Utilizing Triad Quality Improvements to Reduce Disparities: Obstetrics, Pediatrics, & Social Work

Christina Davidson, MD

Tiffany McKee-Garrett, MD

Michelle Lawson, LCSW

Aisha Jones, LMSW

Texas Children's®

Health Equity + The Potential for Bias

A Tale of Two Patients

Comparative Experiences

- Non-Hispanic White patient
- Non-Hispanic African-American patient

Both patients had reported history of substance use, neither tested at birth admission

- Non-Hispanic White infant not tested at birth
- Non-Hispanic African-American infant tested due to “history of use,” which resulted in call to CPS that was unwarranted due to meds providers had prescribed
- Concern from teams re: bias with similar drug history and no standardized process for drug testing and subsequent reporting to CPS

Background

Purpose: To understand the processes at TCH for drug screening, testing, and referral to services and child welfare & identity if/where gaps exist globally, with a specific focus on racial and ethnic differences

Interviews*

Acknowledged lack of uniformity within their service

Believed we are missing patients who need SUD support

VERY interested in QI around standardizing activities to reduce bias

Social Work

Is the primary responder for drug use (verbal, toxicology, suspected), however, not always consulted

EPIC Data

Inpatient mom-child linked - for those that delivered

Dates (delivery): 1/1/2020 – 6/12/2021 (18.5 months)

9514 unique patients (duplicates removed), 9790 unique babies

*completed spring/summer 2021: 8 leaders across inpatient, outpatient, Centers, social work, & WAC

Inpatient Mom-Baby Linked Data

Overall Findings

- 61% of all moms had verbal screening done as part of their inpatient social history
- 7% of the total and 11% of those screened said they had a history of substance use or were currently using (i.e., positive screen)
- Only 8% of moms with urine toxicology order had a positive screen

- Of moms with a positive screen
  - Only 11% had urine or meconium ordered on their baby
  - Only 44% had social work consult

- Conclusions:
  1. Urine toxicology being ordered on moms even in the absence of a positive screen
  2. Not all positive screens in moms lead to urine/meconium drug tests in their infant
  3. Not all positive screens in moms lead to social work consult
  4. Inconsistent practice in testing and referrals

Inpatient Mom-Baby Linked Data

Demographic Findings

- Overall demographics: 31% NH-White, 21% NH-Black, 40% Hispanic, 8% Asian/other/unknown, 53% Commercial insurance, 43% Medicaid

- Verbal screening did not differ based on age, race, ethnicity, language, or insurance
- NH-Black moms 3x as likely as NH-White moms to have urine toxicology ordered if screen + (6% vs. 18%)
- Hispanic moms 2x as likely as NH-White moms to have urine toxicology ordered if screen + (6% vs. 12%)
- Those with Medicaid 2x as likely as Commercial to have urine toxicology ordered if screen + (16% vs. 36%)

- Conclusions:
  1. Disparities exist in drug testing
  2. Historically marginalized populations most impacted by these disparities

Workgroup Members

Obstetrics	Pediatrics and Neonatology	Social Work	Nursing	Public Health	Quality & Safety
Dr. Christina Davidson	Dr. Danielle Brewer (PGY3)	Aisha Jones	Kristin Thorp (OB)	Dr. Beth Van Horne	Lauren Shubert
Dr. Matt Carroll	Dr. Tiffany McKee-Garrett	Michelle Lawson	Sharon Burkes (OB)	Dr. Chris Greeley	Towana Simms
Dr. Manisha Gandhi	Dr. Kris Reber		Lisa Davenport (NICU)		
Dr. Elisabeth Baquet (PGY4)			Ashley Simms (NICU)		
Sara Dean (NP)					
Dr. Carey Eppes					

Survey on substance use screening, testing and referral practices in pregnant patients

Objective: to understand current attitudes, screening and referral practices for substance use in pregnant patients and their newborns at PFW

Unique survey sent to Obstetricians, Pediatricians and Social Workers, with overlapping questions on all surveys regarding perception of bias, racism, and discrimination in current practice

Respondents (learners = residents and fellows; providers = faculty and APPs):

- 18/55 obstetric learners (33%), 41 providers (51%)
- 43 pediatric learners (20%), 47 providers (31%)
- 14/19 SW (74%)

Criteria for Ordering Urine or Meconium Toxicology

Survey Results

- On admission for delivery, the most common criteria used to order a urine toxicology test is for patients who are obtunded/unconscious (88%) or with evidence of intoxication (92%) or physical evidence of injection use (83%)

- Obstetric and pediatric providers are more likely to order toxicology for placental abruption than learners (75% vs. 50%, p=0.053 for obstetrics; 45% vs 12% for pediatrics)

- Pediatric providers more likely to order toxicology for “noncompliance with prenatal care” than learners (40.4% vs. 14%, p=.005)

Survey Results

71% of Obstetric respondents and 79% of Pediatric respondents would consult Social Work for all positive urine/meconium drug tests

Only 29% of Social Work respondents report all positive urine drug tests/cases in pregnant patients to CPS; most (64%) consider different factors for CPS referral based on the specific drug found to be positive

Most respondents in all disciplines felt that the current practice for birth admission drug testing has potential for racism, bias, and/or discrimination: 80% of Obstetric respondents, 67% of Pediatric respondents, 86% of Social Work respondents

All disciplines thought a standardized protocol for testing pregnant patients and their newborns would reduce discrimination: 82% of Obstetric respondents, 84% of Pediatric respondents, 71% of Social Work respondents

Free Text: Thoughts Shared

Obstetricians

“Screening for SUD should be performed on all patients using validated tools either verbal or written. Toxicology should not be used as a screen and care should be taken to avoid stigmatizing and traumatizing individuals being screened particularly as it pertains to reporting and involvement of CPS and other agencies.”

Free Text: Thoughts Shared

Pediatricians

"…I also don't routinely get uds/mec on infants of moms with poor prenatal care due to immigration from another country (aka unable to successfully navigate new healthcare system in a new country) if they screen negative when interviewed re substance use. That's something we frequently see on the BT side."

Free Text: Thoughts Shared

Social Work

"…SW have seen who identify as Caucasian/non-Hispanic with a history of substance use NEVER tested upon admission. SW see African/African American and Hispanic/Latino patients who have a history of substance use from 10 years prior to admission tested without informing the patient /mother of testing of themselves nor baby."

Implications

Do no harm; become closer partners with patients for wellness and healing

Potential implications for future interactions with the health care system

Next Steps

- Universal screening tool in triage
- Criteria for ordering urine toxicology on pregnant patient at birth admission
- Criteria for ordering urine/meconium toxicology on newborn
- Criteria for consulting social work
- EMR integration of above

Substance Use Screening and Biologic Testing in Pregnant Women/People and Their Newborns at Texas Children's Hospital Pavilion for Women

ACOG recommends early, universal screening for substance use as part of comprehensive prenatal care in partnership with pregnant women.

Using a universal *validated* screening tool is the gold standard for assessing a patient's safety and risk for a substance use disorder.

The Pavilion for Women currently does not have a standardized substance use screening tool that eliminates racial and ethnic disparities and offers intervention strategies.

Identifying patients who are at risk for a substance use disorder (SUD) early in pregnancy can improve maternal and fetal outcomes.

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

SCREENING

A quick assessment that evaluates the patient's substance use risk and uses the screening tool to guide the patient's treatment plan.

BRIEF INTERVENTION

Increases the insight and awareness regarding the patient's substance use and their motivation towards behavioral change.

REFERRAL TO TREATMENT

Provides patients who are identified as needing more extensive treatment with access to specialty care.

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

Purpose and Definitions

Purpose of guideline: To standardize substance use screening and targeted biologic testing for all pregnant women/people during an obstetric admission using best practices, while eliminating racial and ethnic disparities. For details on diagnosis and management of substance use disorder (SUD), refer to the Baylor College of Medicine SUD in Pregnancy Perinatal Guideline.

Definitions: screening vs testing in new guideline

- **Screening**: a universally administered questionnaire designed to ascertain who is at high risk for having a substance use disorder in pregnancy
- **Testing:** biologic testing of urine or meconium is discussed as a test and not as a screening technique. A biologic test may be useful only in selected clinical scenarios in which the results would guide medical management.
  - **Universal biologic testing to *screen* pregnant women is not recommended**.
  - **The "urine drug test (UDS)/"drugs of abuse screen" ("LABTOXDS" in Epic) offered at TCH for adults and infants is appropriate for *screening* only. Positive results should be confirmed by sending the sample for confirmatory *testing* by tandem mass spectrometry to rule out a false positive finding. This confirmatory testing is a send-out test and takes 3-5 days to receive results.**

DAST-10 Screening Tool

"Drug use" refers to (1) the use of prescribed or over-the-counter drugs in excess of the directions, and (2) any nonmedical use of drugs.

The various classes of drugs may include cannabis (marijuana, hashish), solvents (e.g., paint thinner), tranquilizers (e.g., Valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD) or narcotics (e.g., heroin). The questions do not include alcoholic beverages.

Please answer every question. If you have difficulty with a statement, then choose the response that is mostly right. You may choose to answer or not answer any of the questions in this section.

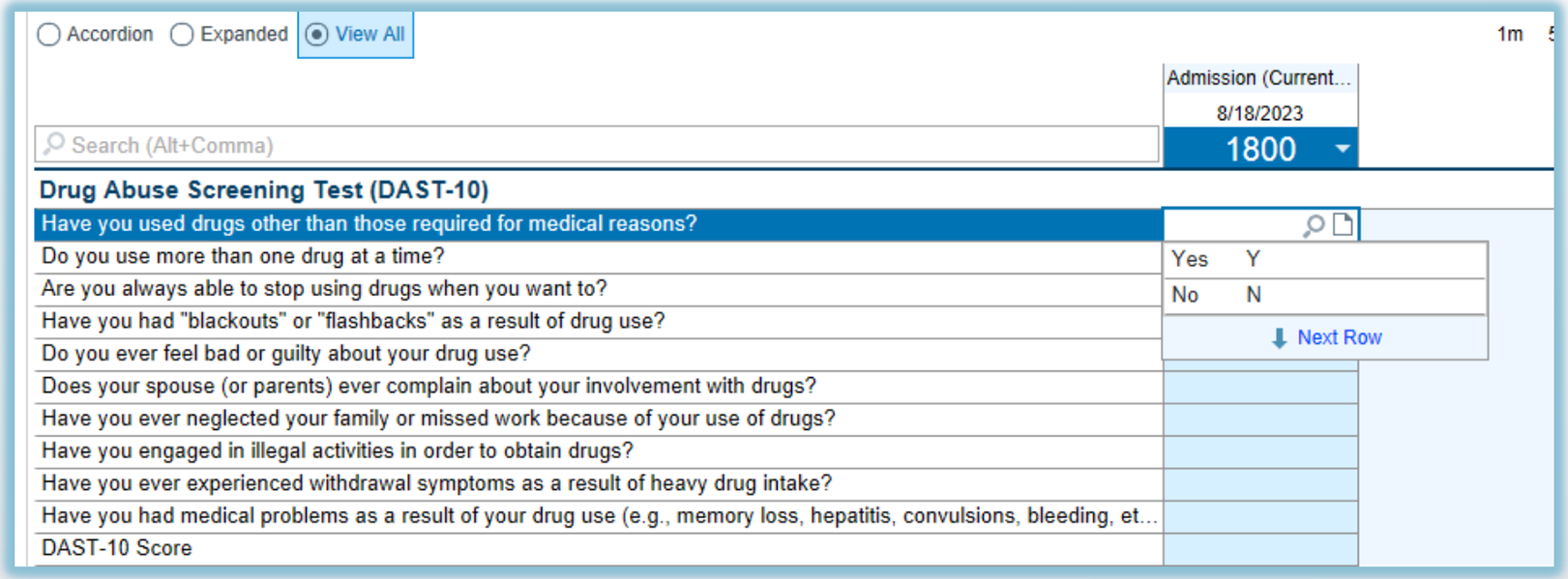
These questions refer to the past 12 months:	No	Yes
Have you used drugs other than those required for medical reasons?		
Do you use more than one drug at a time?		
Are you always able to stop using drugs when you want to?		
Have you had "blackouts" or "flashbacks" as a result of drug use?		
Do you ever feel bad or guilty about your drug use?		
Does your spouse (or parents) ever complain about your involvement with drugs?		
Have you ever neglected your family or missed work because of your use of drugs?		
Have you engaged in illegal activities in order to obtain drugs?		
Have you ever experienced withdrawal symptoms as a result of heavy drug intake?		
Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?		
Score (for facility use)		

- The DAST-10 will be asked on EVERY patient, with EVERY visit, pregnant and non-pregnant.
- Assign 1 point for any question the patient answers "Yes" to, with the **exception** of question #3
- Assign 1 point – if the patient answers "No" to question #3
- Due to how EPIC is set up, even if the patient answers, "No" to the first question, the nurse has to answer all questions so that a score can be computed. Skipped cells = No Score.

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

DAST-10 DOCUMENTATION

- The patient can either be asked the questions by the nurse or the patient can fill out the paper form (available in English and Spanish)
- The DAST-10 will be located in the ***Admission/Triage Navigator*** under *Assessments,* below the Columbia Suicide Severity Rating Scale
- For patient's that are admitted for a scheduled surgical case on the 5th floor, the DAST-10 will be located in the ***PAT Navigator*** and the ***Pre-op Admission Navigator***. The questions will need to be asked in PAT **and** the day the patient arrives for their surgery.



Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

Interpreting the Score

DAST-10 Score	Degree of Problems Related to Drug Abuse	Suggested Action
0	No problems reported	None at this time
1–2	Low level	Monitor, re-assess at a later date
3–5	Moderate level	Further investigation
6–8	Substantial level	Intensive assessment
9–10	Severe level	Intensive assessment

- When the DAST-10 is > 0 but < 6
  - A brief intervention is appropriate
  - If the patient request, the provider may still refer patient to MPAT clinic

- When DAST-10 is ≥ 6, a BPA will trigger for further investigation by a provider
  - The number of patients that will screen ≥ 6 is very low. For example, out of 873 patients who were screened using the DAST-10 at Ben Taub, 3 of them had a score of ≥ 6.

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

RN

- Screens the patient
- Score of 1-5: notify provider and they will determine if they wish to investigate further.
- Score ≥6, a *BPA will appear for further investigation by a provider.

Provider

- Will investigate further
- Will provide a 'Brief Intervention'
- The Provider will have their own *BPA appear, with suggestions for plan of care

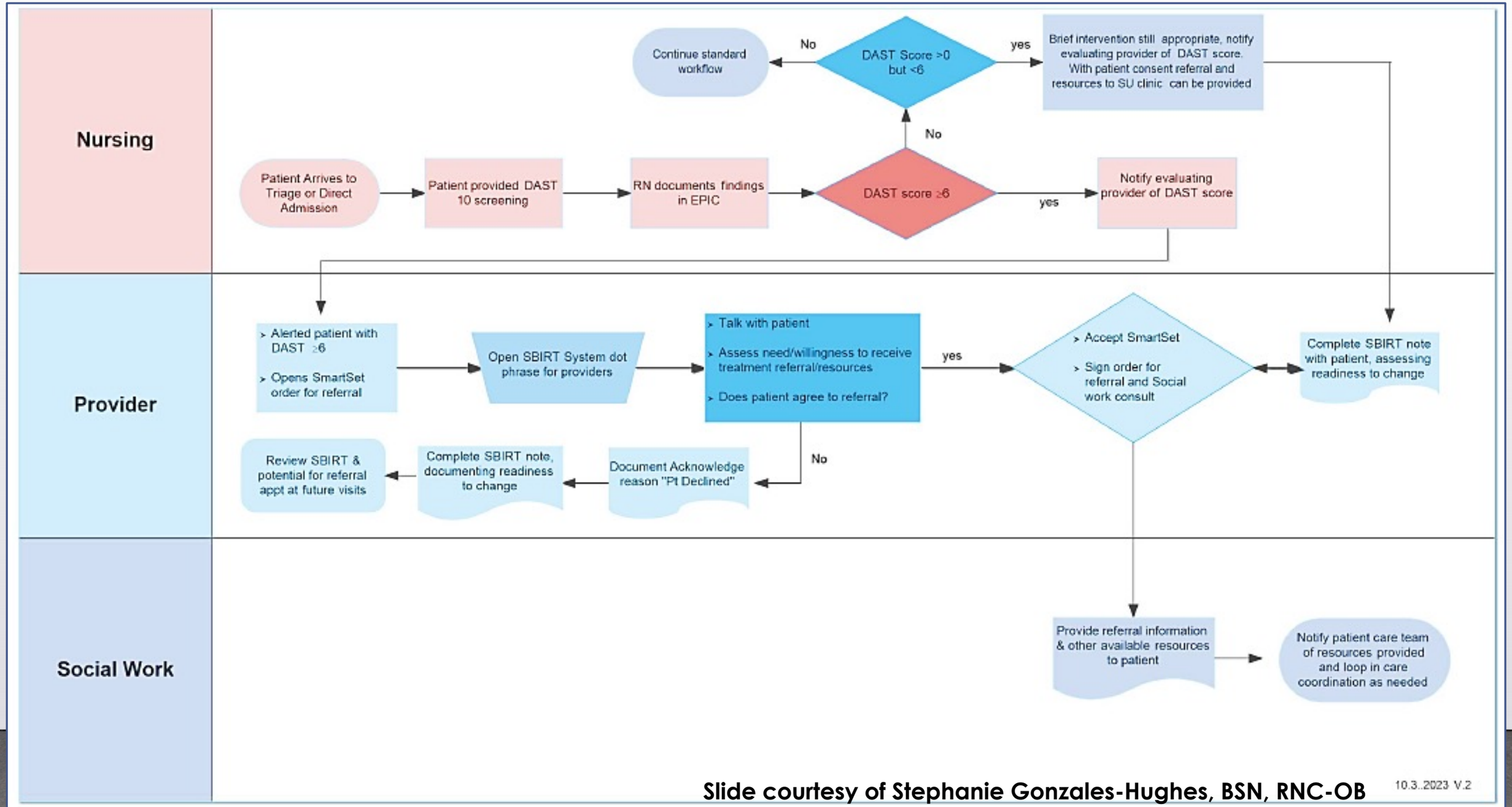
Social Worker

- If the provider's investigation deems the patient needs treatment, the SW will make the referral
- ** The patient needs to agree to treatment for the referral to be made

* The BPA is being created by the EPIC team, therefore they will not appear initially after the GoLive date.

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

SUBSTANCE USE DISORDER WORKFLOW



Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

Indications For Ordering Urine Toxicology during Obstetric Admissions

- Altered mental status, including loss of consciousness, evidence of intoxication, slurred speech, etc. (not otherwise explained)
- Recent physical evidence of injection use (e.g., "track marks")
- Unexplained soft tissue infections or endocarditis
- As part of the treatment of a patient receiving medication assisted therapy (MAT) and/or enrolled in a substance use treatment program during pregnancy to evaluate for any continued separate use of opioids or other substances
- A patient identified as having used illicit drugs or inappropriately used prescription medications at any point in the pregnancy
- No prenatal care (a patient who has 0 prenatal visits)
  - Prenatal care received at non-TCH sites, including those outside of the United States, should be counted as prenatal care, even if documentation is not available for review
  - This does not include birthing patients who endorse inability to receive prenatal care due to recent immigration or barriers to access.

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

Urine Drug Screen Collection for the Pregnant Woman/Parent

OBSTETRIC PROVIDER

- Obtain a verbal consent from patient
  - If patient declines, UDS is not ordered and the Pediatrician is notified by the provider that the patient met criteria for testing, but did not consent. This should be documented in the medical record.
  - If patient is unable to be consented due to incapacitation that could be related to substance misuse, UDS should be sent and reason documented in the medical record.
  - Patients who have a UDS and test positive should be informed of the results by a managing provider and informed that social work will be consulted.
- The provider should document the following in the medical record (they can use the smartphrase created)
  - Patient provided verbal consent for urine toxicology
  - If applicable, illicit substance used and most recent date of use
  - Medications patient is currently taking (prescribed or over the counter) that could result in a false positive
  - Reason for UDS

RN

- Collect urine sample prior to administration of medications that may result in a false positive
  - Avoid testing birthing woman /parent after delivery due to risk of positive substances from medications administered during the L&D process (e.g., IV narcotics for pain, ephedrine after epidural, benzodiazepines in the operating room). Exceptions may include patients who deliver rapidly after admission and urine specimen was unable to be collected prior to delivery.
  - If the pediatrics team requests testing of a birthing woman/parent because the baby is showing signs of withdrawal, it is preferable to test the baby; the birthing woman/parent may test positive because of pain medication she received at delivery or postpartum

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

Obstetric Provider Smart Phrase: .PFWUDS

Based on current practice guidelines, a urine drug screen is recommended for the following reason (drop down menu)

- ☐ Altered mental status
- ☐ Physical evidence of injection use
- ☐ Unexplained soft tissue infections or endocarditis
- ☐ Patient is in a substance use disorder (SUD) treatment program and/or receiving medication assisted therapy for SUD
- ☐ Use of illicit drugs or misuse of prescription medications during the pregnancy
  - If this is selected, document substance(s) used and date of last use
- ☐ No prenatal care
- ☐ Other (with option for free hand typing)

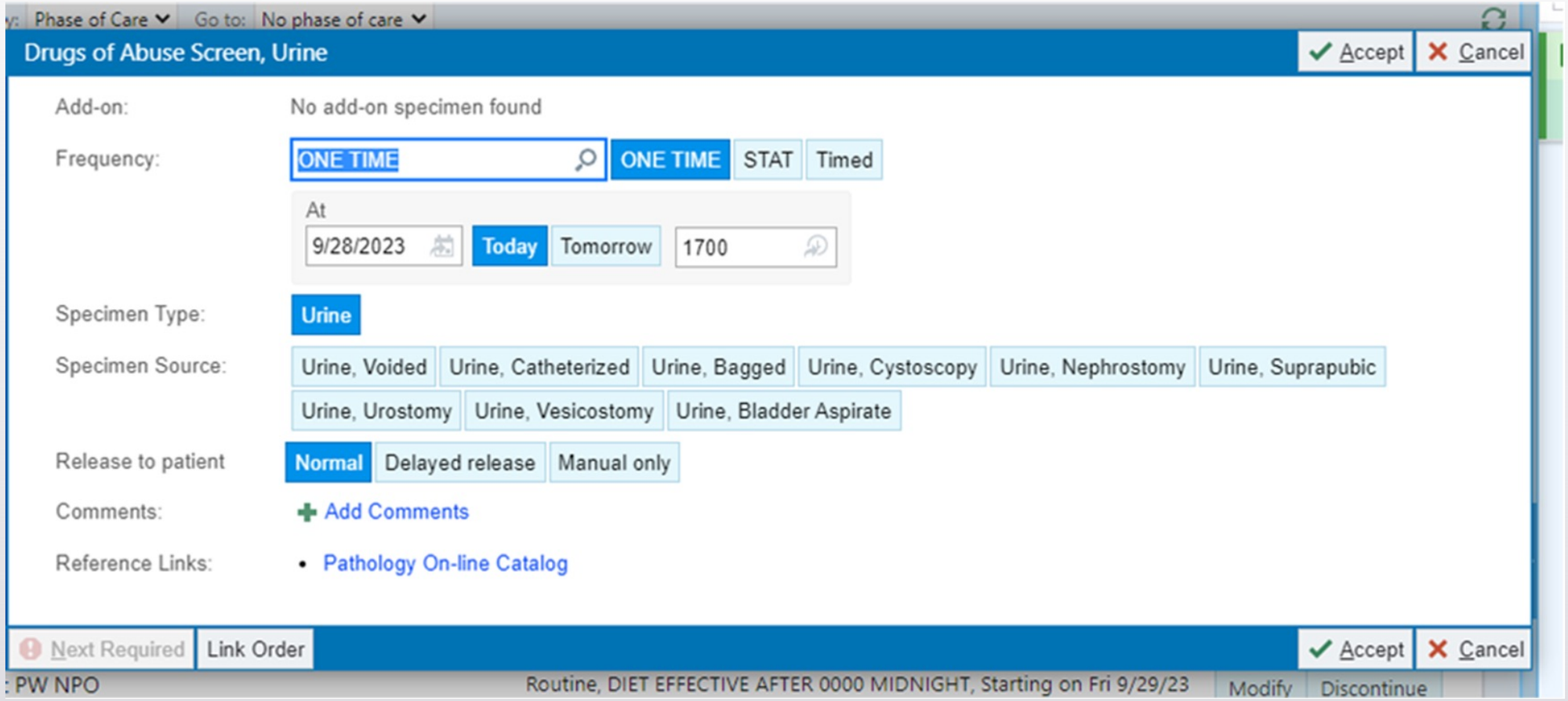
The patient's prescription and over the counter medications were reviewed, and include the following medication(s) that may result in a false positive UDS (select all that apply):

- ☐ Diphenhydramine (Benadryl)
- ☐ Doxylamine (Unisom)
- ☐ Promethazine (Phenergan)
- ☐ Dextromethorphan (Robitussin)
- ☐ Pseudoephedrine (Sudafed)
- ☐ Labetalol
- ☐ Sertraline (Zoloft)
- ☐ Bupropion (Wellbutrin)
- ☐ Proton pump inhibitors
- ☐ Prescription opiates
- ☐ NSAIDs
- ☐ Other

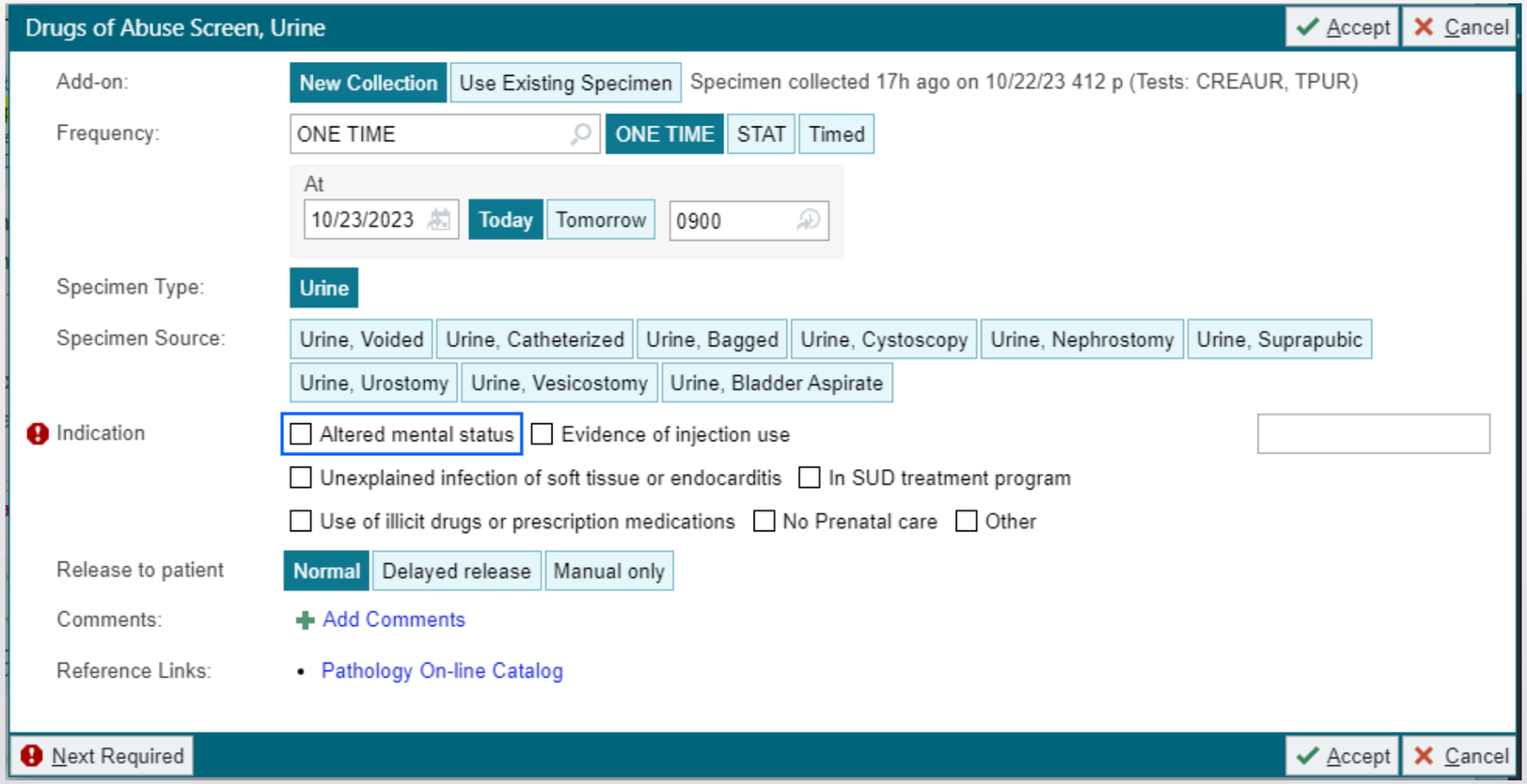
The patient was informed of the recommendation for urine drug screen and the reason for testing as well as the potential implications and (drop down menu)

- ☐ Verbally consents to urine drug screen. The patient was informed that the newborn will be tested as well for substance exposure.
- ☐ Verbally declines urine drug screen. The patient was informed that the newborn will be tested for substance exposure.
- ☐ Is unable to provide consent at this time.

Standard UDS Order



UDS in Ob Order Sets: L&D admission, Antepartum, Scheduled Cesarean, Triage



Urine and/or Meconium Toxicology on a Newborn

INDICATIONS

- Newborn exhibits symptoms consistent with intoxication or withdrawal.
- Birthing woman/parent met criteria for testing (refer to slide 11) and/or tested positive at delivery admission, or at a recent hospital or clinic visit.

PEDIATRICS PROVIDER

- Should ensure documentation of the following in the medical record (can use smartphrase)
  - Birthing woman/parent informed of plan to send urine and/or meconium toxicology on newborn and reason for testing.
  - Medications birthing woman/parent is currently taking (prescribed or over-the-counter) and/or was administered during the admission that could result in a false positive

Slide courtesy of Stephanie Gonzales-Hughes, BSN, RNC-OB

Newborn Provider Smart Phrase: .NEOUDS

Based on current practice guidelines, a urine drug screen and/or meconium of the newborn is recommended for the following reason (drop down menu)

- ☐ Newborn exhibiting symptoms consistent with intoxication or withdrawal
- ☐ Birthing woman/parent met criteria for testing (if this is selected, it opens another drop down menu with the list of criteria and one needs to be selected)
- ☐ Birthing woman/parent has positive urine drug test on admission or from recent hospital/clinic visit (if selected, provide positive result and date of test)

The birthing patient's prescriptions, over the counter medications, and medications administered since admission were reviewed, and include the following medication(s) that may result in a false positive UDS (select all that apply):

- ☐ IV narcotic during labor (eg, fentanyl)
- ☐ Phenylephrine
- ☐ Benzodiazepines
- ☐ Epidural, spinal, or combined spinal-epidural (CSE)
- ☐ General anesthesia
- ☐ Diphenhydramine (Benadryl)
- ☐ Doxylamine (Unisom)
- ☐ Promethazine (Phenergan)
- ☐ Dextromethorphan (Robitussin)
- ☐ Pseudoephedrine (Sudafed)
- ☐ Labetalol
- ☐ Sertraline (Zoloft)
- ☐ Bupropion (Wellbutrin)
- ☐ Proton pump inhibitors
- ☐ Prescription opiates
- ☐ NSAIDs
- ☐ Other

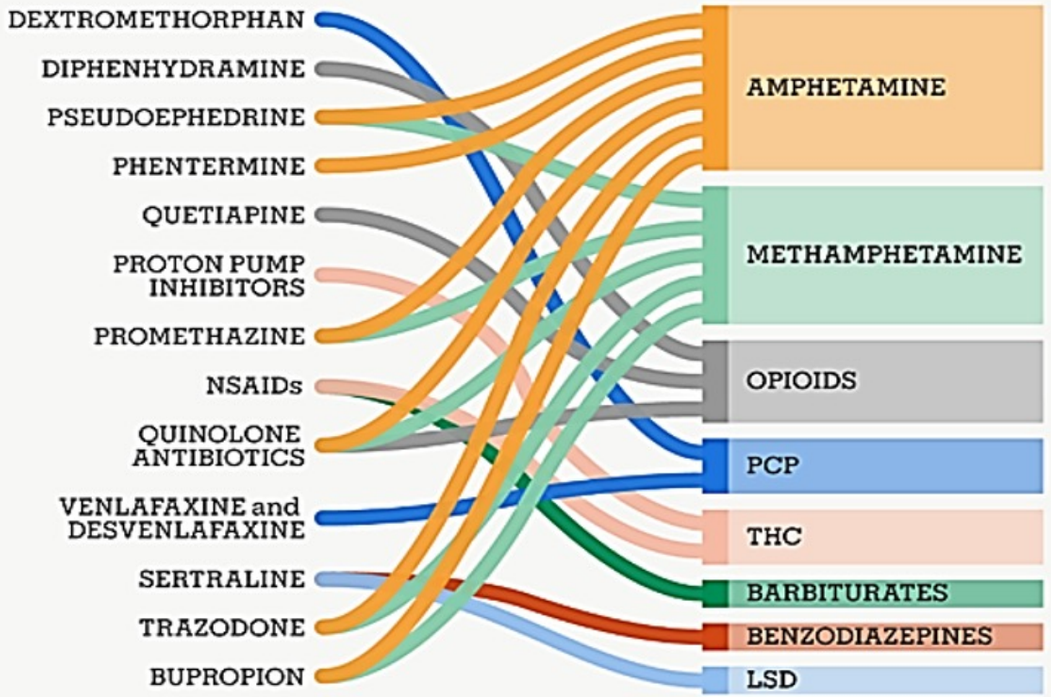
The birthing parent was informed of the plan to send urine and/or meconium toxicology on the newborn and the reason for testing as well as the potential implications.

These Medications Can Cause a

False Positive Result on a Urine Drug Test

A drug test looks for the presence of certain medications and substances. But inaccurate results on drug tests can happen. A "false positive" result is when a drug test shows the presence of a medication or substance that you aren't actually taking.

Below are medications that may cause false positives (left side) and the substances they may show up as (right side)*.



* Other medications may rarely cause false positive results on a urine drug test. These include labetalol (Trandate), doxylamine (Unisom), and tramadol (Ultram).

GoodRx

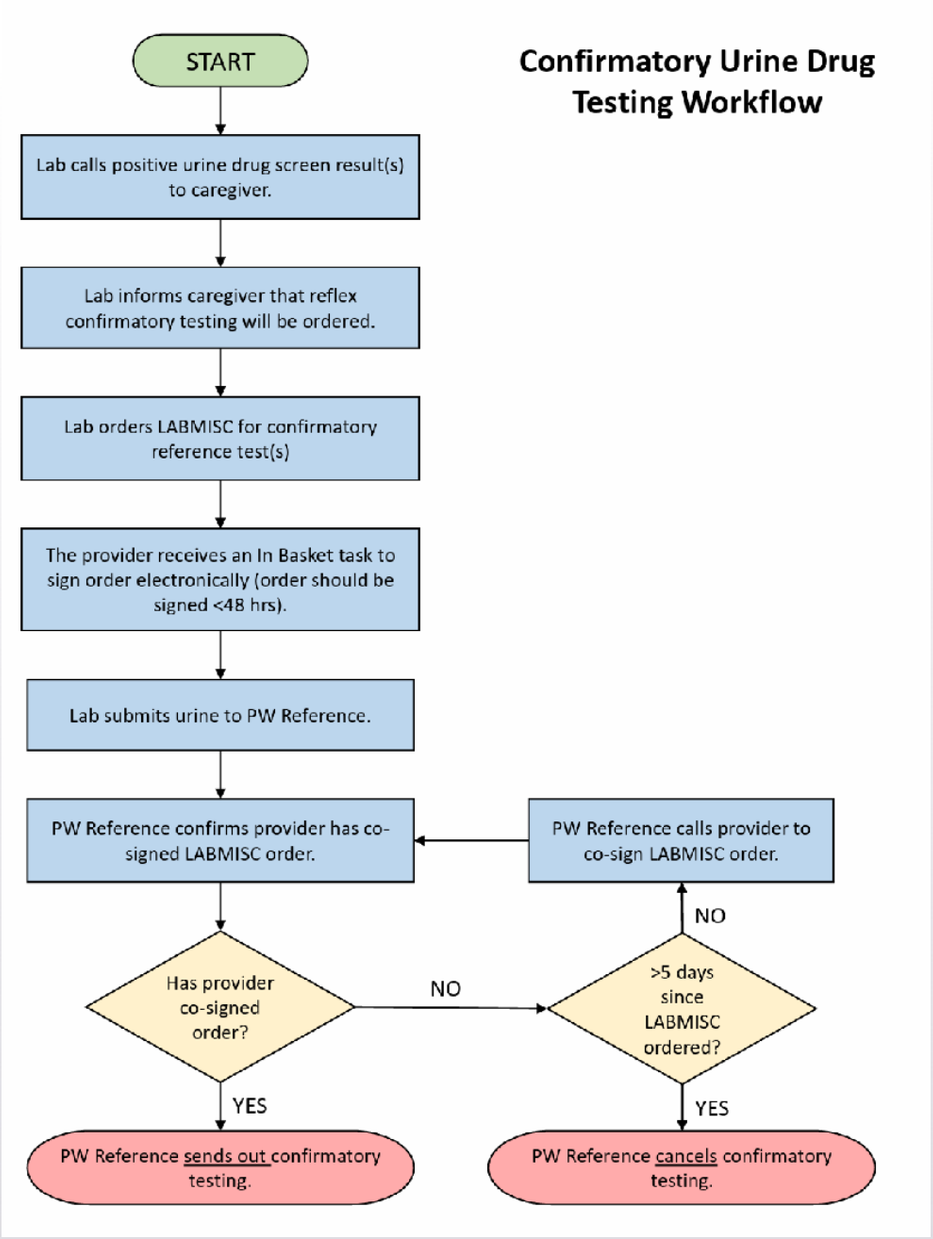
Follow Up Of Positive Urine Toxicology Test

The "urine drug test (UDS)/"drugs of abuse screen" ("LABTOXDS" in Epic) offered at TCH for adults and infants is appropriate for *screening* only.

Positive results should be confirmed by sending the sample for confirmatory testing by tandem mass spectrometry to rule out a false positive finding. This confirmatory testing is a send-out laboratory test and takes 3-5 days to receive results.

Workflow: lab will notify provider to order LABMISC as soon as possible for any birthing woman/parent and/or newborn with presumptive positive on the UDS

Consult Social Work if the birthing woman/parent admits to use of illicit substances during the pregnancy and/or for positive urine toxicology results confirmed on mass spectrometry and/or positive meconium testing results



Social Work Consults and CPS Reporting for Positive Urine Toxicology or Admitted Use During Pregnancy

Before consulting Social Work, the medical provider should complete the following:

1. Confirmatory testing has resulted as positive or has been requested (i.e. urine or meconium)
2. **Inpatient**: Review mother's MAR and home medications to determine if medications taken at home and/or given during the admission or delivery could have caused the results
3. **Outpatient**: Review mother's home medications to determine if there is a valid prescription and/or over the counter medication that could have caused the results
4. **Verbal admission of drug use:** Are there children in the home?

Once a Social Work consult is received, the social worker will complete the following:

1. Social worker will speak with the provider to confirm that the review of the mother's record has been completed and/or confirmatory tests have been received or requested.
2. Social worker will complete/update a psychosocial assessment.
3. Social worker will discuss their findings and identified risk/safety concerns with the provider to develop a plan of care and next steps.
4. Social worker will discuss concerns and resources with the patient and continue to provide support.
5. Social worker will inform patient of requirement to report to child welfare (CPS). Social worker will provide Family CARE Portfolio ("plan of safe care") and other resources to help the birthing woman/parent prepare for a child welfare visit.
6. Social worker will report risk/safety concerns to CPS via Statewide Intake, per TCH policy.*

Reasons Social Workers would submit a report to CPS include, but are not limited to:*

- Pregnant woman/parent admits to use of illicit substances and/or misuse of prescription medications during the pregnancy and is a primary caregiver of minor children.
- Confirmed positive drug test results for mother and/or newborn and home and hospital medications have been ruled out as a contributing factor
- Presence of a non-patient primary caregiver of the newborn in the hospital setting with concerns of active drug use and/or intoxication (for example, confusion, slurred speech, unsteady gait)

report will be made during pregnancy if there are minor children in the home

Post Implementation Observations

Wins

- Implementation of a workflow that clearly defines expectations of each interdisciplinary role
- Collaborative focus on providing the right care to the right patients at the right time in an equitable manner

Opportunities

- Continued need for collaboration and communication regarding the plan of care and safe discharges
- Continued need for ongoing education regarding the UDS workflow