

# Implementation Strategies: Converting Theory into Action

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Funding: National Institute on Drug Abuse  
R34 DA036720-01  
1K01DA039336-01

# 3. Operationalizing (cont.), F: “Implementation Outcomes”

## RE-AIM

- Reach
- Effectiveness
- Adoption
- Implementation
- Maintenance

Reference: Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *American journal of public health, 89*(9), 1322-1327.

Domain	Measure
Reach	Number and percentage of patients excluded
Reach	Number and percentage of patients served by eligible clinics
Reach	Characteristics of participating patients vs. general patient population
Reach	Structured interview with Family Medicine director to qualitatively assess recruitment process
Effectiveness	Number and percentage of patients completing urine drug screens
Effectiveness	Overall rate of opioid prescribing by clinic and provider
Effectiveness	Number and percentage of patients screened for mental health/substance use problems
Effectiveness	Overall rate of opioid/benzodiazepene co-prescribing
Effectiveness	Number and percentage of patients signing pain agreements
Effectiveness	Number and percentage of opioid prescriptions above 120 mg daily morphine equivalent
Effectiveness	Number and percentage of providers who drop out of study at 3 months
Effectiveness	Structured interview with clinic lead to assess satisfaction, effectiveness, and subgroup differences
Adoption (Setting)	Number and percentage of clinics excluded
Adoption (Setting)	Number and percentage of clinics that participate
Adoption (Setting)	Characteristics of participating clinics vs. non-participants
Adoption (Staff)	Number and percentage of staff excluded
Adoption (Staff)	Number and percentage of staff who participate
Adoption (Staff)	Characteristics of participating staff vs. non-participants
Implementation	Hours of coaching delivered/received per provider
Implementation	Adaptations made to coaching protocol during intervention period
Implementation	Cost of coaching intervention
Implementation	Structured interview with clinic lead to assess consistency of coaching intervention
Maintenance (Indiv.)	Number and percentage of patients completing urine drug screens (6 month followup)
Maintenance (Indiv.)	Overall rate of opioid prescribing by clinic and provider (6 month followup)
Maintenance (Indiv.)	Number and percentage of patients screened for mental health/substance use problems (6 month followup)
Maintenance (Indiv.)	Overall rate of opioid/benzodiazepene co-prescribing (6 month followup)
Maintenance (Indiv.)	Number and percentage of patients signing pain agreements (6 month followup)
Maintenance (Indiv.)	Number and percentage of opioid prescriptions above 120 mg daily morphine equivalent (6 month followup)
Maintenance (Indiv.)	Number and percentage of providers who drop out of study (6 month followup)
<b>Maintenance (Indiv.)</b>	<b>Focus group with clinicians who made substantial changes</b>

# Reach

(see [re-aim.org](http://re-aim.org))

The absolute number, proportion, and representativeness of individuals who are willing to participate in a given initiative

- Number and percentage of patients excluded
- Number and percentage of patients served by eligible clinics
- Characteristics of participating patients vs. general patient population
- Structured interview with Family Medicine director to qualitatively assess recruitment process

# Effectiveness

The impact of an intervention on important outcomes, including potential negative effects, quality of life, and economic outcomes.

- Number and percentage of patients completing urine drug screens
- Overall rate of opioid prescribing by clinic and provider
- Number and percentage of patients screened for mental health/substance use problems
- Overall rate of opioid/benzodiazepene co-prescribing
- Number and percentage of patients signing pain agreements
- Number and percentage of opioid prescriptions above 120 mg daily morphine equivalent
- Number and percentage of providers who drop out of study at 3 months
- Structured interview with clinic lead to assess satisfaction, effectiveness, and subgroup differences

# Adoption

The absolute number, proportion, and representativeness of settings and intervention agents who are willing to initiate a program.



- Number and percentage of clinics excluded
- Number and percentage of clinics that participate
- Characteristics of participating clinics vs. non-participants
- Number and percentage of staff excluded
- Number and percentage of staff who participate
- Characteristics of participating staff vs. non-participants

# Implementation

At the setting level, implementation refers to the intervention agents' fidelity to the various elements of an intervention's protocol. This includes consistency of delivery as intended and the time and cost of the intervention.

- Hours of coaching delivered/received per provider
- Adaptations made to coaching protocol during intervention period
- Cost of coaching intervention
- Structured interview with clinic lead to assess consistency of coaching intervention

# Maintenance

The extent to which a program or policy becomes institutionalized or part of the routine organizational practices and policies. Maintenance in the RE-AIM framework also has referents at the individual level. At the individual level, maintenance has been defined as the long-term effects of a program on outcomes after 6 or more months after the most recent intervention contact.

- Number and percentage of patients completing urine drug screens (6 month followup)
- Overall rate of opioid prescribing by clinic and provider (6 month followup)
- Number and percentage of patients screened for mental health/substance use problems (6 month followup)
- Overall rate of opioid/benzodiazepene co-prescribing (6 month followup)
- Number and percentage of patients signing pain agreements (6 month followup)
- Number and percentage of opioid prescriptions above 120 mg daily morphine equivalent (6 month followup)
- Number and percentage of providers who drop out of study (6 month followup)
- Focus group with clinicians who made substantial changes

# Discussion

- RE-AIM: comprehensive, or diffuse?
- Absolute numbers and proportions
- “All models are wrong- some are useful” (George Box)

# Thanks!

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