Starter Questions for Assessing Capabilities of Surveillance Technology (ST) & Their Vendors

These are questions which might be asked of each ST vendor. This preliminary information may help compare products and vendor(s) during your decision making process.

1. Which surveillance models does the technology support?
   _____ Targeted _____ Hospitalwide _____ Both
   _____ Multihospital/Systemwide
   _____ Applicable to Broad Range of Practice Settings [e.g. ambulatory, home, long term care]
   _____ Other (specify): ________________________________

2. Is the data entered:
   _____ Manually (i.e. by user)
   _____ Automatically (i.e. by the ST product)
   _____ Both

3. Which information systems can the technology gather data from?
   ___ ADT (Admission, Discharge, Transfer)
   ___ Pharmacy
   ___ Laboratory [LIS]
   ___ Surgical / OR
   ___ Radiology
   ___ Unique, Customized databases
   ___ Other(s): ________________________________
4. Please describe the flow of data and information, e.g. from the facility LIS to the interface to the vendor’s web-based server and back to the IP:
   _____Vendor's Web-based server processing/analysis:
   _____All-data flow maintained within the facilities IT network

Is an interface(s) between our facility information systems and your product required? If yes:
   a. Are there requirements in the structure of data elements for this interface to work?
   b. Please estimate the average number of hours of personnel time needed to establish the interface(s): _______

5. Are there other IT-specific requirements needed to activate your ST? If so describe these and indicate the level and type of support you can provide to our IT professionals for these steps.

6. Is the data entered into your system able to report HAI data to the Centers for Disease Control & Prevention’s National Healthcare Safety Network? ___ Y ___ N.
   If NO - STOP HERE AND SERIOUSLY ASSESS WHETHER ANY FURTHER CONSIDERATION IS WARRANTED.

7. If the system IS able to report HAI data to the Centers for Disease Control & Prevention’s National Healthcare Safety Network, are the data elements from your system compliant with Clinical Document Architecture Release 2.0 (CDA R2) as published by HL7 in their Refined Message Information Model (RMIM)? ___ Y ___ N.
   Describe how requirements for document authentication, confidentiality, and retention are addressed by information your system is providing to CDC’s NHSN:
   _____________________________________________________________________
   _____________________________________________________________________

8. Does your system use vocabularies and value sets that comply with CDA requirements of NHSN? ___ Y ___ N.
Is data captured by your system compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA)– Privacy Rule: Provisions relevant to public health practice? ___ Y ___ N.

9. Will I be able to report HAI data, i.e. CLABSIs and surgical site infections (SSIs) to Centers for Medicare & Medicaid Services (CMS) under their Inpatient Prospective Payment System (IPPS) Hospital Inpatient Quality Reporting Program using your ST product? ___ Y ___ N.

10. How often is the data loaded or updated?
___Continuous feed (real time) or Batch feed, every ____ hours; _____ Both

11. Who analyzes the data?
___Vendor only
___IP only
___Both
___Owner
How often are vendor only analyses, e.g. alerts, delivered _________________?
Can data be readily exported from this system into other systems e.g Excel, SAS etc.? ___ Y ___ N.

12. Who creates the report formats? ___Vendor ___IP ___ Both
Can they be customized? ___Yes ___ No
Are urgent alerts generated?
___ Yes: _____Vendor defined _____User defined _____Both
___ No

13. How are urgent alerts communicated to the end user? Email, pager, cell phone etc.

14. What kind of computer hardware/software do you need?
________________________________________

15. Is the service offered as SaaS (software as a service) or onsite instillation? ___ Y ___ N.
Where can data and system be accessed?
Within Infection Prevention & Control Offices on personal computers

Any computer in your Healthcare Organization (within its firewall)

Workstation

Mobile computing devices or from home-based computer workstation

Wireless laptop ___ Both

Via secured internet portal (anywhere including at home)

16. Does this ST have the ability to use algorithmic identification to predict which patients have HAIs (not just microbiology results)? ___ Y ___ N. If so, can the IP override/review the algorithmic decisions? ___ Y ___ N. If yes, what types of data are included in this analysis?

___ Vitals

___ MD, RN notes

___ Microbiology

___ Serology

___ Chemistry ___ Diagnosis codes (CPT, ICD9)

___ Hematology

___ Pathology

___ Blood Bank

___ Radiology

___ Other diagnostic procedures

___ Surgery data

___ Procedure

___ Pharmacy Orders

___ Prescriptions

___ Device and days

___ Diagnosis codes (CPT, ICD9)

___ Other data sources: __________________________________________________________

What is the reported sensitivity and specificity of this detection?

17. Does this system include text search or word recognition of notes as part of the
algorithm? ___ Y ___N.

Have you validated the algorithm(s) employed and are they compliant with NHSN HAI surveillance criteria? ___ Y ___N.

18. Does the software differentiate between community and health care associated infections; surveillance and clinical isolates? ___ Y ___N. If yes, how does it do so? ________________________________

What, if any, types of reports are generated?

- Rates based on patients at risk
- Stratified by healthcare provider
- Cross tables
- Graphs
- Flexible, user defined reports
- Control charts
- Corporate Dashboards

19. Does the system embed established benchmarks (e.g., NHSN pooled means) into standard HAI reports? ___ Y ___N.

Can findings from the ST be sent to:

- Public health agencies
- Quality Improvement Organizations
- State Hospital Associations
- Internal Corporate QI/Patient Safety

20. What is the time it takes from contract signing to testing your data on the system? What is the time from validation of your data to “go live” and ICP daily use? Who does the validation? Is the validation one time or ongoing? If ongoing, how often? Ask the ST vendor for a complete customer list, including bed size, IT systems, specialized patient populations served, additional services they use, and specific ICP and IT contact information.
21. What is system or service cost and pricing structure?
   _____ Initial costs?
   _____ Ongoing costs?
   _____ New feature updates?

How many users are allowed with the prices quoted above? What is the additional fee for additional users / system network access?
Who owns the surveillance data if the business relationship with the vendor is terminated? If a “data export” is provided, in what format will it be exported?

What days/hours are customer service / assistance available to customers?

Does the vendor provide assistance with business case development for initial purchase?

Does the vendor provide between facility comparisons (ranking) among its own customers?

What training and implementation services are provided by the vendor during startup? What continuing education opportunities are provided thereafter?

Questions for IPs to ask vendors in regard to their systems CDA capability

1. Does the vendor have the capability to export and import (using the CDA architecture) valid HAI Blood Stream Infection (BSI) events for all inpatient locations?
2. Does the vendor have at least one client exporting and importing HAI Blood Stream Infection (BSI) events via the NHSN CDA architecture?
3. Does the vendor have the capability to export and import (using the CDA architecture) valid Device Denominator and Patient Days counts for all supported locations (the current version of the IG accepts all inpatient locations except for Neonatal Intensive Care and Specialty Care Areas (SCA))?
4. Does the vendor have at least one client exporting and importing Device Denominator data via the NHSN CDA architecture?
5. Does the vendor have the capability to export and import (using the CDA architecture) valid Surgical Site Infection (SSI) events for all valid NHSN procedure types?

6. Does the vendor have at least one client exporting and importing HAI Surgical Site Infection (SSI) events via the NHSN CDA architecture?

7. Does the vendor have the capability to export and import (using the CDA architecture) valid Surgery Procedure records for all supported NHSN procedures?

8. Does the vendor have at least one client exporting and importing valid Surgery Procedure records via the NHSN CDA architecture?