Reforming States Group Evidence-informed Health Policy

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Presenters

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Center for Evidence-based Policy

Based at Oregon Health & Science University, the Center works with federal, state and local policymakers in more than 20 states to use high-quality evidence to guide decisions, maximize resources and improve health outcomes.

www.centerforevidencebasedpolicy.org

COI: Neither the Center nor its personnel receive funding from industry or advocacy organizations.





What We Do

MULTI-STATE COLLABORATIVES

- Self-governing
- Pool resources
- Evidence & data to address policy questions

STATE-SPECIFIC EVIDENCE & DATA

- Evidence synthesis
- Systematic review
- Data analysis & predictive modeling

STATE HEALTH SYSTEMS ENGINEERING

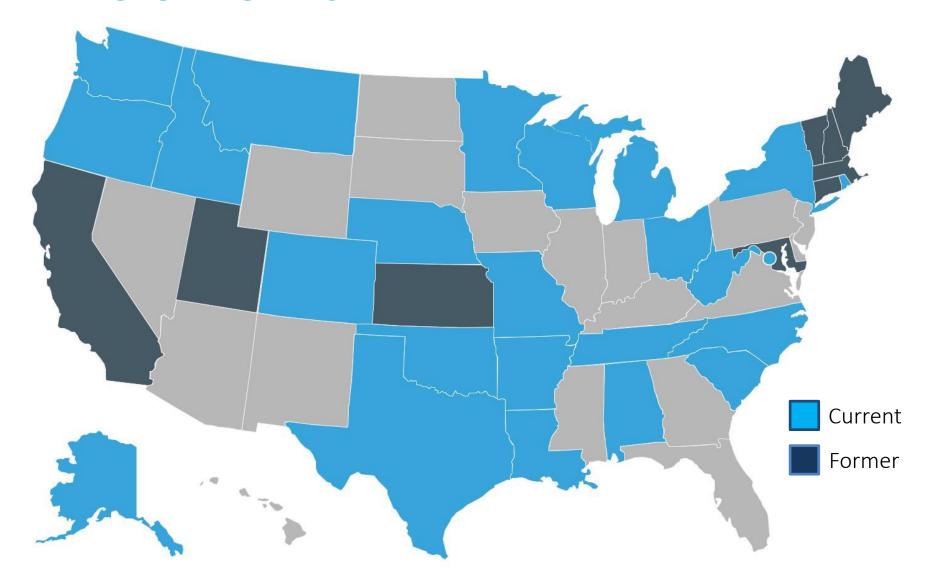
- Process design
- Stakeholder engagement
- Decision-making protocols & tools
- System design & implementation

OTHER

- Training
- Policy analysis
- Multi-sectoral coordination
- Collaboration development

We do not lobby. We are non-partisan.

Where We Work



Today's Objectives

Explore three questions:

- 1. What is evidence-informed health policymaking?
- 2. Why should I care about it?
- 3. How can I, as a policymaker and through fiscal decisions, promote evidence-informed health policymaking on important issues before me?





HELP SAVE ART! IN PUBLIC SCHOOLS

research shows art education:

- Keeps kids in school •
- Teaches creative problem solving
 - Raises academic success •
- Builds character and self-esteem •

e a donation e front desk.

supplies to public schools in need.

What influences policy or budget decisions in your state?





Evidence is necessary, but not sufficient



What is EiHP?

- An approach to health policy decisions that is informed by the best and most complete available research evidence
- A structured way to use research to better understand what works, recognizing that:
 - Not all studies are created equal
 - Some studies may not be relevant to policymaking
 - Transparency in identifying and applying studies is important



What is evidence?

- For our purposes, evidence comes from research that:
 - Is intended to test the validity of a claim
 - Uses reproducible methods
 - Collects and interprets data using tests to distinguish between chance and true effects
 - Can be scrutinized by peers and the public
 - Can be subject to falsification, retraction, and change with time





Why use evidence to inform health policy in your state?





Where might EiHP occur now?

- Executive Branch
 - Medicaid medical and pharmacy coverage/authorization decisions, broader health policy, workers compensation, budget development and management, regulatory actions
- Legislative Branch
 - Budget development, developing and evaluating legislation, responding to constituent requests and lobbyists, program oversight and evaluation





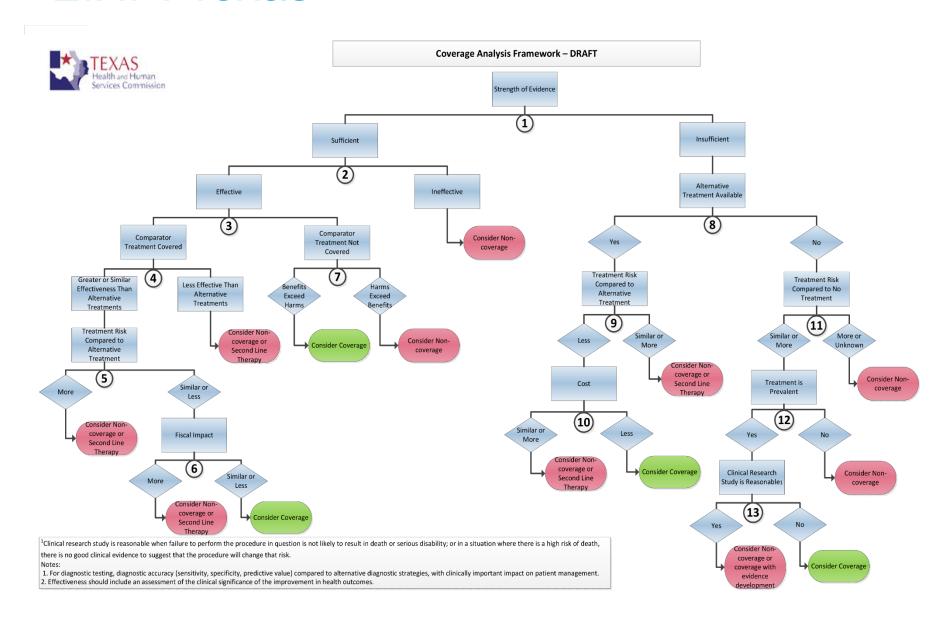
EiHP: Examples

- Hepatitis C
- Therapies for low back pain
- Proton beam therapy
- Robotic assisted surgery
- Bariatric surgery

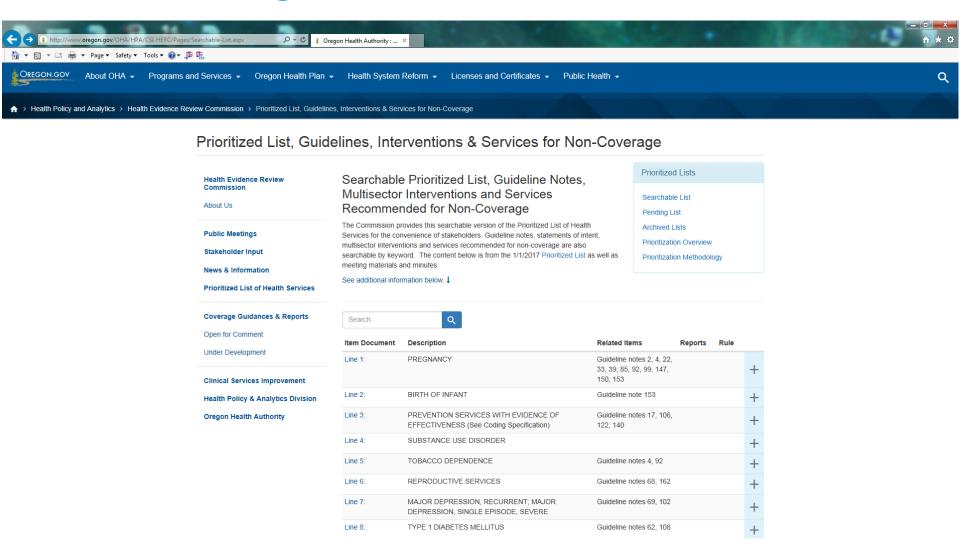




EiHP: Texas



EiHP: Oregon



Evidence-informed Health Policy: The Basics





The challenge of using evidence

- Not everyone is asking the same question
- There are an estimated 24 million studies in PubMed, each a potential piece of evidence
- Studies often reach conflicting results
- It's easy to pick and choose the evidence that best supports a given position
- How do you know what evidence is most accurate and reliable?



The Evidence Hierarchy

Systematic reviews and meta analyses Confidence in the Outcomes Research Randomised controlled trials Cohort studies Case-control studies Quality of the Cross-sectional surveys **Ecological studies** Case series and case reports Ideas, editorials and opinions



How is evidence synthesized?

- A systematic search of the literature is done
- Studies are selected for inclusion based on pre-specified criteria
- The studies are individually assessed for their quality and riskof-bias
- Included studies are summarized and, when appropriate, statistical methods are applied to better estimate the true results (and risks)
- A judgment is made about the overall quality of the literature and its limitations



Why are systematic reviews so important?

- Single studies rarely settle an issue
- Reproducibility confirms the effect
- Refines our estimate of the size of the intervention effect
- Expose unintended harms that might not have been detected in individual studies





Conflicts of interest (COI)

- Cochrane review of the effects of industry-sponsorship on published results
 - 27% more likely to report efficacy
 - 34% more likely to reach positive conclusions about the drug or device
- "...industry sponsored drug and device studies are more often favorable to the sponsor's products than non-industry sponsored drug and device studies..."





Key Questions to Assess the Evidence

- Who produced the evidence? Are they a reliable or conflicted source?
- What is the quality of the evidence? (Good systematic reviews of good randomized trials are best.) Based on the quality of evidence how sure are you that the program/policy will result in the benefit you need?
- What exactly was the intervention and could anything besides it have produced or influenced the results?
- Is all the evidence on the table or are there other studies? Do those reach the same conclusion?
- Are there other stakeholders for this issue who would interpret these data/studies differently?

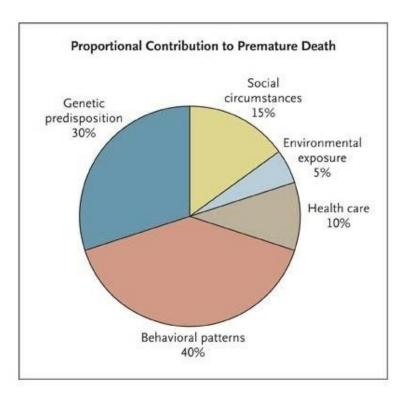
Permanent Supportive Housing (PSH)





Background

Health care is a minor contributor to individual and population health



Schroeder, S.A. (2007). We Can Do Better – Improving the Health of the American People. *New England Journal of Medicine*, *357*(12), 1221-1228.

Discuss homelessness in your state.





What is Permanent Supportive Housing?

 "Supportive housing is an evidence-based housing intervention that combines non-time-limited affordable housing assistance with wrap-around supportive services for people experiencing homelessness, as well as other people with disabilities".

Source: US Interagency Council on Homelessness https://www.usich.gov/solutions/housing/supportive-housing

Not short term shelters





Evidence on Supportive Housing

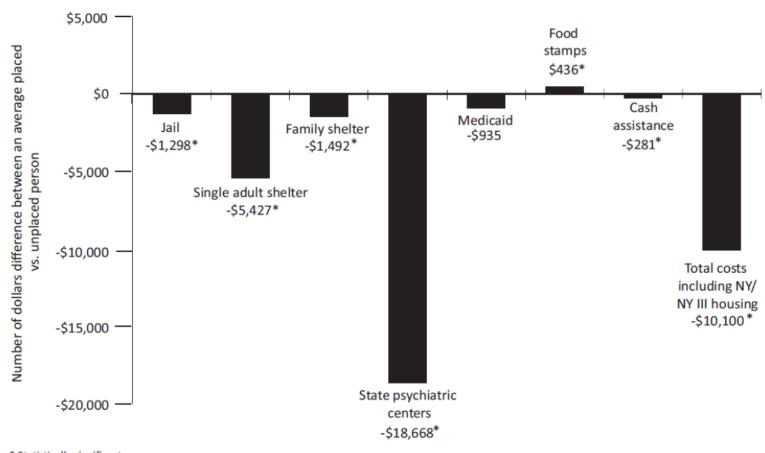
- Good quality review of 8 SRs, 7 RCTs, 5 quasiexperimental studies (limited to adults)
- Moderate quality evidence
- Consistent improvements in housing outcomes
- Subset of Housing First programs also showed reductions in ED use and hospitalization
- Mixed evidence on behavioral health and substance use outcomes
- Some evidence of racial differences in outcomes





Program Evaluations on Supportive Housing

Figure 2: Combined NY/NY III eligible applicants with one year of follow-up time: Differences in average cost per person – NY/NY III tenants (N = 1,695) vs. unplaced eligible applicants (N = 3,700)



^{*} Statistically significant
Data sources: DHS, DOC, DOHMH, HRA, OMH

What questions do you have after hearing the evidence on Supportive Housing?





Supportive Housing: Policy Implications

- Whom should we serve?
 - For example, which populations are most likely to benefit from supportive housing?
- Who do you need to bring to the table?
- Which supportive housing model should we use?
 - Single or scattered site?
 - Housing First?
 - Other services, such as primary care and behavioral health treatment available onsite?



Supportive Housing: Policy Implications

- How aggressively should we implement?
 - What is the supply of supportive housing units?
 - Should we focus on geographic areas with the greatest concentration of our target population?
- How should we measure the impact of the program?
 - Medical, behavioral health, criminal justice, housing stability, employment, child welfare, cash and food assistance use?
 - Spending impact: state only, or state and local government?



Supportive Housing: Policy Implications

- How should we finance the program?
- Should we fund an evaluation component?
 - By whom and what design?





Medication Assisted Therapy (MAT)





Opioid Use Disorder

Vol. 302 No. 2 CORRESP

ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients' who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,² Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare inmedical patients with no history of addiction.

JANE PORTER
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Waltham, MA 02154

- Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. JAMA. 1970; 213:1455-60.
- Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. J Clin Pharmacol. 1978; 18:180-8.

The Risk of Case Reports

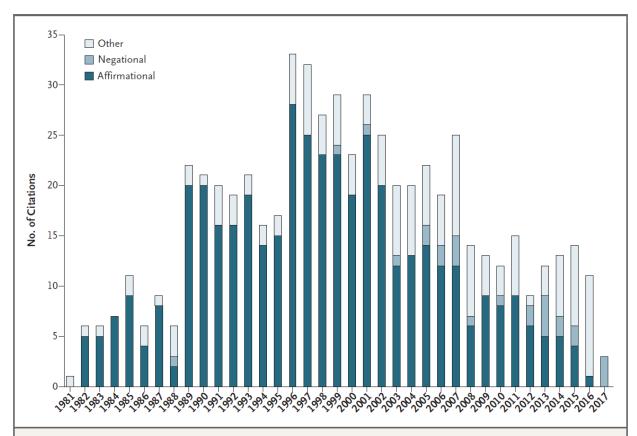


Figure 1. Number and Type of Citations of the 1980 Letter, According to Year.

Shown are number of citations of a 1980 letter to the *Journal* in which the correspondents claimed that opioid therapy rarely resulted in addiction. The citations are categorized according to whether the authors of the articles affirmed or negated the correspondents' conclusion about opioids. Details about "other" citation categories are provided in Section 2 in the Supplementary Appendix.

Prescription Numbers

"For much of the past two decades, doctors were writing so many prescriptions for the powerful opioid painkillers that, in recent years, there have been enough for every American adult to have a bottle."

https://www.nytimes.com/2016/05/21/health/opioid-prescriptions-drop-for-first-time-in-two-decades.html

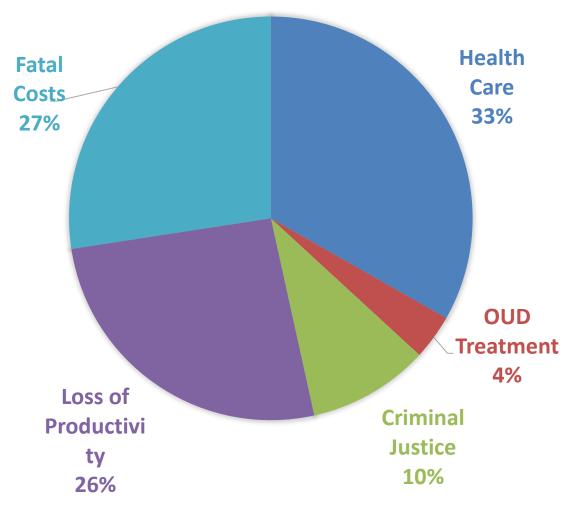




Opioid Consumption is Costly

Annual cost of \$78.5 billon related to opioid consumption

Breakdown of Costs



Florence CS, Zhou C, Luo F, Xu L. The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States, 2013. Med Care. 2016;54(10):901-906. doi:10.1097/MLR.00000000000000525.

Medicaid Beneficiaries

 During 2014, 35.5% of ED visits for all unintentional drug-related poisonings listed Medicaid as the primary source of payment; 16.0% listed Medicare, and 27.4% listed private insurance.





Could the opioid epidemic have been avoided?

If so, how?





Treating opioid use disorder: Background

- Medication assisted treatment
 - Methadone
 - Buprenorphine
 - Naltrexone
- Psychosocial interventions
- Financial incentives





MAT Background

- MAT "the use of medications with counseling and behavioral therapies to treat substance use disorders and prevent opioid overdose" (SAMHSA)
- Types of MAT Programs
 - Opioid treatment programs (OTPs)
 - Office-based opioid treatment (OBOT)
- Clinical Delivery Models of MAT
 - Hub and spoke model (VT)
 - Nurse care manager model (MA)
 - Project extension for community healthcare outcomes (ECHO) (NM)
 - Medicaid health home model (RI)

Evidence 101 on MAT

- Overall, MAT is associated with:
 - Reduction in risk of all cause and overdose mortality
 - Better retention in treatment programs
 - Lower criminality and use of illicit drugs
 - Improved employment
 - Less transmission of HIV and hepatitis C
- Higher doses of buprenorphine are associated with better retention in treatment
- Clinical practice guidelines support use of MAT and policy approaches that incorporate individual recovery goals

How would a conversation about MAT go in your state?





Wrap Up





Evidence should be the starting point



Dealing with insufficient evidence

What to do when there's a compelling challenge but there is lack of sufficient evidence on effective interventions:

- Look for common elements across interventions studied that appear to contribute to effectiveness
- Weigh the opportunities and risks associated with implementing what may be a promising practice
- Consider implementation with evidence development funding research and evaluation as part of program implementation
- Pilot programs or phased implementation

Communicating About Evidence

Evidence Quality = Confidence in Concrete Outcomes

"The evidence makes us very confident that _____ will give us the outcomes we want for our state."





Communicating About Evidence

Insufficient evidence = uncertainty

"The evidence isn't complete enough to give us much confidence about the results."





In the end...

- Good evidence is a tool for good governing
- It allows more confidence that a public policy will:
 - Achieve its intended goal
 - Be the best use of limited resources
 - Not have to be abandoned in 5 years





Key Questions to Assess the Evidence

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