**Supplementary Materials**

**Survey Responses**

|  |  |  |
| --- | --- | --- |
| **Characteristics of Respondents** | | |
|  | | |
|  | No. | % |
| SRN members surveyed | 130 | NA |
| Bounced or opted out | 10 | NA |
| Denominator | 120 | 100 |
| Responded | 52 | 43% |
| USA or Canada | 39 | 75% |
| International | 13 | 25% |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Question 1. Does your infection prevention or antibiotic stewardship program have written indications or criteria for when to order a urine culture (e.g. dysuria, flank pain, fever, mental status changes)?** | | | | | | |
|  | | | | | | |
|  |  |  | USA/Canada | | International | |
|  | Total No. | % | No. | % | No. | % |
| Yes | 23 | 44 | 20 | 51 | 3 | 23 |
| No | 29 | 56 | 19 | 49 | 10 | 77 |
| I don’t know | 0 | 0 | 0 | 0 | 0 | 0 |
| No response | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 52 | 100 | 39 | 100 | 13 | 100 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Question 1a. If YES, is it mandatory to enter the indication(s) for urine culturing when placing the order in your Computerized Physician Order Entry (CPOE) or Electronic Medical Record (EMR) system?** | | | | | | |
|  | | | | | | |
|  |  |  | USA/Canada | | International | |
|  | Total No. | % | No. | % | No. | % |
| Yes | 4 | 17 | 2 | 10 | 2 | 67 |
| No | 19 | 83 | 18 | 90 | 1 | 33 |
| I don’t know | 0 | 0 | 0 | 0 | 0 | 0 |
| No response | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 23 | 100 | 20 | 100 | 3 | 100 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Question 2. Does your laboratory offer 'reflex urine cultures'? Reflex urine culturing involves screening urine samples with a urinalysis ('UA') first. Urine is processed for culture only if pre-defined criteria are met (e.g. WBC>10).** | | | | | | |
|  | | | | | | |
|  |  |  | USA/Canada | | International | |
|  | Total No. | % | No. | % | No. | % |
| Yes | 26 | 50 | 25 | 64 | 1 | 8 |
| No | 25 | 48 | 13 | 34 | 12 | 92 |
| I don’t know | 0 | 0 | 0 | 0 | 0 | 0 |
| No response | 1 | 2 | 1 | 3 | 0 | 0 |
| Total | 52 | 100 | 39 | 100 | 13 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 3. Does your lab offer an option for routine urinalysis (UA) only for non-infectious indications?** | | |
|  | | |
|  | No. | % |
| Yes | 24 | 92 |
| No | 1 | 4 |
| I don’t know | 1 | 4 |
| No response | 0 | 0 |
| Total | 26 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 4. Does your laboratory offer an option for urine culture only without urinalysis?** | | |
|  | | |
|  | No. | % |
| Yes, on any patient | 19 | 73 |
| Yes, only in certain patients1 | 5 | 19 |
| No2 | 2 | 8 |
| I don’t know | 0 | 0 |
| Other | 0 | 0 |
| No response | 0 | 0 |
| Total | 26 | 100 |

1. “Only for urology patients for pre-op screening”; “Pregnancy, neonate, neutropenia, renal transplant”; “Patients under age 25 months, pregnant patients, patients undergoing GU procedures and neutropenic (ANC<100) patients”; “Renal transplant, certain urologic patients, OB”; “pregnancy, urologic procedures”.

|  |  |  |
| --- | --- | --- |
| **Question 5. Which sources of urine specimens are acceptable for reflex urine cultures (choose all that apply).** | | |
|  | | |
|  | No. | % |
| All urine cultures | 21 | 81 |
| Clean-catch urine cultures only | 1 | 4 |
| Catheter urine cultures only | 2 | 8 |
| We use a different approach | 2 | 8 |
| No response | 0 | 0 |
| Total | 26 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 6. Is your CPOE or EMR configured to mandate or guide the ordering clinician preferentially toward reflex urine culturing?** | | |
|  | | |
|  | No. | % |
| Yes | 14 | 54 |
| No | 12 | 46 |
| I don’t know | 0 | 0 |
| No response | 0 | 0 |
| Total | 26 | 100 |

**Question 7. Please explain what defines a “positive” urinalysis for reflex urine cultures at your institution (e.g. white blood cell count (WBC) >10/high power field (hpf), positive leukocyte esterase, positive nitrite, etc).**

*See Table 1 for summary.*

|  |  |  |
| --- | --- | --- |
| **Question 8. We offer reflex urine cultures on:** | | |
|  | | |
|  | No. | % |
| All patients | 19 | 73 |
| Selected patients | 7 | 27 |
| No response | 0 | 0 |
| Total | 26 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 9. Following implementation of reflex urine culturing, we have seen the following in our CAUTI rates:** | | |
|  | | |
|  | No. | % |
| A decrease | 7 | 27 |
| An increase | 3 | 11 |
| No change | 7 | 27 |
| We are uncertain | 9 | 35 |
| No response | 0 | 0 |
| Total | 26 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 10. Following implementation of reflex urine culturing, we have seen the following in our CAUTI rates:** | | |
|  | | |
|  | No. | % |
| Yes | 4 | 16 |
| No | 14 | 56 |
| No, but we will consider it | 6 | 24 |
| I don’t know | 1 | 4 |
| No response | 0 | 0 |
| Total | 25 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 11. At your institution, do nurses receive training about sterile collection of urine including from indwelling urinary catheters?** | | |
|  | No. | % |
| Yes | 50 | 96 |
| No | 1 | 2 |
| I don’t know | 1 | 2 |
| No response | 0 | 0 |
| Total | 52 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 12. Are urine culture specimens rejected (i.e. not processed) by your laboratory if a urine specimen is received after a prolonged transport time?** | | |
|  | No. | % |
| Yes | 21 | 40 |
| No | 20 | 39 |
| I don’t know | 11 | 21 |
| No response | 0 | 0 |
| Total | 52 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 13. Does your institution encourage or require the use of tubes or containers with boric acid preservative (e.g. grey-top tubes) for transport of urine culture specimens? (Boric acid is a preservative that lengthens acceptable transport time from 2 to 72 hours.)** | | |
|  | No. | % |
| Yes | 18 | 35 |
| No | 25 | 49 |
| I don’t know | 8 | 16 |
| No response | 0 | 0 |
| Total | 52 | 100 |

|  |  |  |
| --- | --- | --- |
| **Question 14. When 3 or more uropathogens grow on a urine culture, how are the organisms reported?** | | |
|  | No. | % |
| The culture is reported as “mixed” with no further organism workup | 46 | 88 |
| The organism identification and antibiotic susceptibility testing results are reported on all uropathogens growing regardless of the number of different unique  organisms present | 2 | 4 |
| We use a different approach1 | 4 | 8 |
| I don’t know | 0 | 0 |
| No response | 0 | 0 |
| Total | 52 | 100 |

1. Description of other approaches: “The predominant pathogens are worked up, with susceptibilities. There has been a push to identify a greater number”; “The culture is reported as 'mixed flora' but a predominant uropathogen would be reported and susceptibility testing would be conducted on these isolates”; “We report only significant pathogens with 10^4 or greater”; “The culture is reported as mixed with no further organism workup, however, if requested by the treating physician, The organism identification and antibiotic susceptibility testing results are reported on all uropathogens growing regardless of the number of different unique organisms present.”

|  |  |  |
| --- | --- | --- |
| **Question 15. Which approach(es) to antibiotic susceptibility reporting from positive urine cultures apply to your institution (check all that apply)** | | |
|  | No. | % |
| Results of all antibiotics tested are reported | 15 | 29 |
| We use cascade reporting | 22 | 42 |
| We selectively suppress reporting of certain antibiotics (ex. quinolones) | 23 | 44 |
| We have a different approach | 1 | 2 |
| I don’t know | 1 | 2 |
| Total | 52 | 100 |