

US HOSPITAL-BASED ADDICTION CARE: PAST, PRESENT AND FUTURE & IMPLICATIONS FOR PALLIATIVE CARE

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DISCLOSURES

- Dr. Englander has no relevant conflicts of interest.

OUTLINE FOR TODAY'S SESSION

My story



OHSU's story



Beyond OHSU



MY PATIENT'S STORIES



“Hooked: A Love Story From Vermont's Opioid Crisis,” Kate O'Neill 2019

MY PATIENT, FALL 2012

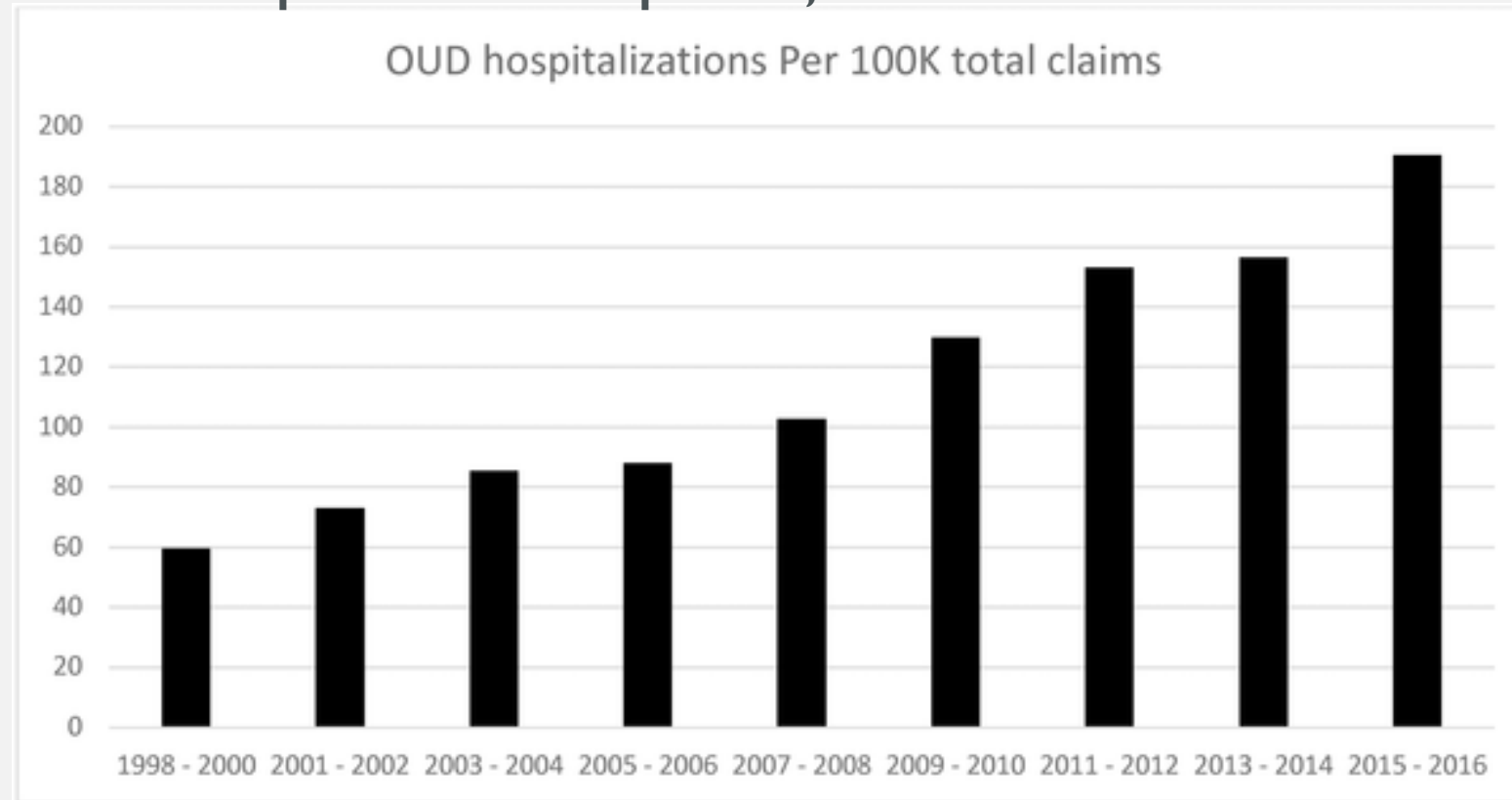
- 23-year-old woman with opioid use disorder admitted to hospitalist service with chest wall pain
- Past Medical History
 - Endocarditis in setting of intravenous heroin use, treated with IV ABX x6 weeks
 - Subsequently aortic/tricuspid valve replacement, discharged to SNF
 - Persistent chest wall pain at sternotomy site, now readmitted
- Hospital course:
 - Met with social work, encouraged to enter residential treatment
 - Conversations about limiting prescribed opioids; not offered methadone or buprenorphine in hospital
 - Grieving recent death of boyfriend to overdose, limited engagement

- We were not equipped to treat the primary disease, the opioid use disorder
- Tremendous cost
- Patient died



RISING OPIOID RELATED HOSPITALIZATIONS ACROSS US

OOD hospitalization rate per 100,000 claims from 1998 to 2016.



SUD-RELATED HOSPITALIZATIONS ARE COMMON, COSTLY

- At least 1 in 9 hospitalized adults in the US has substance use disorder (SUD), higher in many settings
 - Rising rates of opioid-, methamphetamine-, and alcohol-related admissions
- People with SUD are at high risk for repeat ED visits, readmissions, and death

Suen JGIM 2021, Singh PLOS 2020, Winkelman JAMA Open 2018,
Hirode JAMA Open 2020, Peterson JAMA Open 2021

HOSPITALIZATION IS A HIGH-RISK TOUCHPOINT

OR statewide study: Among adults with OUD hospitalized between April 2015-Dec 2017, 7.8% died within 12 months of discharge

- Mortality similar to acute myocardial infarction (5-9%)
- 13% died from overdose; 42% from non-drug related causes
- Overdose represents the tip of the iceberg

MEDICATION FOR OUD (MOUD) SAVES LIVES

In the year after non-fatal overdose, compared with no MOUD:

- Methadone maintenance was associated with ↓ all-cause mortality
 - adjusted hazard ratio 0.47 (CI, 0.32 to 0.71)
- Buprenorphine associated with ↓ all-cause mortality
 - adjusted hazard ratio 0.63 (CI, 0.46 to 0.87)

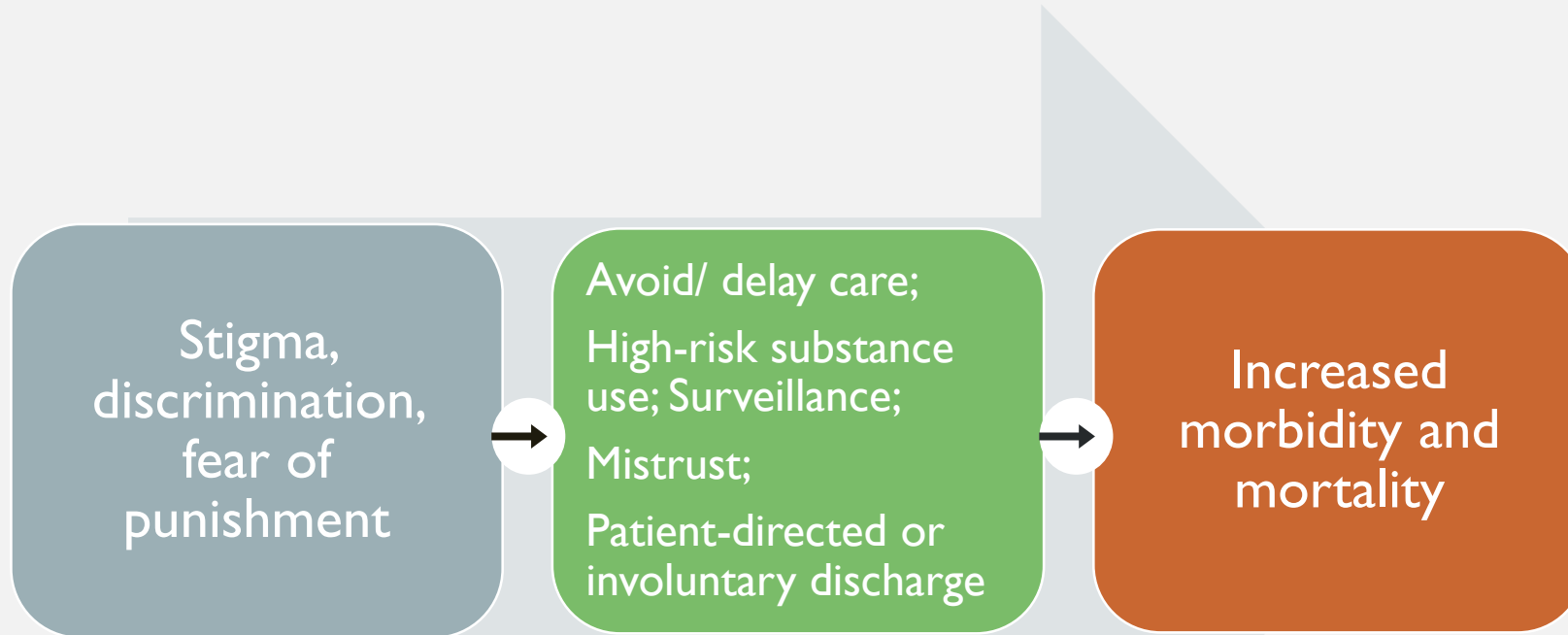
MOUD associated larger mortality reduction than antihypertensives, diabetes medications, statins; more than aspirin after STEMI

MOST HOSPITALS DO NOT OFFER EVIDENCE-BASED ADDICTION CARE

- National VA study: only 15% of admissions with OUD received opioid agonist therapy (OAT)
 - Most commonly, withdrawal management only
 - Only 2% of admissions started OAT with linkage to care after discharge
- Racial differences in MOUD prescribing observed in community settings persist in hospitals
 - Black patients more likely to receive methadone, whereas white patients more likely to receive buprenorphine
- Hospitals are unprepared to treat addiction
 - 46% of NM hospitals lack buprenorphine-naloxone on formulary

Priest JGIM 2020
Priest SAJ 2022
Pham JAM 2022

HOSPITALS AS RISK ENVIRONMENTS



McNeil 2014 SSM; Biancarelli DAD 2019; Simon Saj 2020; Strike PLOS 2020, King CA JAM 2021, Ti PLOS 2015; Barnett Lancet 2021

HOSPITAL SETTING

- Unique considerations:
 - Highly hierarchical systems, often harmful to people who use drugs
 - Patients are acutely ill; may receive life-changing/ life-ending diagnosis
 - Most people do not come to hospital seeking addiction care
 - Hospitalization can be a ‘wakeup call,’ reachable moment
- Changing acute care requires more than training clinicians about a new clinical practice
- Overdose crisis and increasingly lethal drug supply add to an already urgent need

Heller Public Health Rep 2004; McNeil 2014 SSM; Biancarelli DAD 2019; Velez JGIM 2017;
Saitz JAM 2019; Krausz Lancet Psychiatry 2022

OHSU'S STORY



IS HOSPITALIZATION A REACHABLE
MOMENT?

BRIEF REPORT

Planning and Designing the Improving Addiction Care Team (IMPACT) for Hospitalized Adults with Substance Use Disorder

Surveyed 185 hospitalized adults with SUD (09/14 – 04/15)

- 57% of people with high risk alcohol use and 68% with high risk drug use wanted to cut back or quit.
 - Many wanted medication for addiction (MAT) to start in the hospital
- Gap time to community SUD treatment
- Patients valued treatment choice, providers that understood SUD



Pervasive feelings of judgment, stigma, discrimination

“Most of us that do it can’t stand it. I hate the stuff. It is wretched. It’s like damned if you do, damned if you don’t...when I do it I don’t even feel good anymore, like it takes so much just to be okay, to be normal. It’s like when I use I just feel normal...so they don’t understand that.

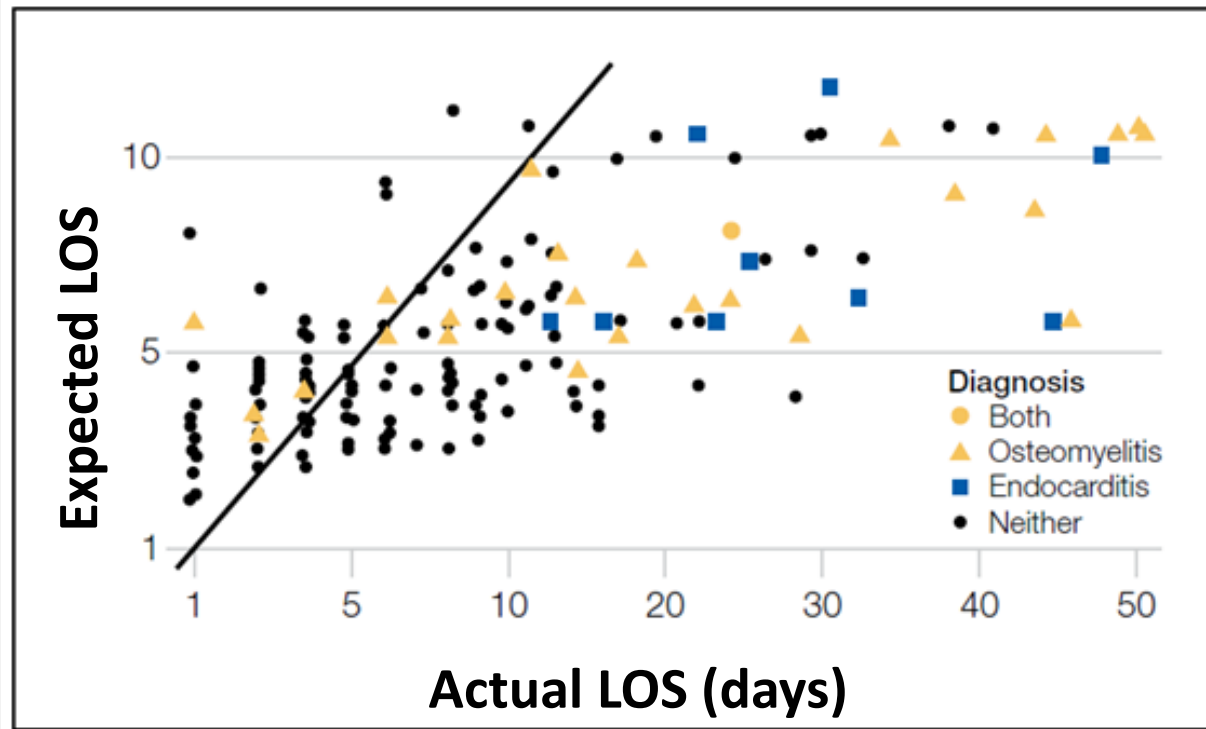
- patient

Value of peers with lived experience

“When you tell me what to do I’m a mule. I dig my hooves in and I’m like uh-uh [shaking head], I make my own decisions. But if I have somebody to talk to that could understand where I’m coming from, yeah, I could see that helping people.”

- patient

DEFINING A BUSINESS CASE



Cohort had:

- Prolonged hospital length of stay (LOS)
- Frequent high cost utilization. First 165 participants had 137 readmissions over a mean observation period of 4.5 months.

ENGAGED COMMUNITY PARTNERS



Velez, JGIM 2017
Englander, JHM 2017

IMPROVING ADDICTION CARE TEAM (IMPACT)

- Interprofessional consult service
 - Initially included MDs, SW, and peer
 - Expanded to NPs/PA, coordinator, RNs, pharmacist, fellows
- Meet people during hospitalization, provide comprehensive substance use disorder (SUD) care
- Provide rapid-access pathways to community SUD care



OUTCOMES

"I am worth Recovery.
Love, Trust, Happiness."

- IMPACT patient window



IMPACT POPULATION

- >3000 medically and socially complex hospitalized patients since July 2015
- 60% experience homelessness; high rates of trauma, mistrust in healthcare
- 80% Oregon Medicaid
- High rates of polysubstance use
 - 65% Opioids; 50% Alcohol; 40% Methamphetamines

ADDICTION CONSULT SERVICE OUTCOMES

- Initiate medication for opioid and alcohol use disorder
- ↑ post-discharge SUD treatment engagement
- ↑ trust in physicians
- ↓ substance use and ↓ SUD severity after discharge
- ↓ mortality
- Improve hospital settings that care for people who use drugs



Englander JAM 2019, Nordeck DADR 2022, Trowbridge JSAT 2017, Wakeman JGIM 2017, Englander JGIM 2019, King JSAT 2020, King JAM 2021, Wilson JGIM 2022, Englander JHM 2018, Collins JGIM 2019, Hoover JSAT 2022

Before IMPACT, care was **chaotic, reactive**, and “very **emotionally draining** and **time consuming**.”

“[Providers] get called to the unit because the person is yelling and throwing things or comes back after being gone for a long period and appears impaired ... it often blows up, and they get discharged or they leave against medical advice or they go out and don't come back. We don't really know what happened to them, and they're vulnerable. And the staff are vulnerable. And other patients are distressed by the disruption and commotion.”

- Patient advocate

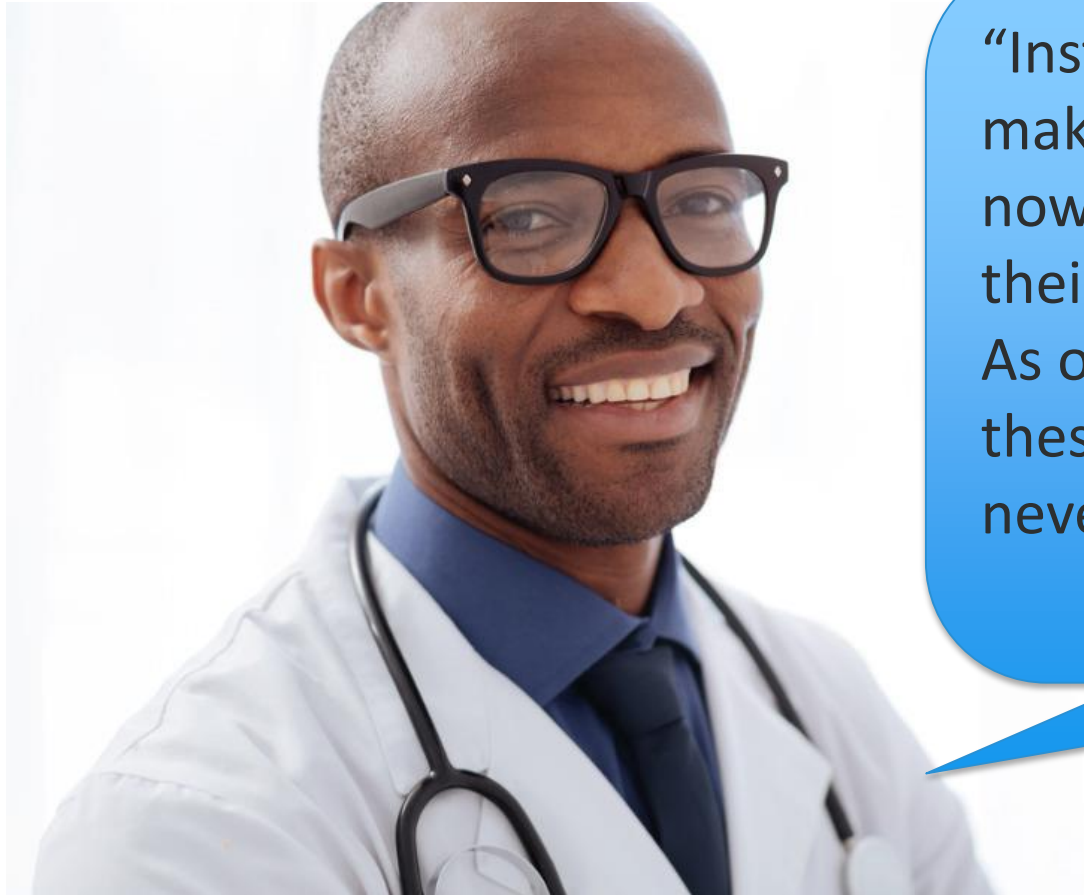
IMPACT alleviated widespread “moral distress”

“You feel more empowered when you’ve got the right medication... the knowledge, and you feel like you have the resources. You actually feel like you’re making a difference.”

- nurse



IMPACT “legitimized” addiction as a treatable chronic condition



“Instead of treating these people and making value judgements around them, now we make diagnoses. Like how bad is their infection, how bad is their addiction? As opposed to just bucketing them, oh these are a bunch of addicted people they’ll never get better.”

– surgeon

Reforming hospital systems



“This is an institution, and so often I feel like the peers will show us the ways in which institutions can either harm patients or not hear patients... those are the conflicts that our patients also experience. We just don’t have to see it when we’re the ones with the power.”

- IMPACT physician

Collins et al., JGIM 2019



ADDICTION CONSULT SERVICES ARE PLATFORM FOR CHANGE

Care redesign

- Medication protocols
- Approaches to serious infections, endocarditis care
- Post-acute care transitions, SNF

Transform culture

- Trauma-informed policies (e.g. hospital drug use, visitor)
- Workforce education
- Address individual and structural stigma

Build responsive systems

- Community treatment pathways
- Emerging population needs (e.g. COVID, fentanyl)

Englander JGIM 2022, O'Donnell JGIM 2021, Sikka BMC ID 2021, Gryzinski Annals 2021, Tassej JSAT 2022, Martin JAM 2022, Collins JGIM 2019, Englander JHM 2018, Hoover JSAT 2022, Callister SAj 2021, Wakeman JAM 2017, King PLOS 2022, Harris ASCP 2022

HOSPITAL-BASED HARM REDUCTION



What is harm reduction?

*Both a philosophy of care and pragmatic set of strategies that helps people who use drugs be safer and healthier, have more autonomy, and take protective and proactive measures for themselves, their families and communities.**



*Definition adapted from Streetworks Edmonton;
slide adapted from Dr. Elaine Hyshka and Amelia Goff



Susannah Lujan-Bear, RN

HARM REDUCTION RN



Amelia Goff, NP

- Discusses safer substance use strategies, overdose prevention education
- Provides patient and staff support regarding in-hospital substance use
- Offers safer-use and overdose prevention kits including
 - Naloxone
 - Clean syringes, sharps containers
 - Wound care, hygiene, safer sex kits



CHANGE BEYOND OHSU – A NATIONAL STORY



SPREADING HOSPITAL ADDICTION CARE



WIDESPREAD NEED



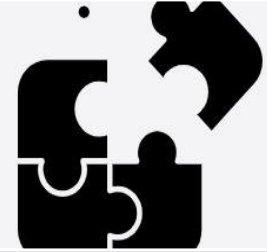
Workforce gaps:

- Staff lack SUD knowledge and skills
- Moralize drug use
- Mutual mistrust between patients and staff



Care Fragmentation:

- Interprofessional siloes
- Hospital & community siloes
- SUD segregated from general healthcare



System lacks key components:

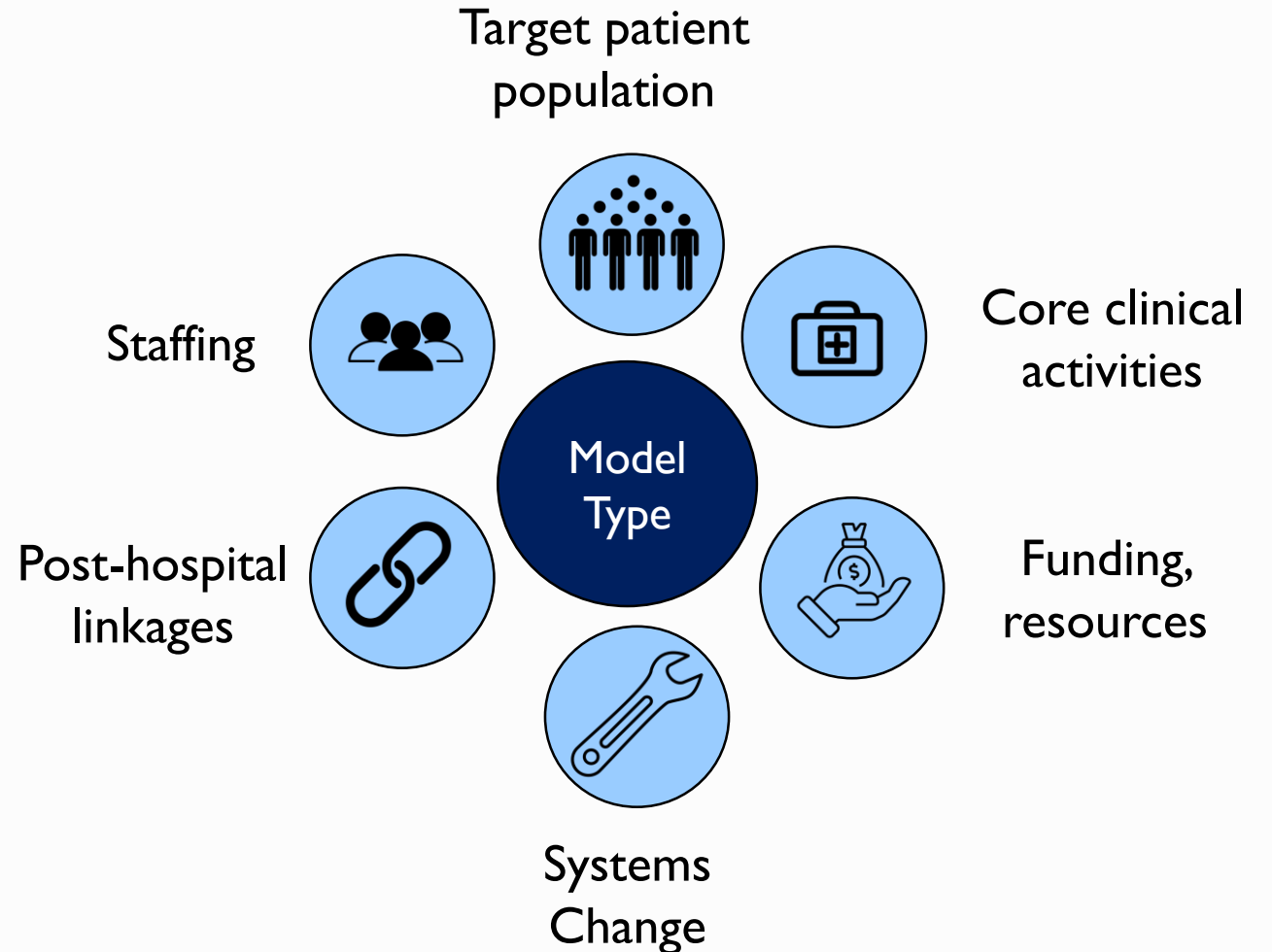
- Medications on formulary
- Metrics, incentives
- Funding
- Leadership commitment
- Community treatment

- Pervasive stigma, discrimination, criminalization of drug use
- Lack of hospital-specific research and clinical guidance

ALL HOSPITALS SHOULD ADDRESS
ADDICTION, BUT HOW?

SCOPING REVIEW

- **Scoping review** of US models including gray and published literature 2000-2021
 - 2849 abstracts → 80 full text → 76 included papers
- **Key informant interviews** (n=15)




TAXONOMY: 6 DISTINCT MODEL TYPES*

Consult	Practice-Based	In-Reach
Expert hospital consultants	General hospital staff integrate SUD care into usual practice	Community providers reach in to deliver care
<ul style="list-style-type: none"> • Interprofessional addiction consult services (ACS) • Psychiatry Consult Liaison Services (PCL) • Individual Consultants 	<ul style="list-style-type: none"> • Hospital-Based Opioid Treatment (HBOT) • Hospital-Based Alcohol Treatment (HBAT) 	<ul style="list-style-type: none"> • Community in-reach

*Models can co-exist or build on each other

UNIQUE CONSIDERATIONS FOR PALLIATIVE CARE

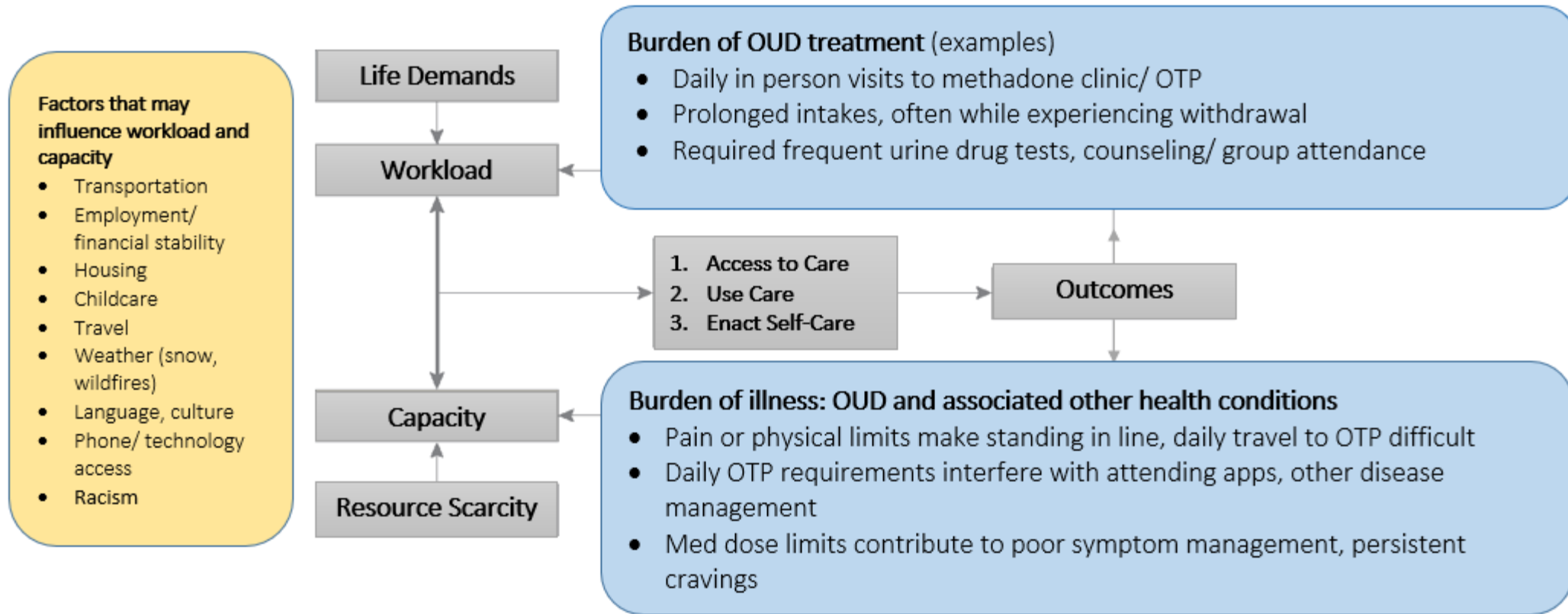
Envisioning Minimally Disruptive Opioid Use Disorder Care

Honora Englander, MD^{1,2} , Jessica Gregg, MD PhD³, and Ximena A. Levander, MD MCR¹



ENORMOUS CHALLENGES FOR PEOPLE WITH
SERIOUS ILLNESS AND OPIOID USE DISORDER

IMBALANCE BETWEEN WORK AND CAPACITY





Consensus Statement | Substance Use and Addiction

Expert Panel Consensus on Management of Advanced Cancer-Related Pain in Individuals With Opioid Use Disorder

Jessica S. Merlin, MD, PhD; Dmitry Khodyakov, PhD; Robert Arnold, MD; Hailey W. Bulls, PhD; Emily Dao, MS; Jennifer Kapo, MD, MSCE; Caroline King, PhD; Diane Meier, MD; Judith Paice, PhD, RN; Christine Ritchie, MD, MSPH; Jane M. Liebschutz, MD, MPH




2 cases: Pt w advanced cancer pain, and OUD treated with buprenorphine or methadone

Consensus:

- Continue methadone and buprenorphine
- Add full agonists as needed
- Appropriate for palliative clinician to assume methadone prescribing from OTP and dose BID, TID

Consensus-Based Guidance on Opioid Management in Individuals With Advanced Cancer-Related Pain and Opioid Misuse or Use Disorder

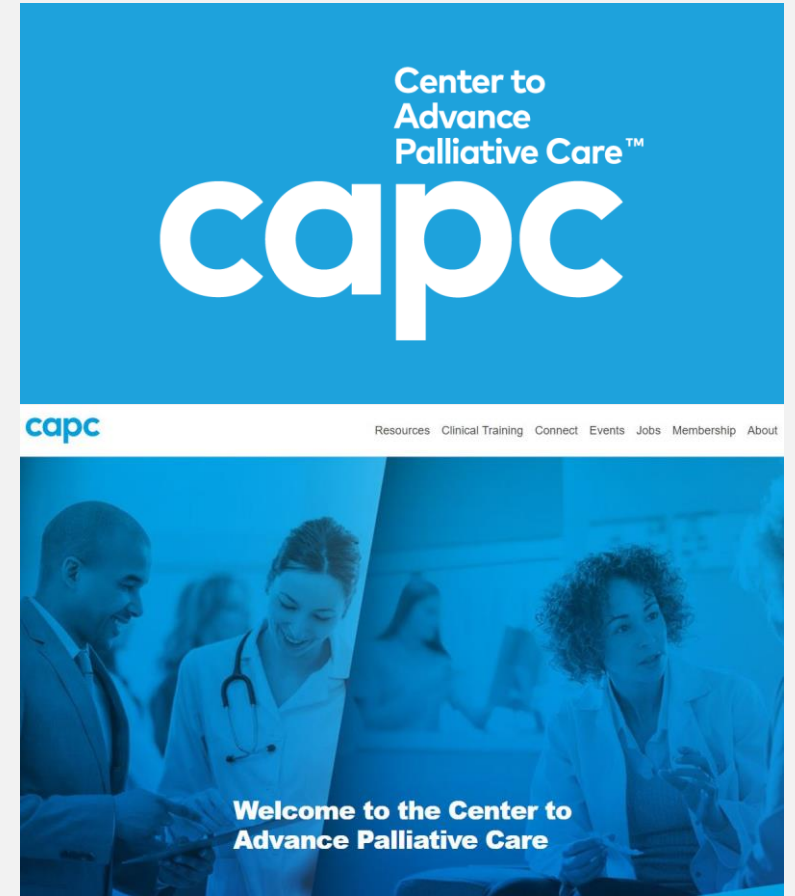
Katie Fitzgerald Jones, MSN; Dmitry Khodyakov, PhD; Robert Arnold, MD; Hailey Bulls, PhD; Emily Dao, MS; Jennifer Kapo, MD; Diane Meier, MD; Judith Paice, PhD; Jane Liebschutz, MD, MPH; Christine Ritchie, MD, MSPH; Jessica Merlin, MD, PhD

Case 1	Case 2	Case 3
<p> Case 1 A recent history of opioid use disorder (OUD) who is not on OUD treatment and not yet prescribed opioids for pain.</p> <p>Recommendations regardless of prognosis</p> <p><input checked="" type="checkbox"/> Prescribe buprenorphine/naloxone</p> <p><input type="checkbox"/> Refer to a methadone clinic</p> <p>Begin split doses of methadone</p> <p><input checked="" type="checkbox"/> Short prognosis <input type="checkbox"/> Longer prognosis</p> <p>Begin a full opioid agonist other than methadone</p> <p><input type="checkbox"/> Short prognosis <input type="checkbox"/> Longer prognosis</p>	<p> Case 2 No history of OUD, prescribed traditional opioids for pain, urine negative for prescribed opioids, and reports repeatedly taking more opioids than prescribed.</p> <p>Recommendations regardless of prognosis</p> <p><input checked="" type="checkbox"/> Increase monitoring</p> <p><input type="checkbox"/> Taper opioids</p> <p><input type="checkbox"/> Transition to buprenorphine/naloxone</p> <p><input type="checkbox"/> Increase opioids based on what patients report they need</p>	<p> Case 3 No history of OUD, prescribed traditional opioids for pain then found to have urine drug screens repeatedly positive for unprescribed benzodiazepines.</p> <p>Recommendations regardless of prognosis</p> <p><input checked="" type="checkbox"/> Increase monitoring</p> <p><input checked="" type="checkbox"/> Continue opioids</p> <p><input type="checkbox"/> Taper opioids</p> <p><input type="checkbox"/> Transition to buprenorphine/naloxone</p>

FUTURE DIRECTIONS

DEVELOP TRAINING, TOOLS AND TECHNICAL ASSISTANCE

- Borrow lessons and experience from other disciplines (e.g. palliative care)
- Spread interprofessional addiction consult services
- Assure core competencies of evidence-based addiction care among trainees



EXPLORE INTERNATIONAL MODELS



CHANGING US STANDARD OF CARE REQUIRES AMBITIOUS, MULTIPRONGED AGENDA



SUMMARY AND TAKE-HOMES

REFRAMING HOW HOSPITALS ADDRESS ADDICTION



Insulin
Diet
Lifestyle



Aspirin
Statin
Exercise



REFRAMING HOW HOSPITALS ADDRESS ADDICTION



Insulin
Diet
Lifestyle



Aspirin
Statin
Exercise



Engage,
treat,
link

ALL CLINICIANS SHOULD

- Recognize patients' experiences of discrimination, mistrust, fear in healthcare settings
- Embrace harm reduction and trauma informed approaches, including acknowledging patients' value and lived-experience
- Identify and treat withdrawal and pain
- Offer evidence-based medication for opioid, alcohol use disorder
- Prescribe naloxone to people with opioid and or stimulant use disorders

RESOURCES

**SAVE A LIFE
CARRY
NALOXONE**



For patients, families

- SAHMSA treatment locator
<https://findtreatment.samhsa.gov/>
- Harm Reduction
<https://harmreduction.org/>
- OHA Naloxone resources
https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Pages/naloxone.aspx#p_harmtoolkit

For providers


- ECHO
<https://connect.oregonechonetwork.org/>
- IMPACT Education and Training
<https://www.ohsu.edu/health/impact-education-and-training>
- OHSU Addiction Medicine Consult Line
503-494-4567




Thank you

- IMPACT patients and families
- IMPACT research and clinical teams
- OHSU leadership
- CareOregon and OHSU Health

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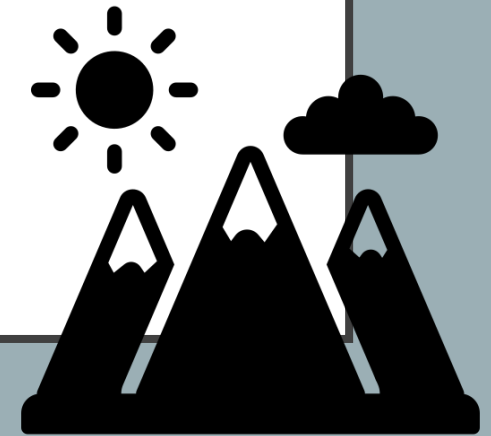
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EXTRA

PATH FORWARD



How do we change the standard of care so all hospitals deliver evidence-based addiction care?

Treatment for Opioid Addiction Must Be Offered in General Hospitals: But How?

Richard Saitz, MD, MPH, DFASAM, FACP

“On the basis of what we know, simply issuing an edict or guideline promulgating initiation of OUD treatment... would seem to be akin to picking low hanging fruit. But it appears not to be the case.”



RESEARCH PRIORITIES

- What are the effects of hospital-based addiction care?
 - Describe outcomes using standard model definitions
- How do we improve care models?
 - Racial disparities; transitional care gaps; population-specific needs (e.g. end of life, rural, pregnancy); specific health conditions (e.g. endocarditis, transplant)
- How do we implement across diverse settings?
- How do we promote broad adoption and diffusion of innovation?

WHY TREAT ADDICTION IN HOSPITALS?

Avoid harms

People with SUD to avoid/ delay care

Withdrawal, pain, stigma

Patient-directed discharge

Benefits

Reachable moment to engage in SUD care

Can improve SUD and other health outcomes

Transform systems

Hospitals have power, influence, resources

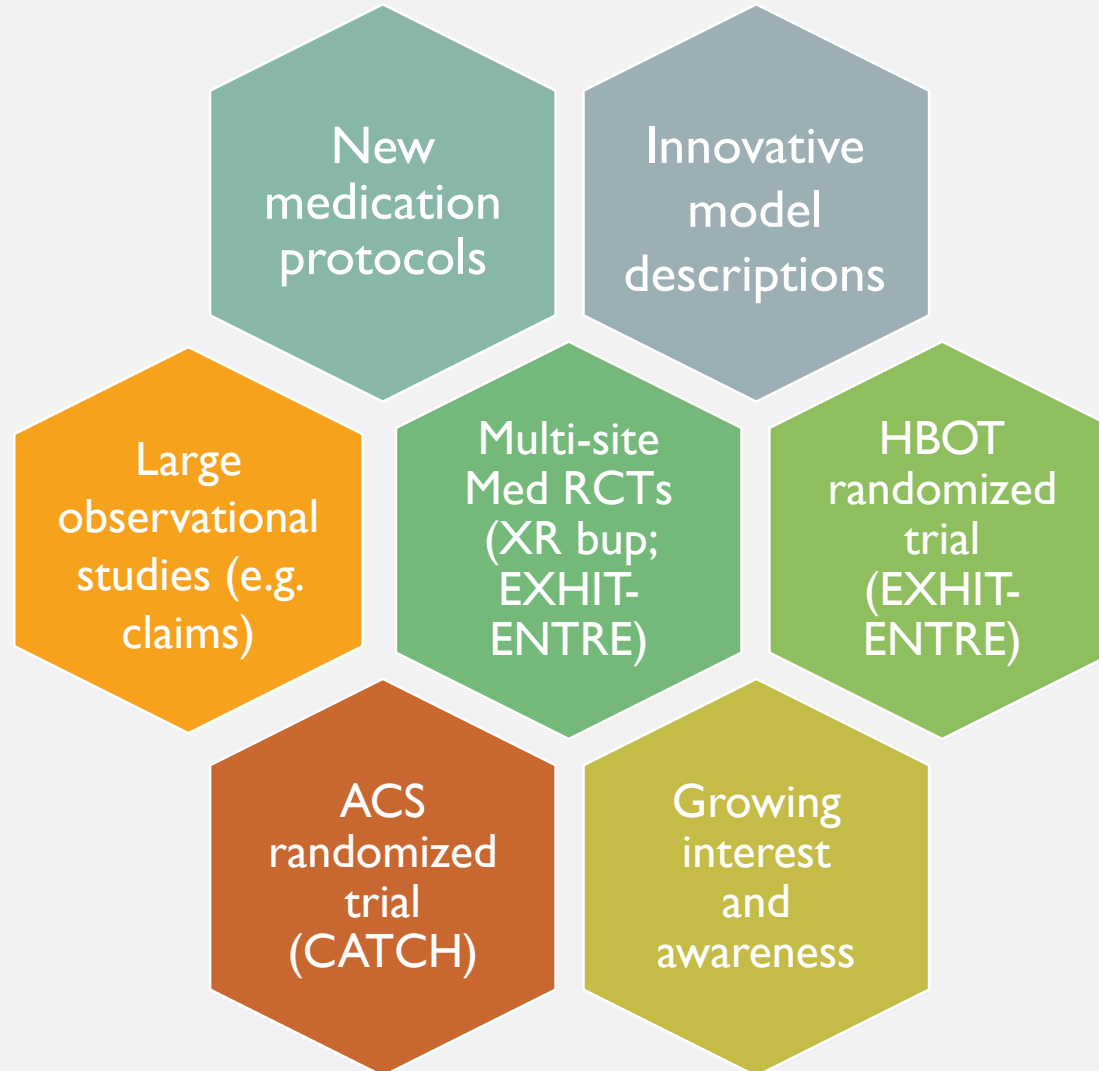
Hospitals are where we train workforce

Build prepared, responsive systems; address inequities

PREPARED AND RESPONSIVE SYSTEMS

- COVID demonstrated that in times of stress, hospitals and health systems serve as safety net for those with nowhere else to turn
- Underscored the need to
 - Incorporate and amplify expertise of people with lived experience
 - Prioritize needs of marginalized populations
 - Partner with organizations that understand community needs
- Investments in Addiction Consult Service care support preparedness,
 - lessons may be important for future climate events, changes in drug supply (eg xylazine), emerging infections

EMERGING EVIDENCE



McNeely ASCP 2019
CTN-98 (EXHIT-ENTRE, Saitz, Bart)