

Substance Abuse Screening Strategies, Reproductive Education and Counseling, and Prevention of Unintended Pregnancies for the Potentially-Pregnant, Pregnant, and/or Previously Pregnant Woman

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#### Mishka Terplan, Disclosures

• To the best of my knowledge, I have no relevant disclosures.

The contents of this activity may include discussion of off label or investigative drug uses. The faculty is aware that is their responsibility to disclose this information.



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 The overarching goal of PCSS-MAT is to make available the most effective medication-assisted treatments to serve patients in a variety of settings, including primary care, psychiatric care, and pain management settings.



#### **Educational Objectives**

- At the conclusion of this activity participants should be able to:
  - Discuss substance use screening strategies for women, especially during pregnancy
  - Be familiar with the important components of reproductive education and counseling
  - Understand the basic epidemiology of unintended pregnancy in the US
  - Discuss basic contraceptive options for women with drug problems



#### Outline

- Substance Use Screening Strategies
  - Emphasis on screening for substance use during pregnancy
- Reproductive Education and Counseling
  - Emphasis on reproductive education and counseling as part of substance use disorder treatment
- Prevention of Unintended Pregnancies for the Potentially-Pregnant, Pregnant, and/or Previously Pregnant Woman
  - Emphasis on contraception method choice and family benefit



#### Case Study 1: Screening

 Ms M is a 24 year old G3P1 presents for her first prenatal visit at 17 weeks. She missed her first scheduled visit a month prior because of transportation difficulties. Her last pregnancy was complicated by a preterm delivery at 30 weeks.



#### **Case Study 1: Question**

- She should be screened for substance use because
  - She is late to care
  - She is non-compliant with prior visits
  - She has a history of a preterm delivery
  - Depends what the urine toxicology shows
  - All patients should be screened
  - She shouldn't be screened



#### Screening

- Universal screening is recommended
- All pregnant women should be screened for licit and illicit substance use (ACOG 2004, 2006) including:
  - Alcohol (ACOG 2011)
  - Prescription opioids (ACOG 2012)
- Early identification of substance use allows for early intervention and treatment which minimizes potential harms to the mother and her pregnancy.
- Selective screening based on "risk factors" perpetuates stigma and misses most women with problematic use.



#### **Screening: Best Practices**

- Patients are usually not offended by questions about substance use if asked in caring and nonjudgmental manner.
- Normalize questions:
  - Embed them in other health behavior questions
  - Preface questions by stating that all patients are asked about substance use
- Ask permission
  - "Is it OK if I ask you some questions about smoking, alcohol and other drugs?"
- Avoid closed-ended questions
  - "You don't smoke or use drugs, do you?"



# Screening: Substance use in pregnancy

- Substance use during pregnancy is correlated with pregnancy complications and negative health outcomes for women and their children
  - Especially for legal substances (tobacco and alcohol)
- Most women quit or cut back substance use during pregnancy although many resume postpartum (NSDUH 2009).
- Those that can't quit or cut back likely have a substance use disorder.
- There is much stigma of admitting to substance use during pregnancy as well as legitimate fear of legal ramifications.



#### Screening: Instruments

- There is no single best screening instrument to identify pregnant women with substance problems.
- Instruments can be either self-completed or done as part of the patient interview.
- The following instruments have been developed or validated among pregnant women (partial list)
  - Alcohol
    - T-ACE (Sokol 1989)
    - TWEAK (Chang 1999)
  - Both alcohol and other substance use
    - DAST and MAST (Kemper 1993)
    - 4P's Plus (Chasnoff 1999)
    - CRAFFT (Chang 2011) for pregnant adolescents



## Screening: Urine

- What about urine toxicology?
- Should not be used as sole assessment of substance problems (ACOG 2012)
  - Short detection window (substance dependent)
  - Might not capture binge or intermittent use
  - Rarely detects alcohol
  - Doesn't capture prescription opioids (without confirmation testing)
- Useful adjunct primarily for individuals during or after treatment (ASAM 2010)
- Ethical issues patient needs to give consent prior to specimen collection



## Case Study 2: Reproductive Education and Counseling

 Ms S is a 25 year old referred to residential treatment for opioid use disorder from a drug court. She has a childhood history of abuse and neglect, opioid use since age 16, and previous arrests for prostitution.



#### **Case Study 2: Questions**

- Should her reproductive health needs be assessed during intake?
- Should reproductive education and counseling be incl uded in either group or individual sessions?



- Addiction is a brain disease with behavioral consequences affecting many domains of functioning – including sexuality and reproduction.
- However reproductive education and counseling are not often included in addiction treatment.
- This is unfortunate as women with substance problems have unmet (and often unrecognized) reproductive health care needs (Crandall 2003).



- Women in drug treatment are at increased risk of sexually transmitted infections (STIs) especially HIV (Armstrong 1999)
- Women in drug treatment are at increased risk of unintended pregnancy
  - Higher lifetime parity (Weber 2003)
  - Higher unintended pregnancy rates (Heil 2011)
  - Higher abortion rates (Martino 2006)
- Women in drug treatment are less likely to use effective contraception (Black 2012) (Sharpe 2008)



- Women with substance problems are less likely to seek any needed health care (aOR=3) and more likely to use the emergency department as primary source of care (aOR=6) (Sterk 2002).
- Addiction treatment is an opportunity to provide reproductive health
  - Reproductive education and counseling in addiction treatment can
    - Prevent substance exposed pregnancies
    - Decrease STIs (especially HIV)
    - Decrease unintended pregnancies



## **Topics to Discuss with Your Patient:**





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- Treatment non-completion and relapse are common.
- Sexual behavior linked to substance use can be a reason for relapse.
- Incorporating sexuality education into treatment can improve outcomes (Marlatt & Donovan 2005).
- Addiction treatment providers might be ambivalent or lack confidence about addressing sexual issues.
- Evidence-based curriculums exist and should fill this gap (for example Braun-Harvey 2009).



- Screening for reproductive health needs is important and easy.
- Single question:

## Would You Like to Become Pregnant in the Next Year?

 Oregon Foundation for Reproductive Health (<u>www.onekeyquestion.org</u>)



- "Would you like to become pregnant in the next year?"
  - Client-centered approach
  - Non-judgemental
  - Respects client autonomy
  - Easy to incorporate at intake and/or during treatment
  - Allows reproductive education and counseling to be efficiently targeted to client needs



- Would you like to become pregnant in the next year?
- "Yes I want to become pregnant"
  - Client needs preconception services including:
    - Smoking cessation and alcohol avoidance
    - Folic acid (400 mcg) supplementation and prenatal vitamins
    - STI screening
    - See <a href="http://www.cdc.gov/preconception/planning.html">http://www.cdc.gov/preconception/planning.html</a>
- "No I don't want to become pregnant"
  - Client needs other reproductive health services:
    - Contraception
    - STI screening



- For women who are pregnant at treatment entry:
  - Assist women in understanding the impact of a pregnancy on her current life situation.
  - Help identify and explore all options available so that she can make the best possible decision.
  - Offer the opportunity to get additional counseling through referral to other agencies.
  - Educate women regarding their reproductive health care, birth control methods, prenatal care, and other related health issues.



- Reproductive education and counseling can be incorporated into treatment.
  - Individual counseling
  - Group
- As with other aspects of treatment, a client-centered approach delivered with therapeutic empathy are key (Project MATCH 1998)
- Better communication between client and provider can change contraceptive behavior (Adbel-Tawab 2010) and reduce unprotected sex and STI acquisition (Crepaz 2006)



- Simple tools for reproductive education and counseling exist that can be incorporated into treatment.
- For example: WHO publishes a flip chart guide
  - <u>http://whqlibdoc.who.int/publications/2012/978924150</u> 3754\_eng.pdf?ua=1
- Other modules available at CDC
  - <u>http://www.cdc.gov/reproductivehealth/</u>



## Case Study 3: Preventing Unintended Pregnancies

 Ms G is a 29 year old recently admitted for methadone and intensive outpatient treatment. She has no prior treatment admissions. Her two prior pregnancies predate her heroin use and both ended in elective abortions. She has been sexually active without contraception except occasional condoms. For the last several years she reports irregular menses.



#### **Case Study 3: Questions**

- True/False
  - Her rare menses are due to her history of abortions.
  - Her rare menses are likely due to her heroin use.
  - Given her recent history she is at low risk of an unintended pregnancy.
  - Without contraception she is at high risk of an unintended pregnancy.
  - Once stabilized on methadone she will have normal menses.





- The human reproductive system is under complex endocrine regulation.
- Ovulation is essential for fertility.
- Menstruation is an indirect measurement of ovulation.



- The endocrine and reproductive consequences of substance use are complex and complicated by age, poly-substance use, and other medical comorbidities.
- Alcohol changes estradiol and prolactin levels
  - Menstrual irregularities and infertility (Wilsnack 1984)
- Tobacco decreases estrogen
  - Earlier menopause (McKinlay 1985)
- Opioids suppress hypothalamic activity by interfering with GnRH
  - Oligo-ovulation, ammenorhea or oligo-menorrhea (Abs 2000)
- Menstrual dysfunction often normalizes during treatment and in during recovery.



- Menstrual dysfunction often normalizes during treatment and in during recovery.
- Therefore women who may not have gotten pregnant while using are at risk of pregnancy as a consequence of treatment.
- Contraception is essential to prevent unintended pregnancies.
- If menstrual dysfunction does not normalize, a gynecologic referral is indicated.





- Almost 50% of pregnancies in US are unintended
- Approximately 6.4 millions births per year
- 5% of reproductive-age women have unintended pregnancy per year
- Unintended pregnancy rates are 2-3 times higher among women with substance problems



Unintended pregnancy rates have risen among poor women even as they fell among higher income women



- Although the unintended pregnancy rate overall has remain unchanged over the last 2 decades:
  - It has increased substantially among low income women
  - And decreased among higher income women

www.guttmacher.org



#### In the U.S., Unintended Pregnancy Rates Are High Among Women of Color, Across All Income Levels



Income as a percentage of the federal poverty level (\$21,200 for a family of four in 2008)

These disparities reflect broader health inequities by race and ethnicity.



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- The unintended pregnancy rate is not equal across all segments of society.
- Not only are there income disparities, but racial disparities in unintended pregnancy rates.

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#### **Contraception Works**

The two-thirds of U.S. women at risk of unintended pregnancy who practice contraception consistently and correctly account for only 5% of unintended pregnancies.



- Contraception works
- Most unintended pregnancies are among women who either don't use or inconsistently use contraception.
- Only 5% of unintended pregnancies result among women with consistent contraceptive use.





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- Why is it important to avoid unintended pregnancies?
- Planned pregnancies
  - Result in healthier women, infants and families.
  - Reduce cost (to individuals and society)
- Among women with substance problems planned pregnancies result in
  - Improved maternal and child health
  - Fewer substance exposed pregnancies



#### WOMEN'S REASONS

A majority of clinic clients say that the use of birth control to prevent pregnancy has helped them meet educational, career, financial and family goals.



- The typical U.S. woman wants only two children.
- To achieve this goal, she must use contraceptives for roughly three decades
- Contraception empowers
  women
- Assists women in meeting their educational, career, financial and family goals.

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#### **Educational Attainment**

#### There is strong evidence that:

- Historically, legal access to the pill contributed significantly to increases in the number of young women who obtained at least some college education.
- Access to the pill was linked to the increased numbers of college-educated women pursuing advanced professional degrees and making up increased proportions of such degree programs.
- Young women who give birth in their teenage years are less likely than their peers to obtain any college education or to earn a degree, and they are likely to achieve fewer years of formal schooling overall; these findings are partially explained by differences in which women are most likely to become teen parents in the first place.

#### Workplace Participation

#### There is strong evidence that:

- The advent of the pill was a driving force behind the societal shift to significantly more young women participating in the paid labor force, including professional occupations requiring advanced education and training.
- Effective contraceptive use can increase the amount of time women are part of the paid workforce, largely by improving women's ability to delay and time childbearing to coincide with their educational and early professional opportunities.

#### Economic Stability

#### There is strong evidence that:

- Access to contraception has significantly contributed to increasing women's earning power and to decreasing the gender gap in pay.
- Having a child tends to decrease a woman's earnings in both the short and long term, a phenomenon known as the family gap.
- By delaying having a first child until her late 20s or 30s, a woman can mitigate the family gap and contribute to her family's strengthened economic stability.
- Highly educated women are the group that receives the greatest economic benefits from delayed childbearing.
- Family-friendly policies in the workplace can mitigate the costs associated with childbearing, especially for the highly skilled women who are most likely to receive these benefits.

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- There is a great range of contraceptive options
- Effectiveness varies by method choice
- Contraceptive effectiveness is defined by both
  - Perfect Use describes effectiveness among couples who use the method both consistently and correctly
  - Typical Use refers to the effectiveness experiences among all couples who use the method (includes both inconsistent and incorrect use)
- Women who don't use any method have a 85% chance of becoming pregnant in a year



## The proportion of women who will become pregnant over one year of use by method

Method	Perfect Use	Typical Use
Implant	0.05	0.05
Vasectomy	0.10	0.15
IUD Levonorgestrel-releasing Copper-T	0.2 0.6	0.2 0.8
Tubal sterilization	0.5	0.5
Injectable	0.2	6
Pill/vaginal ring/patch	0.3	9
Male condom	2	18
Female condom	5	21
Withdrawal	4	22
No Method	85	85



- Effectiveness is related to frequency of use.
- Assessment of client's reproductive desires is key to helping in recommendation of method choice.
- The term "forgettable contraception" can be helpful in counseling and refers to a method requiring attention no more often than every 3 years (Grimes 2009).
- Another common term is "long-acting reversible contraception" (LARC).



Method	Attention required	Forgettable?
Sterilization (male and female)	Once	Yes
LARC Copper-T IUD Levonorgestrel-releasing Implant	10 years 5 years 3 years	Yes
Injection	3 months	No
Vaginal Ring	Monthly	No
Patch	Weekly	No
Pill	Daily	No
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- Where to get more information about contraceptive methods:
  - <u>http://bedsider.org/methods</u> a great resource for clients especially and maintained by The National Campaign to Prevent Teen and Unplanned Pregnancy
  - Office of Women's' Health, US DHHS <u>http://www.womenshealth.gov/publications/our-</u> <u>publications/fact-sheet/birth-control-methods.html</u>



- Not all contraceptives are equally safe for all women.
- There are contraindications/cautions for specific methods that are of concern for women with substance problems
  - Smoking increases the risk of blood clots especially for women who use combined hormonal contraceptives (pill, ring, patch)
    - Avoid pill, ring, patch in women > 35 who smoke
    - LARC methods are safe for smokers
  - HIV/AIDS antiretroviral medications can interfere with the metabolism of (especially) oral contraception.
- Best resource for contraceptive contraindications is CDC Medical Eligibility Criteria for Contraceptive Use (CDC 2010)



#### Case Study 1: Screening

- Ms M is a 24 year old G3P1 presents for her first prenatal visit at 17 weeks. She missed her first scheduled visit a month prior because of transportation difficulties. Her last pregnancy was complicated by a preterm delivery at 30 weeks.
  - She should be screened for substance use because
    - She is late to care
    - She is non-compliant with prior visits
    - She has a history of a preterm delivery
    - Depends what the urine toxicology shows
    - All patients should be screened
    - She shouldn't be screened



## Answer to Case Study 1: Screening

- Ms M should be screened for substance use because
  - All patients should be screened
- Universal screening is recommended.
- "Risk-based screening" (determined by late to care or non-adherence) reinforces stigma.
- Smoking is associated with preterm delivery cocaine is associated with placental abruption which is rare and can lead to preterm labor – other substances are not associated with preterm delivery.



# Case Study 2: Reproductive Education and Counseling

- Ms S is a 25 year old referred to residential treatment for opioid use disorder from a drug court. She has a childhood history of abuse and neglect, opioid use since age 16, and previous arrests for prostitution.
  - Should her reproductive health needs be assessed during intake?
  - Should reproductive education and counseling be included in either group or individual sessions?



#### Answers to Case Study 2: Reproductive Education and Counseling

- Should her reproductive health needs be assessed during intake?
  - Yes The one key question is client-centered and easy to use: "Would you like to become pregnant in the next year?"
- Should reproductive education and counseling be included in either group or individual sessions?
  - Yes Women with substance problems have unmet reproductive health needs. Addressing the needs in treatment can reduce STI acquisition as well as unintended and substance exposed pregnancies.



## Case Study 3: Preventing Unintended Pregnancies

 Ms G is a 29 year old recently admitted for methadone and intensive outpatient treatment. She has no prior treatment admissions. Her two prior pregnancies predate her heroin use and both ended in elective abortions. She has been sexually active without contraception except occasional condoms. For the last several years she reports irregular menses.



#### Answers to Case Study 3: Preventing Unintended Pregnancies

- Her rare menses are due to her history of abortion.
  - False there is no relationship between abortion history and subsequent menstrual patterns.
- Her rare menses are likely due to her heroin use.
  - True opioids affect the endocrine system and can lead to oligo-ovulation and oligo-menorrhea
- Given her recent history she is at low risk of an unintended pregnancy.
  - False Given her history of substance problems she is at an even greater risk of unintended pregnancy.
- Without contraception she is at high risk of an unintended pregnancy.
  - True
- Once stabilized on methadone she will have normal menses.
  - Maybe menstrual dysfunction is greater for heroin than methadone.



#### **References: Screening**

- American College of Obstetricians and Gynecologists. 2004. Committee Opinion Number 294: At-risk drinking and illicit drug use. Ethical Issues in Obstetric and Gynecologic Practice.
- American College of Obstetricians and Gynecologists. 2006. Committee Opinion Number 343: Psychosocial risk factors: Perinatal screening and intervention.
- American College of Obstetricians and Gynecologists. 2011. Committee Opinion Number 496: At-risk drinking and alcohol dependence: Obstetric and gynecologic implications. Obstetrics & Gynecology 118 (2 Pt 1):383-388.
- American College of Obstetricians and Gynecologists. 2012. Committee Opinion Number 524: Opioid abuse, dependence and addiction in pregnancy.
- American Society of Addiction Medicine. 2010. Public policy statement on drug testing as a component of addiction treatment and monitoring programs and in other clinical settings. <u>http://www.asam.org/docs/publicy-policy-statements/1drug-testing---clinical-10-10.pdf?sfvrsn=0</u>



#### **References: Screening**

- Chang G, Wilkins-Huag L, Berman S, Goetz MA. 1999. The TWEAK: Application in a prenatal setting. Journal of Studies on Alcohol, 60:306-310.
- Chang G, Orav EJ, Jones JA, Buynitsky T, Gonzalez S, Wilkins-Huag L. 2011. Self-reported alcohol and drug use in pregnant young women: a pilot study of associated factors and identification. Journal of Addiction Medicine, 5:221-226.
- Chasnoff IJ, Hung WC. 1999. The 4 P's Plus. Chicago: NTI Publishing.
- Kemper KJ, Bennett E, Babonis TR. 1993. Screening mothers of young children for substance abuse. Journal of Development & Behavioral Pediatrics, 14(5):308-312.
- The Massachusetts Screening, Brief Intervention, Referral and Treatment (MASBIRT) Program <u>www.masbirt.org</u>
- NSDUH. 2009. Substance use among women during pregnancy and following childbirth. <u>http://oas.samhsa.gov/2k9/135/PregWoSubUseHTML.pdf</u>
- Sokol RJ, Martier SS, Ager JW. 1989. The T-ACE questions: Practical perinatal detection of risk drinking. American Journal of Obstetrics and Gynecology, 160(4): 863-870.



## References: Reproductive Education and Counseling

- Adbel-Tawab N, Ramarao S. 2010. Do improvements in client-provider interaction increase contraceptive continuation? Patient Education & Counseling, 81:381-387.
- Armstrong KA, Kennedy MG, Kline A, Tunstall C. 1999. Reproductive health needs: Comparing women at high, drug-related risk of HIV with a national sample. Journal of the American Medical Women's Association, 54(2): 65-70.
- Black KI, Stephens C, Haber PS, Lintzeris N. 2012. Unplanned pregnancy and contraceptive use in women attending drug treatment services. Australian & New Zealand Journal of Obstetrics & Gynaecology, 52(2): 146-150.
- Braun-Harvey D. 2009. Sexual Health in Drug and Alcohol Treatment: Group facilitator's manual. New York: Springer.
- Crandall LA, Metsch LR, McCoy CB, Chitwood DD, Tobias H. 2003. Chronic drug use and reproductive health care among low-income women in Miami, Florida: A comparative study of access, need, and utilization. Journal of Behavioral Health Services & Research, 30(3):321-331.
- Crepaz N, Lyles CM, Wolitski RJ, Passin WF, Rama SM, Herbst JH, Purcell DW, Malow RM, Stall R. 2006. Do prevention interventions reduce HIV risk behaviors among people living with HIV? A meta-analytic review of controlled trials. AIDS, 20(2):143-157.
- Heil SH, Jones HE, Arria A, Kaltenback K, Coyle M, Fischer G, Stine S, Selby P, Martin PR. 2011. Unintended pregnancy in opioid-abusing women. Journal of Substance Abuse Treatment, 40: 199-202.



## References: Reproductive Education and Counseling

- Marlatt S, Donovan D (eds). 2005. Relapse Prevention: Maintenance strategies in the treatment of addictive behaviors. New York: Guilford Press.
- Martino SC, Collins RL, Ellickson PL, Klein DJ. 2006. Exploring the link between substance use and abortion: The roles of unconventionality and unplanned pregnancy. Perspectives on Sexual and Reproductive Health, 38(2): 66-75.
- Planned Parenthood. <u>www.plannedparenthood.org</u>
- Project MATCH Research Group. 1998. Therapist effects in three treatments for alcohol problems. Psychotherapy Research, 8:455-474.
- Sharpe TT, Velasquez MM. 2008. Risk of alcohol-exposed pregnancies among lowincome, illicit drug-using women. Journal of Women's Health, 17(8): 1339-1344.
- Sterk CE, Theall KP, Elifson KW. 2002. Health care utilization among drug-using and non-drug-using women. Journal of Urban Health: Bulletin of the New York Academy of Medicine, 79(4): 586-599.
- Weber AE, Tyndall MW, Spittal PM, Li S, Coulter S, O'Shaughnessy MV, Schecter MT. 2003. High pregnancy rates and reproductive health indicators among female injection-drug users in Vancouver, Canada. European Journal of Contraception and Reproductive Health Care, 8:52-58.



#### **References: Unintended Pregnancy**

- Abs R, Verhelst J, Maeyaert J, Van Buyten JP, Opsomer F, Adriaensen H, Verlooy J, Van Havenbergh T, Smet M, Van Acker K. 2000. Endocrine consequences of long-term intrathecal administration of opioids. Journal of Clinical Endocrinology and Metabolism, 85(6):2215–2222.
- Emanuele MA, Wezeman F, Emanuele NV. 2003. Alcohol's effects on female reproductive function. NIAAA. <u>http://pubs.niaaa.nih.gov/publications/arh26-4/274-281.htm</u>
- Center for Disease Control and Prevention. 2010. U.S. Medical Eligibility Criteria for Contraceptive Use. MMWR (59). <u>http://www.cdc.gov/mmwr/pdf/rr/rr59e0528.pdf</u>
- Grimes DA. 2009. Forgettable contraception. Contraception, 80(6): 497-499.
- Guttmacher Institute <u>www.guttmacher.org</u>
- McKinlay SM, Bifano NL, McKinlay JB. Smoking and age at menopause in women. 1985. Annals of Internal Medicine, 103:350-356.
- Wilsnack SC, Klassen AD, Wilsnack RW. 1984. Drinking and reproductive dysfunction among women in a 1981 national survey. Alcoholism: Clinical and Experimental Research, 8:451–458.



## **PCSS-MAT Mentoring Program**

- PCSS-MAT Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid addiction.
- PCSS-MAT Mentors comprise a national network of trained providers with expertise in medication-assisted treatment, addictions and clinical education.
- Our 3-tiered mentoring approach allows every mentor/mentee relationship to be unique and catered to the specific needs of both parties.
- The mentoring program is available, at no cost to providers.

#### For more information on requesting or becoming a mentor visit: pcssmat.org/mentoring



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