Urine Drug Screening among patients on admission to acute psychiatric wards in south London

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Introduction

- Urine Drug Screen tests (UDSs) are useful aids in establishing illness aetiology and supporting the management of substance use disorder.[1]
- Timely completion of the UDS is vital as most substances are rapidly cleared.[2] The South London and the Maudsley NHS Foundation trust (SLaM) sets out for UDSs to be completed within the first 4 hours from a patient's admission, and to be documented in the specified "assessments" section within electronic patient records.

SLaM Admissions Checklist:

To be completed within first 4 hours	
Risk Assessment Tool (Risk/Safeguarding Tab)	RMN
Child Risk Screen (Risk/Safeguarding Tab)	RMN
Write admission note on EPJS	RMN
Care Plans: To complete care plans as generated from Risk Assessment	RMN
Adult or child safeguarding risks identified (referral made if required cc. Care Coordinator)	RMN/HCA
SHO Assessment, Physical Examination (ECG, bloods) & clerking in	SHO
MEWS: Baseline Observations, Height and Weight (BD for 72hrs)	RMN/HCA
Urine drug Screen and Urinalysis: Record on ePJS (Assessment Tab/Urine Screen) & MEWS chart	RMN/HCA

- Unfortunately, UDS results and patient refusing the UDS, is often not documented.
- We aimed to improve the use and documentation of urine drug screen tests among patients on admission to SLaM. We hypothesised a suboptimal rate of UDS documentation, and a prolonged duration between admission and UDSs being offered.

Methodology

- A prospective **quality-improvement project** with a two-staged intervention
- Pre-intervention, and post each intervention, electronic patient records of **40 patients** admitted to Lambeth Hospital were reviewed 7 days from their date of admission for:
  1. **Documentation in assessments or notes sections of UDS being performed, declined or unobtainable**
  2. **Duration (in days) between admission and UDSs being offered**
  3. **UDS included in care plan** (in those where there was no documentation of one being offered)

Staged interventions to improve UDS documentation:

Stage 1 (early March 2021)
- **Presentation and discussion of findings** at the **SLaM weekly consultants', daily managers', and weekly ward governance meetings.**

Stage 2 (late March - early April 2021)
- **Educational training session by Lambeth Hospital Dual Diagnosis Practitioner,** "Dual diagnosis assessment and urine drug screening"
- Inclusion of UDS in **monthly reminder email sent by Dual Diagnosis Practitioner encouraging the completion of drug and alcohol assessments**
- Presentation and discussion of findings at the **SLaM monthly ward managers' and monthly quality improvement meeting**

- Meeting discussions were aimed to gather insight on barriers to, and ideas for, the successful execution and documentation of UDSs.

Results

- A total of 120 patient records, in 3 stages of 40, were reviewed for UDS documentation.
- **The proportion of patients with documentation of UDS being offered increased from 35% pre-intervention to 60% post intervention 2.**

Documentation of UDSs

	Pre-Intervention Total n=40	Post Intervention 1 Total n=40	Post Intervention 2 Total n=40
Documentation of UDS being offered	**35% (n=14)**	**55% (n=22)**	**60% (n=24)**
Test carried out	27.5% (n=11)	45% (n=18)	50% (n=20)
Test declined or unobtainable	7.5% (n=3)	10% (n=4)	10% (n=4)

Location of documentation

- Most documentation was carried out in the correct section of electronic patient records, with a small increase noted post interventions.

	Pre-Intervention Total n=14	Post Intervention 1 Total n=22	Post Intervention 2 Total n=24
Assessments section	**71%** (n=10)	**72.7%** (n=16)	**87.5%** (n=21)
Care notes only	29% (n=4)	27.2% (n=6)	12.5% (n=3)

Timing of UDS

- All audit stages demonstrated that UDSs were most often offered on the day of admission (day 0) or on the following day (day 1), with the proportion of timely completion improving after each intervention.

	Pre-Intervention Total n=14	Post Intervention 1 Total n=22	Post Intervention 2 Total n=24
Day 0	**35.7%** (n=5)	**54.5%** (n=12)	**62.5%** (n=15)
Day 0 or 1	57.1% (n=8)	72.7% (n=16)	79.2% (n=19)
Days 2 to 7	42% (n=6)	27.2% (n=6)	20% (n=5)

UDS in patient care plan

- A varied proportion of patients (52.4% pre, 76.1% post intervention 1, 43.8% post intervention 2) who had no documentation of a UDS attempt had it included in their care plan.

Results: Feedback from meetings

Points raised by nursing and care team | Potential solutions

Outstanding admissions tasks are often not handed over
- Nurses advised to bringing checklist to handover
- Electronic admissions checklists with automated transfer of outstanding tasks are due to be implemented

Its often not appropriate to carry out UDS as patients are too unwell upon arrival
Interventions focused on encouraging staff to document "unable to obtain sample"

Difficult to complete the admissions process (total ~4 hrs) alongside other demands, especially with low staffing
- Splitting up admissions tasks
- Involving and training bank staff in admissions process

Patients may be concerned that testing positive will carry negative repercussions (ie on leave)
Encouraged staff to state it is a routine procedure done on all patients and facilitates care

Several UDS kits used within and between wards
The most frequently used UDS kit:
- **Is susceptible to tampering as open**
- **Interpretation can be confusing (ie MET (Methamphetamine) versus MTD (Methadone)**
- **Tests for few drugs**
- Advocated to implement Matrix 10 Drug tamper proof Urine Kit across all inpatient settings
- Sealed cups: minimise risks related to handling samples
- Address opiate management and local spice use by testing for more drugs: K2-AB (spice generation 3), EDDP (Metabolite of Methadone), Buprenorphine
- Sole UDS will ensure clinical consistency across trust

UDS kits currently in use (Alere Panel)
Cocaine, Amphetamine, Methamphetamine, THC, Methadone, Opiates, PCP, Barbiturate, TCAs, BDZ

Educational training

- Planned for in person, but carried out virtually via zoom due to social distancing restrictions
- Demonstration of UDS use and interpretation via images
- Attendance: 5 persons from 2 different wards in Lambeth Hospital

Conclusions

- **Rates of UDS documentation in inpatient settings requires improvement, which can be promoted by increasing awareness among nursing and senior management staff.**
- Practical interventions including an electronic admissions checklist and a superior UDS test kit will hopefully further increase testing for drugs in psychiatric patients on admission.
- Educational sessions delivered virtually are limited in terms of their uptake, engagement and teaching of practical skills. Their effectiveness should increase once in-person sessions are possible again.

References

1. Clinical Guidelines on Drug Misuse and Dependence Update 2017 Independent Expert Working Group. (2017) Drug misuse and dependence: UK guidelines on clinical management. London: Department of Health.
2. Taylor D, Barnes TE, Young A. (2018) The Maudsley prescribing guidelines in psychiatry. 13th edition. Hoboken, NJ : Wiley

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