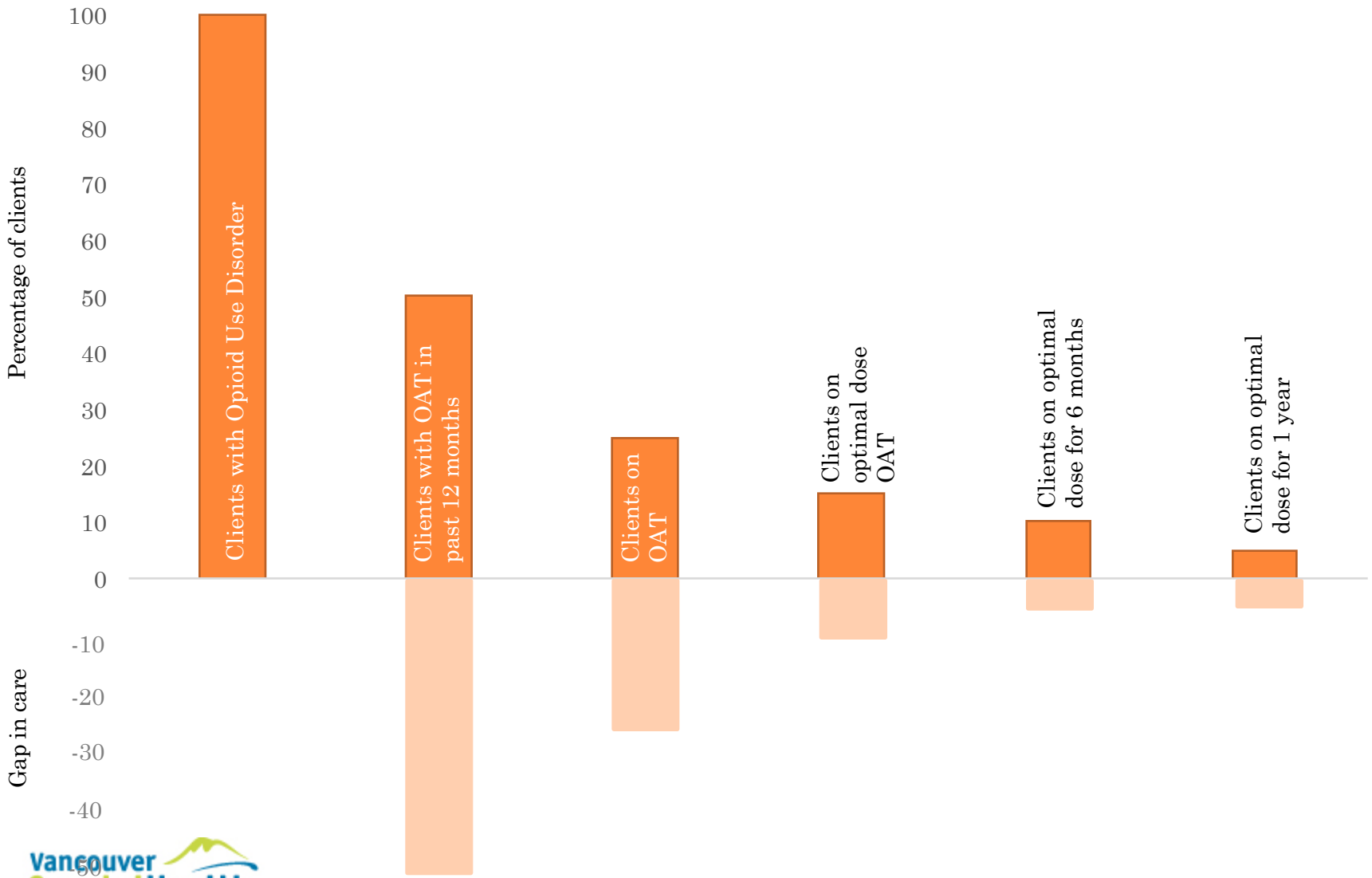
VCH-VC: OUD Treatment Cascade of Care



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OPEN ACCESS

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

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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

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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.

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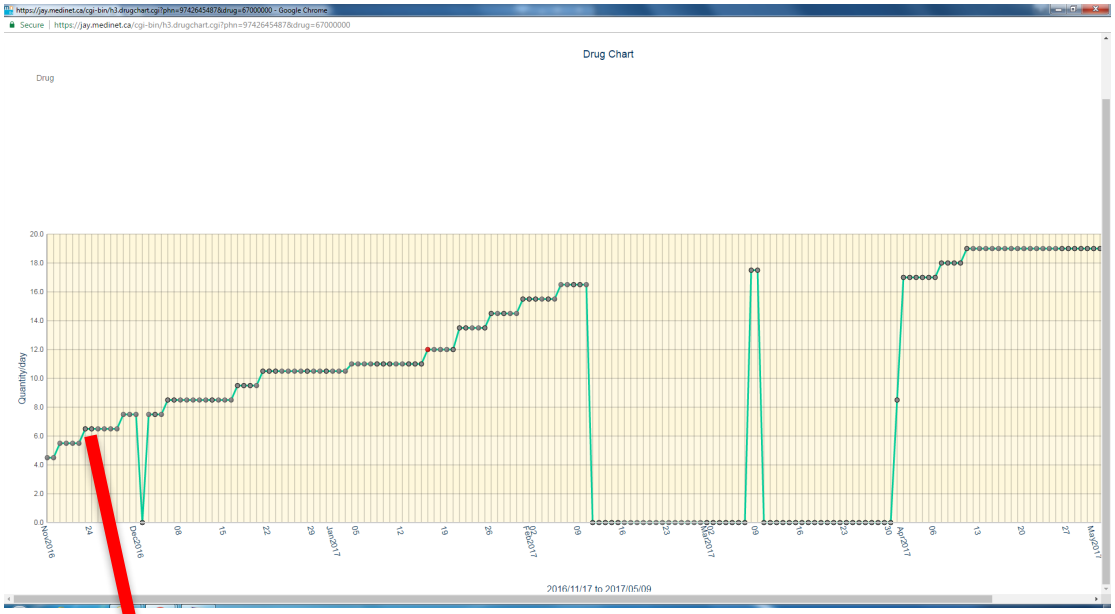
A couple of cases – optimal doses



12 days to achieve optimal dose

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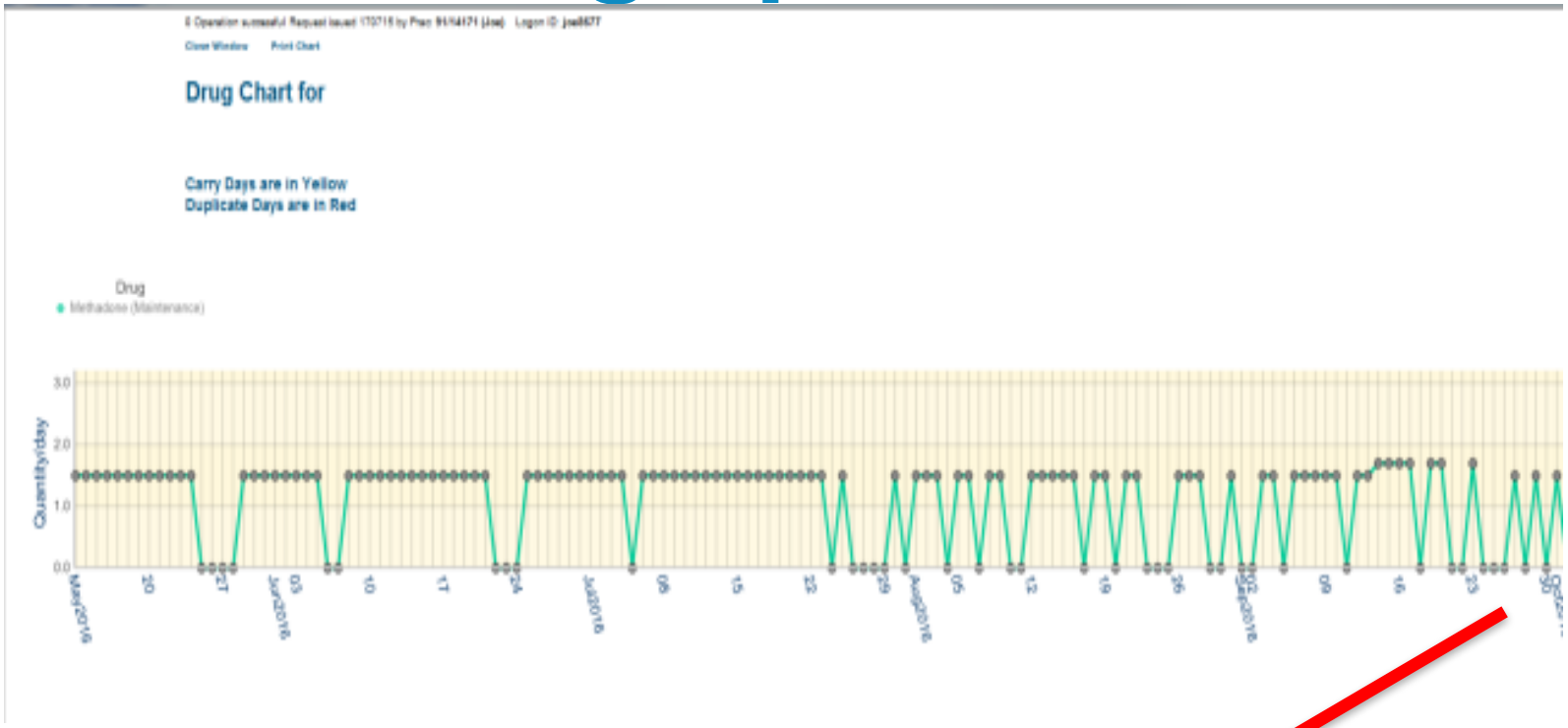
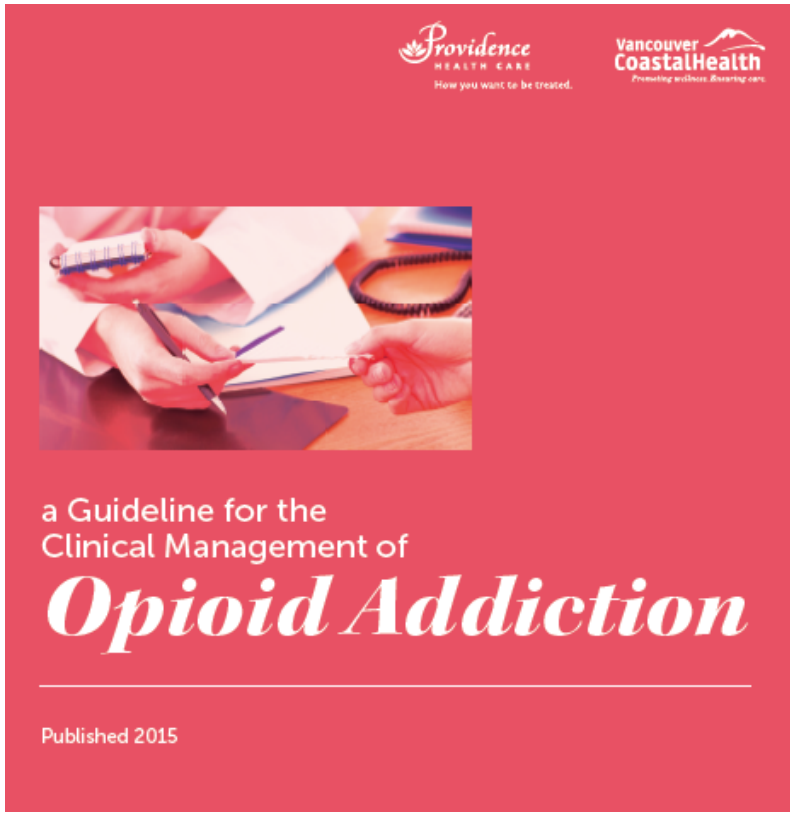
A couple of cases – Not achieving optimal doses

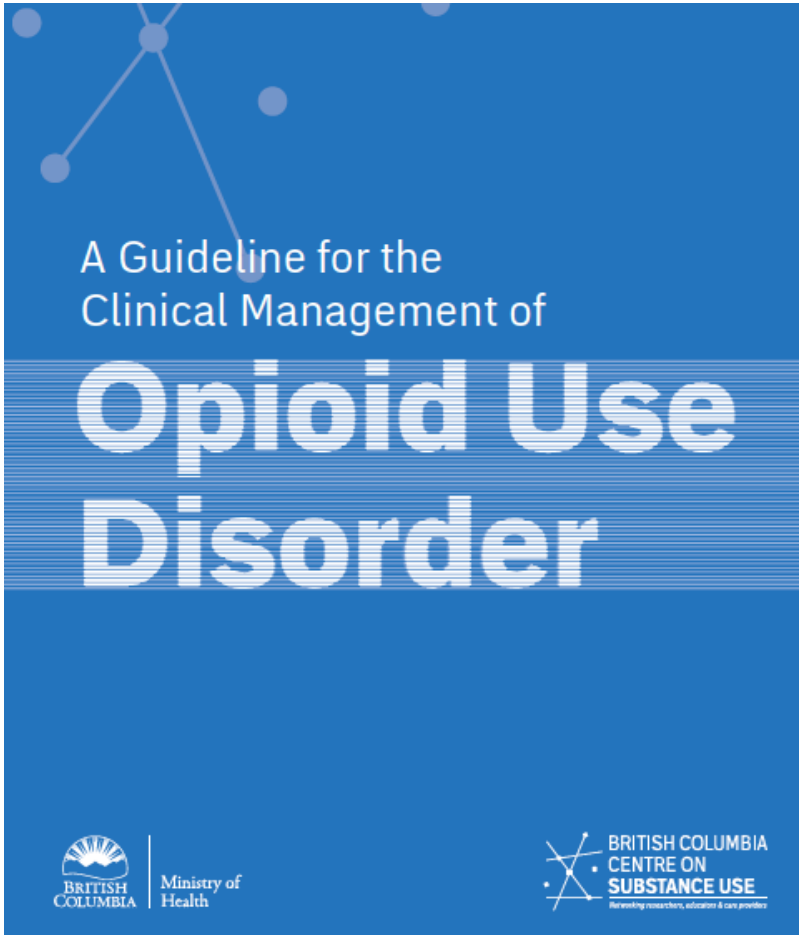


6 months and not achieving optimal dose

Bridging the Gap:

Science exists:





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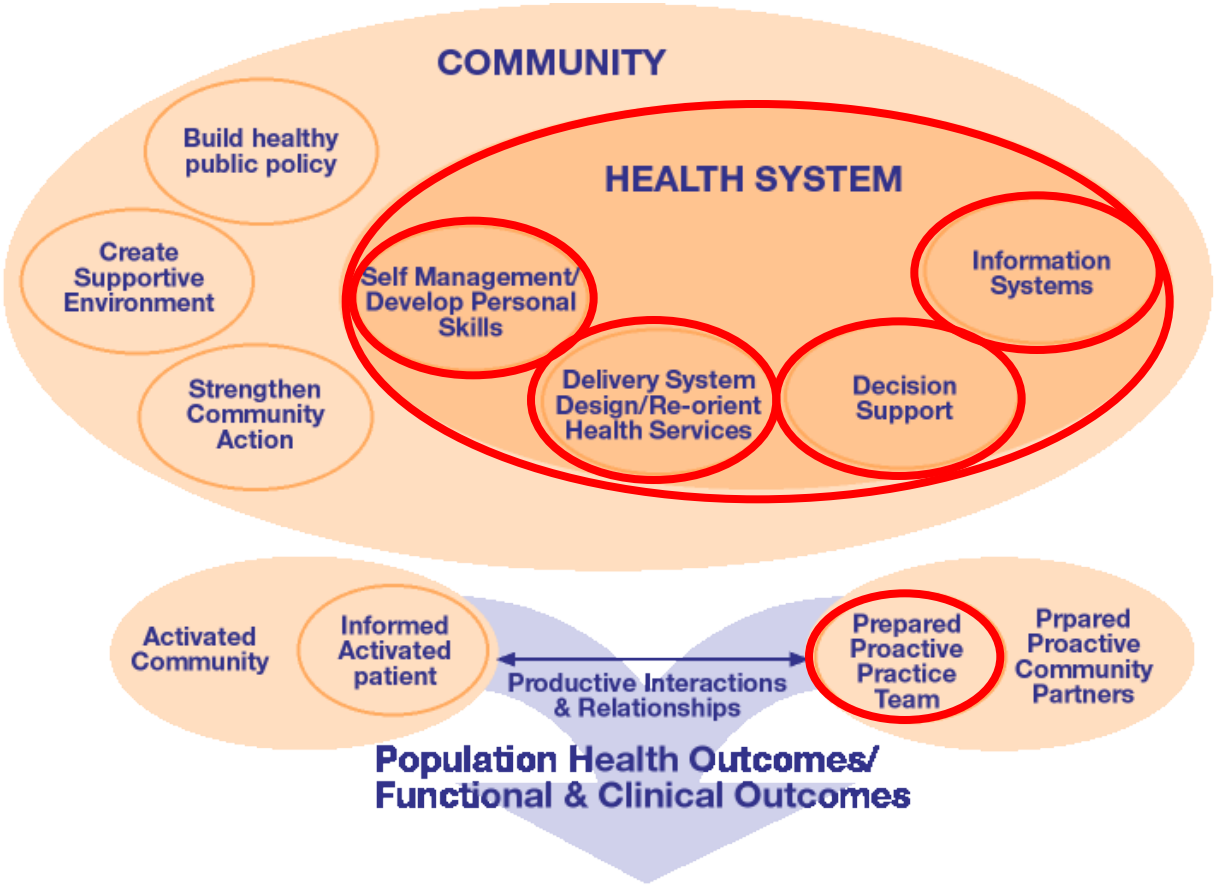
The Expanded Chronic Care Model



Created by: Victoria Barr, Sylvia Robinson, branda Marin-Link, Lisa Underhill, Anita Dotts & Darlene Ravensdale (2002)
Adapted from Glasgow, R., Orleans, C., Wagner, E., Curry, S., Solberg, L. (2001). Does the Chronic Care Model also serve as a template for improving prevention? The Milbank Quarterly, 79(4), *and* World Health Organization, Helath and Welfare Canada and Canadian Public Health Association. (1986). Ottawa Charter of Health Promotion.

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.

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Am J Manag Care. 2005 August ; 11(8): 478–488.

A Meta-Analysis of Interventions to Improve Care for Chronic Illnesses

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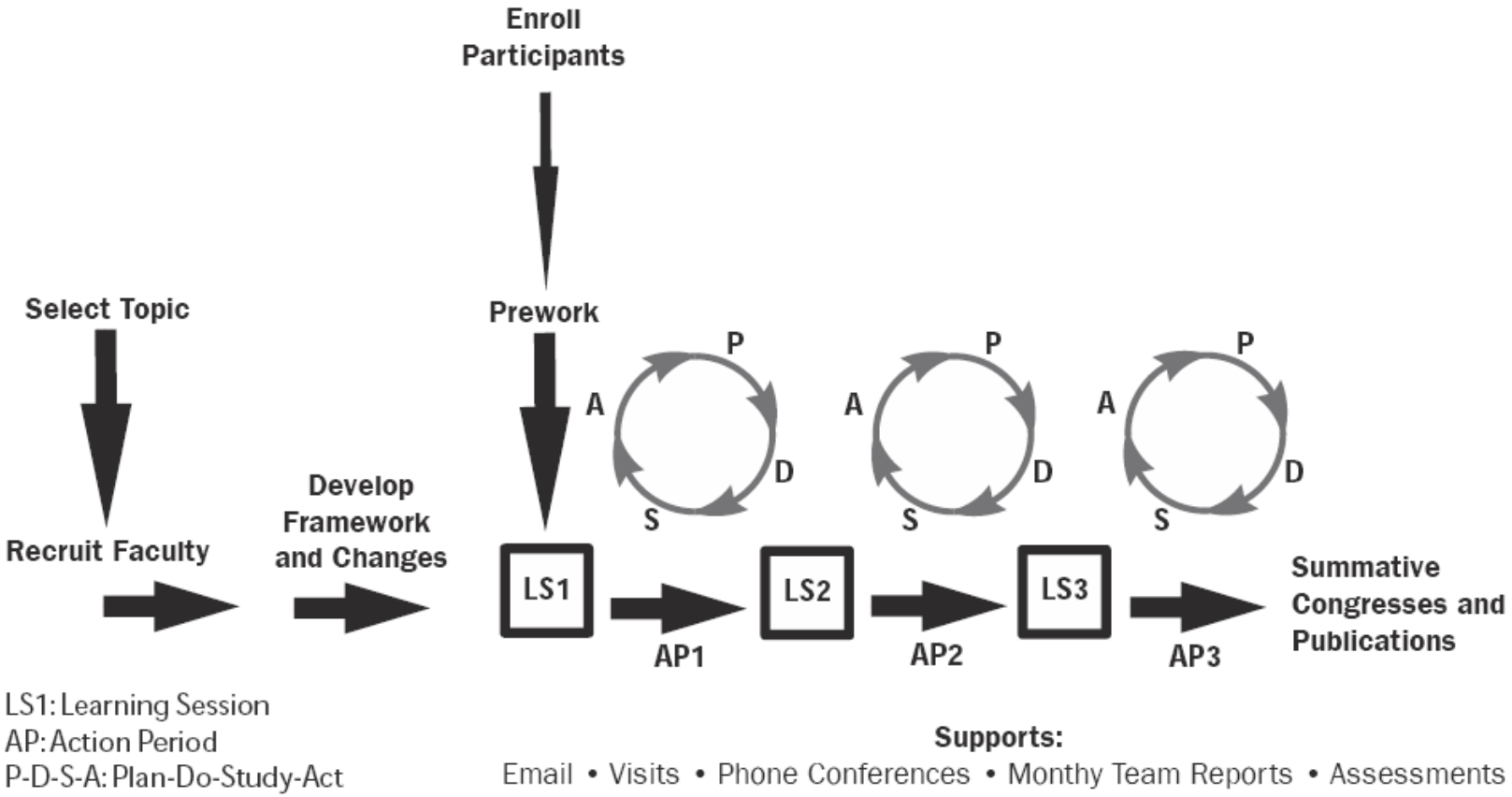
RAND Health

Discussion

Interventions that have incorporate one or more elements of the CCM have had beneficial effects on clinical outcomes and processes of care for patients, and the results were consistent across a variety of chronic illnesses. Our estimated pooled effect size estimates, although small-to-moderate-sized, (60) are also broadly consistent with those reported in prior meta-analyses. Interventions directed at diabetes are, for example, led to a 0.30%-0.47% reduction in hemoglobin A1c. Managed care organizations may realize benefits from even smaller reductions in mean population values for continuous risk factors such as lipid levels and hemoglobin A1c. For example, the European Prospective Investigation of Cancer and Nutrition (EPIC-Norfolk) estimated that a population reduction of 0.2% in hemoglobin A1c could reduce the prevalence of men with high HbA1c levels (5%-6.9%) from 79% to 57% and reduce excess mortality by 10%. We found that interventions directed at congestive heart failure led to a 5.6-6.7 point improvement in the Chronic Heart Failure Questionnaire, slightly less than the 7-9 point difference that is regarded as a minimal clinically important different on that scale.

IHI Breakthrough Series Collaborative Model



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

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BMJ

RESEARCH

Evidence for the impact of quality improvement collaboratives: systematic review

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ABSTRACT

Objective To evaluate the effectiveness of quality improvement collaboratives in improving the quality of care.

Data sources Relevant studies through Medline, Embase, PsycINFO, CINAHL, and Cochrane databases.

Study selection Two reviewers independently extracted data on topics, participants, setting, study design, and outcomes.

Data synthesis Of 1104 articles identified, 72 were included in the study. Twelve reports representing nine studies (including two randomised controlled trials) used a controlled design to measure the effects of the quality improvement collaborative intervention on care processes or outcomes of care. Systematic review of these nine studies showed moderate positive results. Seven

health authorities support nationwide quality programmes based on this strategy.

Different types of multiorganisational collaboratives exist, the purpose of which are to improve care.[1-3] The term quality improvement collaborative seems to be used for different multifaceted packages that focus on accelerating better outcomes.[4] Quality improvement collaboratives are used in different clinical areas and organisational contexts and have been adopted by numerous large and small healthcare systems and individual clinics. These initiatives represent substantial investments of time, effort, and funding in the delivery of health care, although estimates of the total investment and applications of the collaborative are not available.[5] The strength of the quality improvement collaborative seems to be the relatively efficient

Conclusions The evidence underlying quality improvement collaboratives is positive but limited and the effects cannot be predicted with great certainty.

Despite these limitations, this review shows that the evidence underlying quality improvement collaboratives is positive but still limited and that the effects cannot be predicted with great certainty.

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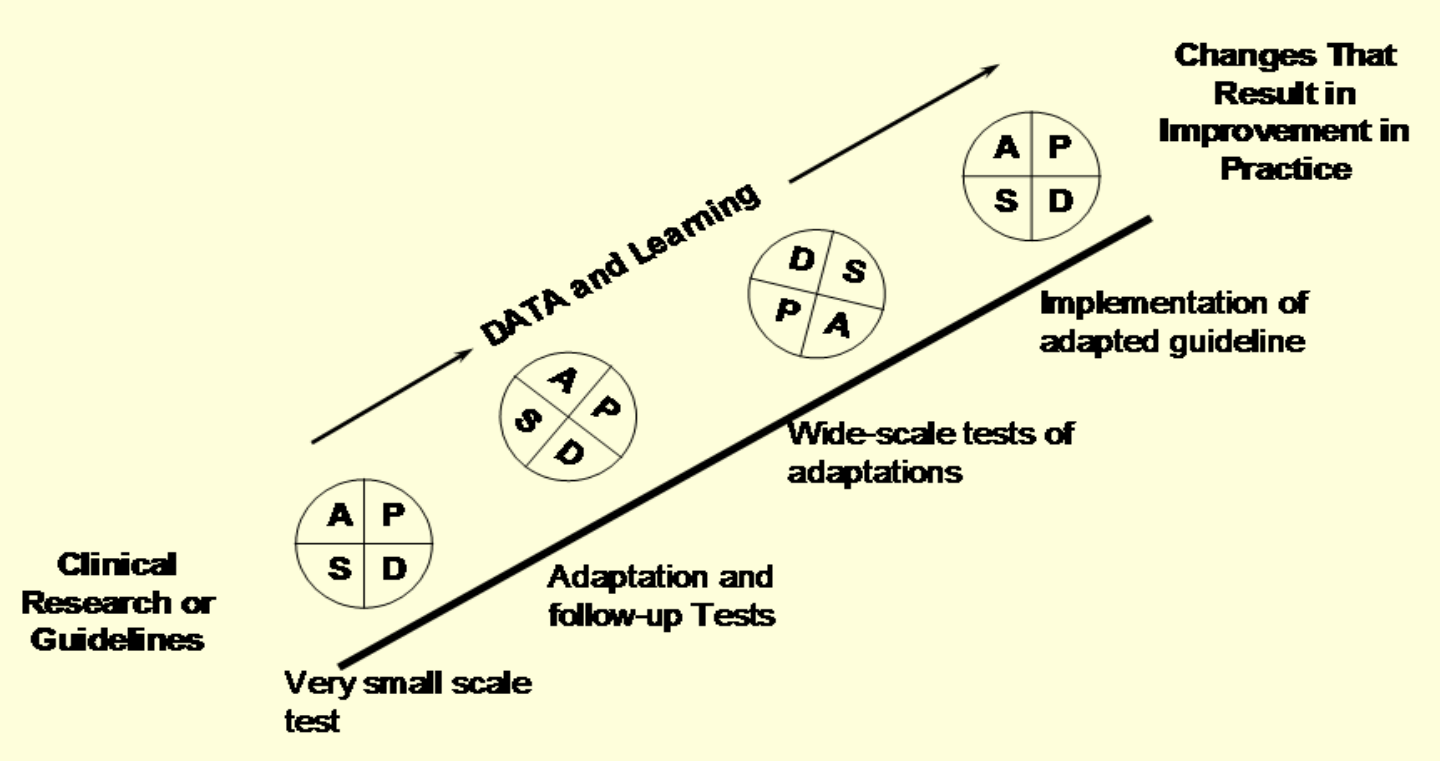
Real Time Interactive Operational Research



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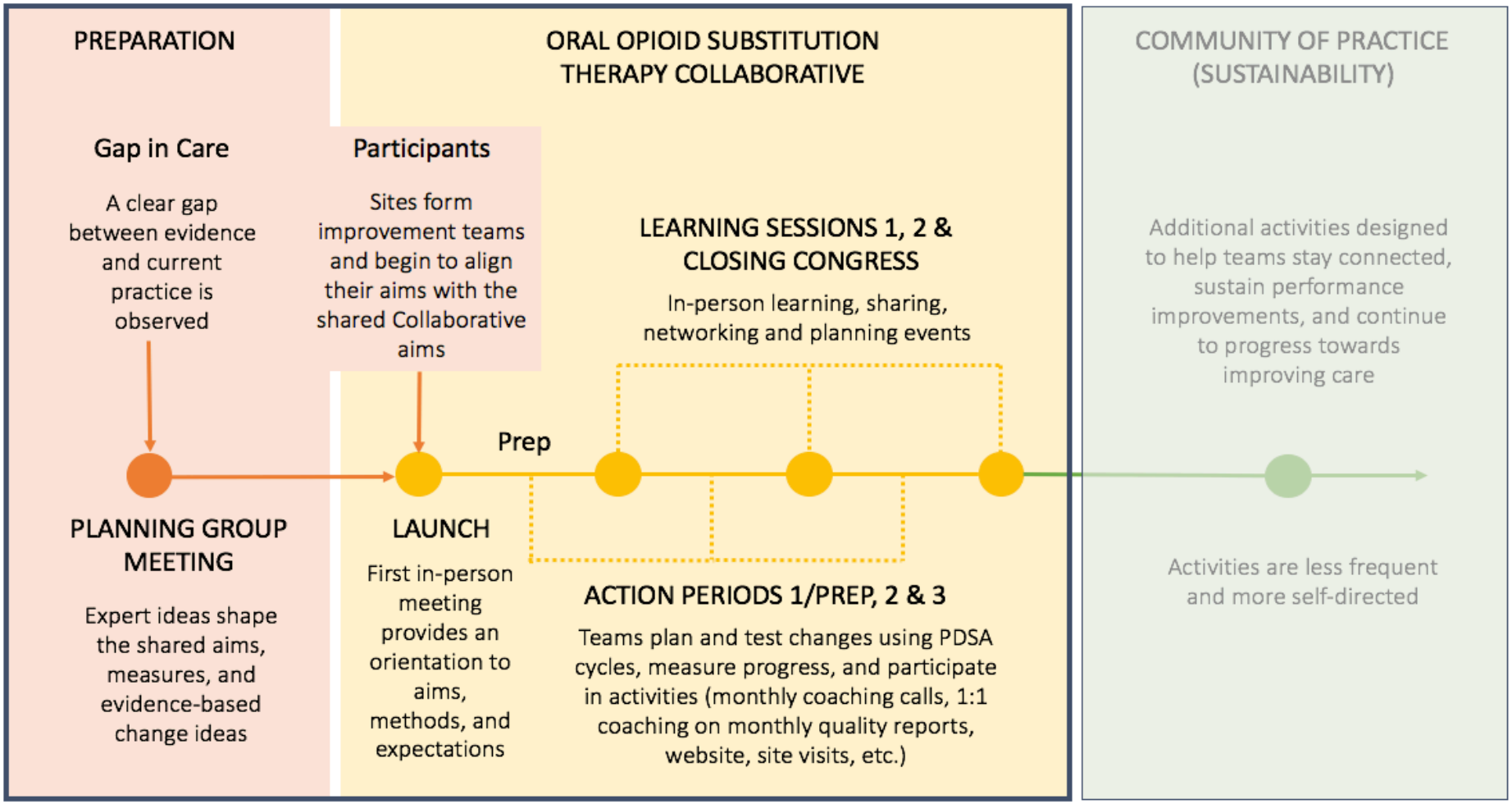
Proposed Intervention: BOOST Structured Learning Collaborative



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)

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Summary:

- **Gaps in Care Exist:**
  - Unknown timing of the Dx and initiation of Rx
  - Many patients are not benefiting from optimal OAT doses
  - Patients are being lost to care – retention rates are low
- This is not about the provider or the client, this is about a **system that is not designed to respond to the needs of the client.**
- **Do not wait for the perfect data** to take action!

“Knowing is not enough; we must apply. Willing is not enough; we must do.”

-

Goethe

- Questions?

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