Substance Use Disorders in Integrated Care

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Overview

- Birch Grove Collaborative (Medford) background
- Screening for SUD
- Referral to treatment and follow up
- Medication-Assisted Treatment for opioid disorders
- Birch Grove experience
- Barriers to integrated care
- Case example

Birch Grove Collaborative Background

- Birch Grove Health Center (BGHC) opened March 2014 as new access point FQHC in La Clinica Health System, opened in collaboration with Jackson County Mental Health, and two substance abuse agencies: Addictions Recovery Center and OnTrack

- Clinic designed to target patient population primarily with substance abuse and/or mental health diagnoses through referrals from partner agencies

Patient Population

- +/- 1000 patients with 2.75 full-time providers, one MD, and two mid-levels
- Substance abuse diagnosis: 319 (33%)
- Mental health diagnosis: 375 (39%)
- Dual diagnoses: 464 (48%)*
- Buprenorphine MAT 72 (7%)

(*includes any SA diagnosis and any MH including anxiety and depression, some duplication in stats)

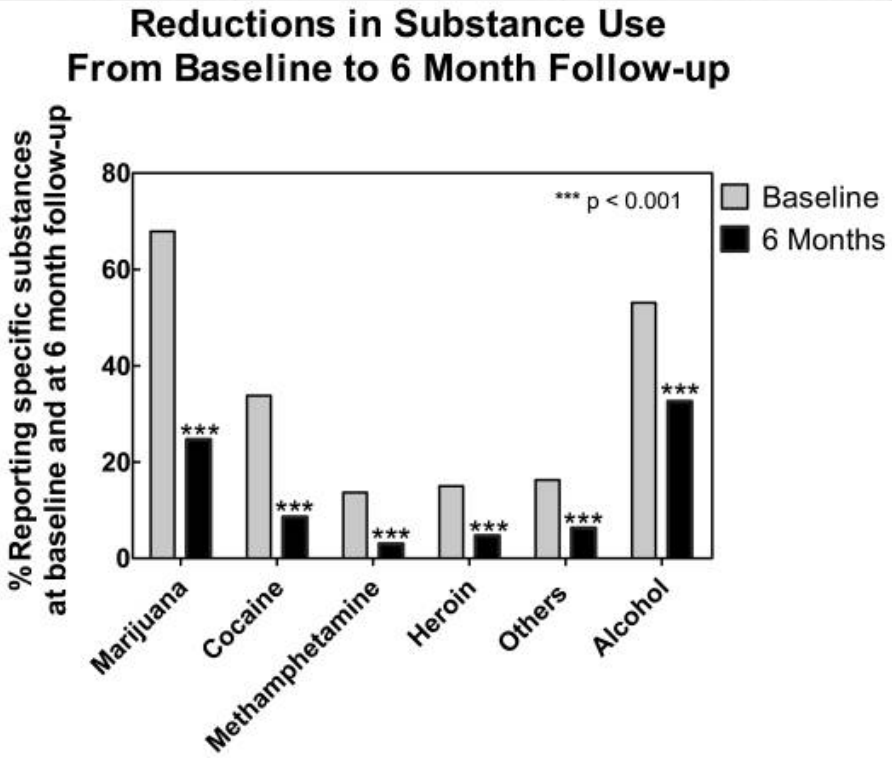
Screening for SUD: Best Practice

- Screen, brief intervention, referral to treatment (SBIRT)
- SBIRT has been shown in multiple studies to reduce problematic drinking[1]
- SBIRT studies on illicit drug use have been mixed[2]

Screening

- One meta-analysis with >450,000 found drop in heavy alcohol and illicit drug use found 67% drop in illicit drug use after SBIRT[3] (with only small percent were referral to treatment)
- Limitation of meta-analysis need to be considered: mostly patient self-reported data and illicit use screened positive with 1 use in past 30 days

Date from meta-analysis



Screening

- Several tools have been validated for screening
- DAST
- ASSIST
- CRAFFT
- GAIN
- AUDIT

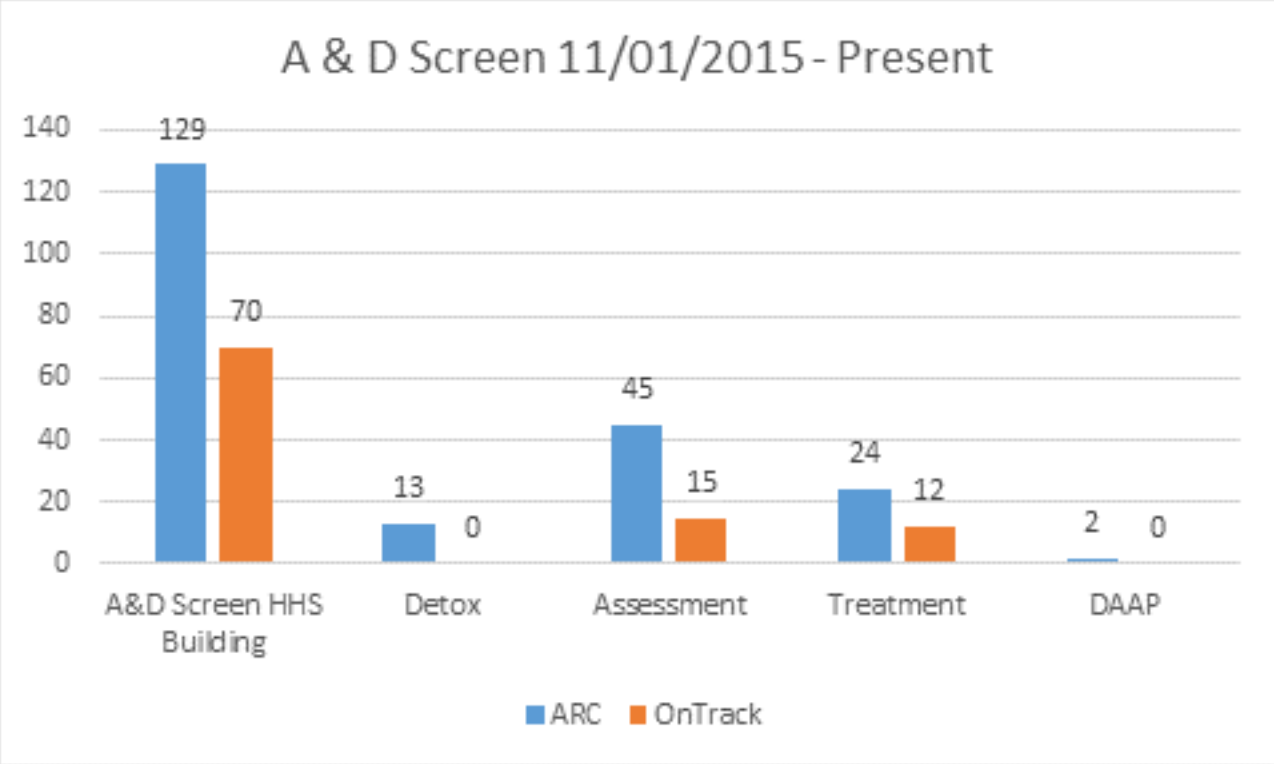
Brief Intervention

- Definition varies in the literature and across sites, what this actually means isn't clear
- Can be 1-3 or more interventions
- Follow up by phone or in person
- FRAMES model: Feedback, Responsibility, Advice, Menu of Options, Empathy, Self-Efficacy[4]

Referral to Treatment

- System dependent on how well this goes, in our experience warm hand-offs when patient truly at a “point of change” most effective
- In our clinic it is about 30% of pts who screen positive for referral to treatment get assessment, and 15% have at least one treatment encounter

Birch Grove Data



Issues with SBIRT

- Patient engagement is key. Judging “readiness to change” (pre-contemplative, contemplative, etc)
- Studies indicate is more useful for less problematic alcohol/drug behavior (non-dependent)
- Strong links to treatment and follow-up are key for more severe use

Medication Assisted Treatment (MAT)

- Methadone
- Buprenorphine (suboxone, subutex)
- Naltrexone (oral and injectable)
- Naloxone (overdose prevention)

- Due to nature of this talk I will not discuss methadone or naloxone treatment

Office-Based Opioid Treatment (OBOT): buprenorphine

- Oral two forms: buprenorphine (subutex) & buprenorphine/ naloxone (suboxone)
- Tablets & strips, 2 mg & 8 mg (there is a 4 mg suboxone strip)
- Implantable (Probuphine) 80 mg—implantable, only for stable pts at 8 mg or less (approved May 2016)

OBOT Buprenorphine

- Multiple studies have shown increased retention in treatment and decreased illicit drug use with OBOT, 50-77% retention in treatment at 12-18 months [5,6,7]
- Older, employed, and attend abstinence-based therapy (AA/NA meetings) patients tend to do better

Naltrexone

- Two currently available form: oral (tablet) or injectable
- Oral naltrexone (Revia, Depade) 50 mg—must be taken daily
- Injectable (Vivitrol) 380 mg—intramuscular shot once per month

Naltrexone efficacy

- Weak data for oral form to prevent opiate abuse[8]
- Largest barrier for oral therapy is that has no re-enforcing properties, also causes GI upset, so people stop taking it—very high discontinuation rates
- Depot from (Vivitrol) is monthly injection, and has shown greater retention rates in studies[9,10]
- Major barrier is cost: very expensive (around $800-1000/injection) and difficult to get covered

Birch Grove Experience

- Work in close collaboration with two major SA (ARC and OnTrack) treatment agencies in Medford
- Patients are referred primarily from residential rehab facilities
- Weekly meetings with residential managers for coordination of care
- Buprenorphine treatment for opiates, flexible schedule to allow patients to seen/started when first come in to treatment

Birch Grove Care Team

- Fairly traditional medical model but with some modifications
- Embedded mental health therapist (LCSW) from JCMH works closely with medical providers to provide short-term MH (3 months or less) to clinic patients, and refers back into JCMH when longer-term management needed
- Case manager for buprenorphine patient (still working on this)
- CADC in building (not embedded in team) to do referrals to treatment/set appointments

Birch Grove—Successes

- Better screening for comorbidities (HIV, Hep C, STIs, mental health disorders)
- High initiation rates of contraceptive use
- Patient retention: model was designed to create secure connections with patients so they would continue with us after SA treatment—this has largely happened
- We are picking up patients earlier in relapses
- Large percentage of whole family care, i.e. partners and children of patients enroll at clinic

Birch Grove—Challenges

- Integration of records/electronic communication very slow, still not functional (working on JHIE)
- Culture of collaboration slow to build
- Financial pressure driving care back to more traditional model (clinic loses >$250,000 last year)
- Hard to innovate when in financial loss

Barriers that Affect Care: Patient Level

- STABLE HOUSING—in our population the #1 issue, very high relapse/decompensation without stable living situation
- Lack of trust in health system
- Involvement with multiple different “systems” (DHS, legal)
- Employment/education
- Transportation
- “Life skills”-knowing how to make/keep appointments, etc.
- Lack of therapeutic options for family support/couples counseling

Barriers: System Level

- Cultures of different agencies slow to change, with systematic barriers to care coordination (difficult to get psychiatric assessment in timely fashion, agencies not used to collaboration with other systems)
- Loss of collaboration follow up with transitions of care—patient moves from inpt SA treatment to outpt & communication lost
- Lack of coordination with legal system/DHS
- Communication very person-dependent, not systematized (working on this with HIE)

Barriers: Payment

- Care coordination is not reimbursed, therefore unpaid for a time-intensive process
- Group visits not reimbursed through medical billing, has to be individual check-in with group
- Productivity lower than traditional clinic, longer appointment times
- Case management not reimbursed through medical billing
- Buprenophine prior authorization process onerous, intensive staff time
- High no-show rates with this population, difficulty keeping scheduled appts

Barriers: Patient Selection and Risk Stratification

- This has been difficult to accomplish effectively
- Models proposed based on high/low behavioral and physical health needs, but don't capture whole picture

FOUR QUADRANT CLINICAL INTEGRATION MODEL

BEHAVIORAL HEALTH

Behavioral health clinician/case manager w/ responsibility for coordination w/ PCP PCP (with standard screening tools and guidelines) Outstationed medical nurse practitioner/physician at behavioral health site Specialty behavioral health Residential behavioral health Crisis/ED Behavioral health inpatient Other community supports	PCP (with standard screening tools and guidelines) x Outstationed medical nurse practitioner/physician at behavioral health site x Nurse care manager at behavioral health site x Behavioral health clinician/case manager x External care manager x Specialty medical/surgical x Specialty behavioral health x Residential behavioral health x Crisis/ ED x Behavioral health and medical/surgical inpatient x Other community supports
PCP (with standard screening tools and behavioral health practice guidelines) PCP-based behavioral health consultant/care manager Psychiatric consultation	PCP (with standard screening tools and behavioral health practice guidelines) x PCP-based behavioral health consultant/care manager (or in specific specialties) x Specialty medical/surgical x Psychiatric consultation x ED x Medical/surgical inpatient x Nursing home/home based care x Other community supports

PHYSICAL HEALTH NEEDS

What 4 quadrant doesn't capture

- Involvement in other systems that affect patient's care/functional level (child protective services, criminal justice, self-sufficiency)
- Social environment of patients (housing status, social isolation/connectedness, employment, transportation)
- Patients' feelings of self-efficacy (hard to define, but a mix of ACEs & adult accomplishment)

So how do we accurately risk stratify?

- Short answer: I don't know
- We have done some rudimentary work with cross-matching mental health, substance abuse and physical health codes (similar to 4 quadrant)
- Factoring in the social components more difficult, but needs to be looked at (i.e.—a patient raised in foster care w/o high school degree who has never had paid employment needs more intensive intervention over longer term)

Barriers: How We View "Health"

- Social impact of SA relapse/MH decompensation not factored into medical "cost" e.g.-cost of foster care, incarceration: factors which over long-term affect health

- Current health metrics reflective of broad population, not as relevant to high-risk subpopulations that we serve (e.g. housing/employment status better predictor of health outcomes than colon cancer screen)

Bringing Integration to the Next Level

- Substance abuse is a multi-modal problem that intersects with many systems outside health care
- How do we start to factor this in when risk stratifying patients?
- How do we factor in when judging success?

Why do we need to think more broadly

- High risk, high needs individuals/families interact with and impact the cost of multiple government-funded agencies
- Currently, the services received are not coordinated well, decreasing the impact of services and raising their cost
- Health services to families need to be approached with an understanding their unique needs and the multiple systems in which they are involved

Moving beyond silos of measurement and funding

- Most agencies view their impact only through the lens of their own measures, and not the potential impact on other systems
- For most agencies costs to other agencies do not factor into budgets, and total system costs are vague/hidden
- All of the agencies/systems involved are tax-payer funded
- This population is a unique, high societal cost subset, whose progress is not well measured using population-based metrics

Case example

- 23 year old pregnant woman, heroin addicted, with two children, ages 1 and 3. Has been through residential drug treatment two times previously, children both currently in foster care x past 4 months. Mother spent 2 days in jail for PCS charge, and has probation officer prior to entering residential drug treatment

Direct Non-Medical Costs—7 months, 4 mo prior to care and 3 mo residential Tx

Foster Care: ($994/month/per child):	$7,952
Residential SA Tx ($106/day, 3 mo):	$9,540
DHS case manage ($8.83/day):	$1,854
Arrest, 2 days jail:	$ 351
Parole officer x 3 mo ($13.48/day):	$1,213

Total: $20,910

(all cost estimates except foster care taken from 2010 publication Jackson County Community Family Court, NPC Research. Foster care data from DHS website, 2016)

Mother placed on buprenorphine MAT while in residential care

- Roughly 50% of newborns with mother on MAT will have Neonatal Abstinence Syndrome (NAS)

- Average cost of episode cited by University of Vermont is $52,000/NICU stay for NAS infants

  (2012 data)

RRMC NICU admission for Neonatal Abstinence Syndrome (NAS)

- 2014 - 11 patients, Average LOS 14 days
- 2015 - 9 patients, Average LOS 13 days
- 2016 - **30 patients**, Average LOS 17 days

Conservative estimate of cost (not including TANF, SNAP, other health care or legal)

- $72,910 for 7 month period

Discussion

References

- 1. Screening, Brief Intervention, and Referral to Treatment (SBIRT): rationale, overview and cross-site evaluation. Jeremy Bray et al *Addiction,* Volume 112, Supplement S2, February 2017
- *2.* Screening and Brief Intervention for Unhealthy Drug Use in Primary Care Settings: Randomized Clinical Trials are needed. Richard Saitz et al. *Journal of Addiction Medicine. Issue 4 (3) 123-130* September 2010
- 3. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later. Madras et al, *Drug and Alcohol Dependence* Volume 99 pages 280-295 January 1, 2009
- 4. FRAMES model: http://methoide.fcm.arizona.edu/infocenter/index.cfm?stid=242
- 5. Five Year Experience with Collaborative Care of Opioid Addicted Patients using Buprenorphine in Primary Care, Alford et al, Archives of internal Medicine, 171 (5) 425-431, March 14, 2011
- 6. Parran TV, Adelman CA, Merkin B, et al. Long-term outcomes of office-based buprenorphine/naloxone maintenance therapy. Drug Alcohol Depend. 2010;106(1):56–60.
- 7. Mintzer IL, Eisenberg M, Terra M, MacVane C, Himmelstein DU, Woolhandler S. Treating opioid addiction with buprenorphine-naloxone in community-based primary care settings. Ann Fam Med. 2007;5(2):146–150

References

- 8. Minozzi S, Amato L, Vecchi S, Davoli M, Kirchmayer U, Verster A. Oral naltrexone maintenance treatment for opioid dependence. Cochrane database of systematic reviews (Online) 2006

- 9. Krupitsky EM, Nunes EV, Ling W, Illeperuma A, Gastfriend DR, Silverman BL. Injectable extended-release naltrexone for opioid dependence: a double-blind, placebo-controlled, multicentre randomised trial. Lancet. 2011;377(9776):1506–1513
- 10. Comer SD, Sullivan MA, Yu E, et al. Injectable, sustained-release naltrexone for the treatment of opioid dependence: a randomized, placebo-controlled trial. Arch Gen Psychiatry Feb. 2006;63(2):210–218.
- Babor, T. F., McRee, B. G., Kassebaum, P. A., Grimaldi, P. L., Ahmed, K., & Bray, J. (2007). Screening, Brief Intervention, and Referral to Treatment (SBIRT): Toward a public health approach to the management of substance abuse. *Substance Abuse*, *28*(3), 7–30.