**SURVEY RESPONSES**

**Respondent Characteristics**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| SRN members surveyed | 70 | NA |
| Responded and completed survey | 37/70 | 53 |
|  USA or Canada | 37/37 | 100 |
|  Academic medical center | 28/37 | 76 |
| Implemented rapid molecular test for viral pneumonia | 35/37 | 95 |
| Implemented rapid molecular test for bacterial pneumonia | 7/37 | 19 |

**Primary Role of Survey Respondent**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Antimicrobial Stewardship | 13 | 35.1 |
| Infection Prevention | 11 | 29.8 |
| Infectious Diseases Consult | 13 | 35.1 |
| **Total Responses**  | 37 | 100 |

**Who is a member of your institutional Antimicrobial Stewardship Team? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| MD, ID-trained | 37 | 100 |
| MD, non-ID-trained | 8 | 21.6 |
| PharmD, ID-trained | 31 | 83.7 |
| PharmD, non-ID-trained | 10 | 27 |
| Clinical Microbiologist | 25 | 67.6 |
| Infection Preventionist | 26 | 70.3 |
| Information Technology Specialist | 13 | 35.1 |
| **Total Responses**  | **37** | **100** |

**RESPIRATORY VIRAL PANELS**

**Question #1: Which rapid molecular tests does your institution currently utilize for detection of viral respiratory infections? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Biofire FilmArray RP | 25 | 71.5 |
| Verigene RP | 4 | 11.4 |
| ePlex RP Panel | 2 | 5.7 |
| Cepheid Flu/RSV | 2 | 5.7 |
| Other1 | 2 | 5.7 |
| Multiple assays2 | 3 | 8.6 |
| **Total** | **35** | **100** |

1. One respondent reported using cobas® Liat® influenza A/B & RSV; one respondent did not specify the product used.
2. Two respondents reported using both Biofire FilmArray RP and Cepheid Xpert Xpress Flu/RSV; one respondent reported using Biofire FilmArray RP and Verigene RP.

**Question #2: Does your institution have written guidance stating how and when to obtain samples for rapid molecular viral respiratory infections testing?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes, available online | 17 | 48.6 |
| Yes, available through written guidebooks | 4 | 11.4 |
| Yes, total | 21 | 60 |
| No, in development | 2 | 5.7 |
| No, and no current plans for development | 11 | 31.4 |
| No, total  | 13 | 37.1 |
| I don’t know | 1 | 2.9 |
| **Total Responses**  | **35** | **100** |

**Question #3: Are there any restrictions in place to limit samples that undergo rapid molecular viral respiratory infections testing? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes, based on sample type (ex. NP swab only) | 10 | 28.6 |
| Yes, based on patient location (ex. ICU only) | 2 | 5.7 |
| Yes, based on patient demographics (ex. peds)1 | 3 | 8.6 |
| Yes, based on ordering provider (ex. ID only) | 0 | 0 |
| Yes, based on previous testing (ex. once/week) | 7 | 20 |
| Other restrictions2 | 3 | 8.6 |
| No restrictions reported | 16 | 45.7 |

1. One respondent indicated that RVP is discouraged unless patient is immunosuppressed; one respondent indicated that panel testing is used only in the ICU and in immunocompromised patients and that rapid influenza/RSV testing is used for other patients.
2. One respondent indicated that panel testing is not performed if rapid testing for influenza is positive.

**Question #4: How are the ordering restrictions enforced? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| The ordering system (ex. the EHR or CPOE) blocks the order/test not meeting criteria | 4 | 11.4 |
| The laboratory manually cancels the order/test not meeting criteria | 11 | 31.4 |
| Unknown | 7 | 20 |
| **Total Responses** | **22** | **62.9** |

**Question #5: When are the rapid molecular viral respiratory infections tests processed?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| It is performed 24/7 in an on-site laboratory | 22 | 62.9 |
| It is performed 24/7 in an off-site laboratory | 4 | 11.4 |
| It is performed on certain shifts only (ex. day shift only) | 6 | 17.1 |
| It is performed on certain days only (ex. weekdays only) | 2 | 5.7 |
| **Total Responses**  | **34** | **97.1** |

**Question #6: Does your Clinical Microbiology Laboratory suppress or edit results of rapid molecular viral respiratory infections tests before release to providers? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| No suppression or edits to report | 11 | 31.4 |
| The lab adds comments to providers to guide de-escalation from antibiotics | 0 | 0 |
| The lab suppresses results of certain organisms | 1 | 2.9 |
| The lab summarizes results to ease interpretation | 6 | 17.1 |
| Do not know | 5 | 14.2 |
| Other, not defined  | 3 | 8.6 |
| **Total Responses**  | **26** | **74.3** |

**Question #7: How are rapid molecular viral respiratory infections test results from the Clinical Microbiology Lab reported? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| They are reported in the electronic medical record | 34 | 97.1 |
| The laboratory communicates the result to a member of the patient’s clinical team | 2 | 5.7 |
| The laboratory communicates the result to the antimicrobial stewardship team | 2 | 5.7 |
| The laboratory communicates the result to the infectious diseases team | 1 | 2.9 |
| **Total Responses** | **35** | **100** |

**Question #8: Has your Antimicrobial Stewardship (AMS) Team implemented any of the following in response to rapid molecular viral respiratory infections test results? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Development of institution-specific policies, procedures, or pathways  | 8 | 22.9 |
| Stewardship-led educational initiatives | 15 | 42.9 |
| Real-time review and feedback to clinical team | 5 | 14.3 |
| Review of results otherwise part of routine ASP activities | 15 | 42.9 |
| At least one activity reported | 22 | 62.9 |
| No AMS activities reported | 13 | 37.1 |
| **Total Responses** | **35** | **100** |

**Question #9: Does your AMS Program have policies, procedures, or pathways in place to guide antibiotic management in response to rapid molecular viral respiratory infections test results?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes, available online | 1 | 2.9 |
| Yes, available through written guidebooks | 2 | 5.7 |
| No, in development | 2 | 5.7 |
| No, and no current plans for development | 3 | 8.6 |
| **Total Responses** | **9** | **25.7** |

**Question #10: What educational initiatives have been pursued to encourage appropriate use of rapid molecular viral respiratory infections tests? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Lectures | 11 | 31.4 |
| Provider in-services | 7 | 20 |
| EHR-based alerts | 1 | 2.9 |
| Hospital-wide educational campaigns (posters, screensavers) | 6 | 17.1 |
| Hospital-integrated competencies | 1 | 2.9 |
| **Total Responses** | **35** | **100** |

**Question #11: How successful is your AMS Team with regards to antibiotic de-escalation based on results from the rapid molecular viral respiratory infections tests?**

|  |  |  |
| --- | --- | --- |
|  | No. | % |
| Approximately 25% or less recommendations accepted | 1 | 2.9 |
| Approximately 25% to 50% recommendations accepted | 5 | 14.3 |
| Approximately 50% to 75% recommendations accepted | 5 | 14.3 |
| Approximately 75% to 85% recommendations accepted | 4 | 11.4 |
| Approximately 85% or more recommendations accepted | 3 | 8.6 |
| Unable to comment | 14 | 40 |
| **Total Responses**  | **33** | **94.3** |

**Question #12. Please describe other initiatives completed by AMS to guide antibiotic management of rapid molecular viral respiratory infections tests results.**

Two respondents described use of procalcitonin in combination with respiratory viral panels. One respondent noted that respiratory viral panels helps to prompt isolation precautions and expedites discharge of patients who do not need hospitalization or antibiotics.

**RESPIRATORY BACTERIAL PANELS**

**Question #13: Which rapid molecular tests does your institution currently utilize for detection of bacterial pneumonia?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Biofire® FilmArray® Pneumonia Panel | 7 | 100 |
| Curetis Unyvero LRT Panel | 0 | 0 |
| **Total** | **7** | **100** |

**Question #14: Does your institution have written guidance stating how and when to obtain samples for rapid molecular bacterial pneumonia testing?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes, available online | 4 | 57.1 |
| Yes, available through written guidebooks | 0 | 0 |
| No, in development | 2 | 28.6 |
| No, and no current plans for development | 1 | 14.3 |
| **Total** | **7** | **100** |

**Question #15: Are there any restrictions in place to limit samples that undergo rapid molecular bacterial pneumonia testing ? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes, based on sample type (ex. BAL only) | 2 | 28.6 |
| Yes, based on patient location (ex. ICU only) | 0 | 0 |
| Yes, based on patient demographics (ex. Pediatric only) | 0 | 0 |
| Yes, based on ordering provider (ex. ID only) | 1 | 14.3 |
| Yes, based on previous testing (ex. once/week) | 1 | 14.3 |
| Yes, other restrictions | 2 | 28.6 |
| No, there are no restrictions | 2 | 28.6 |
| **Total** | **7** | **100** |

**Question #16: How are the ordering restrictions enforced?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| The ordering system (ex. the EHR or CPOE) blocks the order/test not meeting criteria | 1 | 14.3 |
| The laboratory manually cancels the order/test not meeting criteria | 2 | 28.6 |
| Total | 3 | 42.9 |

**Question #17: When are the rapid molecular bacterial pneumonia tests processed?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| It is performed 24/7 in an on-site laboratory | 3 | 42.9 |
| It is performed 24/7 in an off-site laboratory | 0 | 0 |
| It is performed on certain shifts only (ex. day shift only) | 1 | 14.3 |
| It is performed on certain days only (ex. weekdays only) | 1 | 14.3 |
| **Total** | **5** | **71.4** |

**Question #18: Does your Clinical Microbiology Laboratory automatically perform cultures in addition to the rapid molecular pneumonia test?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes | 2 | 28.6 |
| No  | 4 | 57.1 |
| Total | 6 | 85.7 |

**Question #19: Does your Clinical Microbiology Laboratory suppress or edit results of rapid molecular viral respiratory infections tests before release to providers? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| The lab adds comments to providers to guide de-escalation from antibiotics | 0 | 0 |
| The lab suppresses results of certain organisms | 2 | 28.6 |
| The lab summarizes results to ease interpretation | 0 | 0 |
| Do not know | 2 | 28.6 |
| **Total Responses**  | **4** | **57.1** |

**Question #20: How are rapid molecular bacterial pneumonia test results from the Clinical Microbiology Lab reported? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | No. | % |
| They are reported in the electronic medical record | 5 | 71.4 |
| The laboratory communicates the result to a member of the patient’s clinical team | 0 | 0 |
| The laboratory communicates the result to the antimicrobial stewardship team | 0 | 0 |
| The laboratory communicates the result to the infectious diseases team | 0 | 0 |
| No direct notifications | 2 | 28.6 |
| **Total Responses**  | **7** | **100** |

**Question #21: Does your AMS program have policies, procedures, or pathways in place to guide antibiotic management in response to rapid molecular bacterial respiratory infections test results?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Yes, available online | 0 | 0 |
| Yes, available through written guidebooks | 0 | 0 |
| No, in development | 1 | 14.3 |
| No, and no current plans for development | 3 | 42.9 |
| **Total** | **4** | **57.1** |

**Question #22: Has your Antimicrobial Stewardship (AMS) Team implemented any of the following in response to rapid molecular viral respiratory infections test results? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Development of institution-specific policies, procedures, or pathways  | 0 | 0 |
| Stewardship-led educational initiatives | 2 | 28.6 |
| Real-time review and feedback to clinical team | 1 | 14.3 |
| Review of results otherwise part of routine ASP activities | 3 | 42.8 |
| At least one activity reported | 4 | 57.1 |
| No AMS activities reported | 3 | 42.8 |
| **Total Responses** | **35** | **100** |

**Question #23: What educational initiatives have been pursued to encourage appropriate use of rapid molecular bacterial respiratory infections tests? Choose all that apply.**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Lectures | 0 | 0 |
| Provider inservices | 1 | 14.3 |
| EHR-based alerts | 0 | 0 |
| Hospital-wide educational campaigns | 0 | 0 |
| Hospital-integrated competencies | 0 | 0 |

**Question #24: How successful is your AMS Team with antibiotic de-escalation based on results from the rapid molecular bacterial respiratory infections tests?**

|  |  |  |
| --- | --- | --- |
|  | **No.** | **%** |
| Approximately 25% or less recommendations accepted | 1 | 14.3 |
| Approximately 25% to 50% recommendations accepted | 0 | 0 |
| Approximately 50% to 75% recommendations accepted | 1 | 14.3 |
| Approximately 75% to 85% recommendations accepted | 0 | 0 |
| Approximately 85% or more recommendations accepted | 1 | 14.3 |
| Unable to comment | 1 | 14.3 |
| **Total Responses**  | **4** | **57.1** |

**Question #25: What guidance is available to assist clinical teams in situations where rapid molecular bacterial pneumonia results are not consistent with final culture results?**

One respondent noted that the panel is a work in progress and guidance is still being developed. Two reported ID/ASP consult is needed.