# 2007 AHA Annual Survey Information Technology Supplement Health Forum, L.L.C.

Please return to: AHA Annual Survey Information Technology Supplement One North Franklin, 29<sup>th</sup> Floor Chicago, Illinois 60606

1. Does your hospital have a computerized system for: (Fully implemented means it has completely replaced paper record for the function.)

|                                                                                                                          | (1)<br>Fully<br>Implemented<br>Across All<br>Units | (2)<br>Fully<br>Implemented<br>in At Least<br>One Unit | (3)<br>Beginning to<br>Implement in<br>At Least<br>One Unit | (4) Have Resources to Implement in the Next Year | (5) Do not have Resources but Considering Implementing | (6)<br>Not in Place<br>and not<br>Considering<br>Implementing |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------|
| Electronic Clinical Documentation                                                                                        |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| a. Patient Demographics                                                                                                  |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| b. Physician Notes                                                                                                       |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| c. Nursing Assessments                                                                                                   |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| d. Problem Lists                                                                                                         |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| e. Medication Lists                                                                                                      |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| f. Discharge Summaries                                                                                                   |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| g. Advanced Directives (e.g. DNR)                                                                                        |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| Results Viewing                                                                                                          |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| a. Lab Reports                                                                                                           |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| b. Radiology Reports                                                                                                     |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| c. Radiology Images                                                                                                      |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| <ul> <li>Diagnostic Test Results (e.g., EKG report,<br/>Echo report)</li> </ul>                                          |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| e. Diagnostic Test Images (e.g., EKG tracing)                                                                            |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| f. Consultant Reports                                                                                                    |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| Computerized Provider Order Entry<br>(Provider (e.g., MD, APN, NP) directly enters<br>own orders)<br>a. Laboratory Tests | П                                                  | П                                                      | П                                                           | П                                                | П                                                      | -                                                             |
| b. Radiology Tests                                                                                                       | 님                                                  |                                                        |                                                             |                                                  |                                                        |                                                               |
| c. Medications                                                                                                           |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| d. Consultation Requests                                                                                                 |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| e. Nursing Orders                                                                                                        |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| Decision Support                                                                                                         |                                                    | Ш                                                      |                                                             |                                                  |                                                        |                                                               |
| <ul> <li>Clinical Guidelines (e.g., Beta blockers<br/>post-MI, ASA in CAD</li> </ul>                                     |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| b. Clinical Reminders (e.g., pneumovax)                                                                                  |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| c. Drug Allergy Alerts                                                                                                   |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| d. Drug-Drug Interaction Alerts                                                                                          |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| e. Drug-Lab Interaction Alerts                                                                                           |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| <ul><li>f. Drug Dosing Support (e.g., renal dose guidance)</li><li>Bar Coding</li></ul>                                  |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |
| a. Laboratory specimens                                                                                                  | П                                                  |                                                        | П                                                           |                                                  |                                                        | П                                                             |
| b. Tracking pharmaceuticals                                                                                              | <u>=</u>                                           |                                                        |                                                             |                                                  |                                                        |                                                               |
| c. Pharmaceutical administration                                                                                         |                                                    |                                                        |                                                             |                                                  |                                                        |                                                               |

| INFO                                                                              | RMATION          | TECHNOLO          | GY SUPPLE                | MENT |   |
|-----------------------------------------------------------------------------------|------------------|-------------------|--------------------------|------|---|
| d. Supply chain management                                                        |                  |                   | П                        | П    | П |
| e. Patient ID                                                                     |                  |                   |                          |      |   |
| Other Functionalities                                                             | _                | _                 | _                        | _    | _ |
| a. Telemedicine                                                                   |                  |                   |                          |      |   |
| b. Radio Frequency ID                                                             |                  |                   |                          |      |   |
| c. Physician Use of Personal Data Assistant                                       |                  |                   |                          |      |   |
| 2. Has your hospital implemented IT applicati                                     | on in the follow | ring non-clinical | areas?                   |      |   |
|                                                                                   | (1)<br>Yes       | (2)<br>No         | (3)<br>Do<br>Not         |      |   |
| a. Patient accounts department                                                    | П                |                   | Know<br>□                |      |   |
| b. Patient scheduling systems                                                     |                  | H                 |                          |      |   |
| c. Pharmaceuticals supply chain management                                        |                  |                   |                          |      |   |
| d. Medical-surgical supply chain management                                       |                  |                   |                          |      |   |
| 3. Are the functionalities listed below fully im                                  |                  |                   |                          |      |   |
| Emergency Department                                                              | (1)<br>Yes       | (2)<br>No         | (3)<br>Not<br>Applicable |      |   |
| a. Electronic Clinical Documentation                                              |                  |                   |                          |      |   |
| b. Results Viewing                                                                |                  |                   |                          |      |   |
| c. Computerized Provider Order Entry                                              |                  |                   |                          |      |   |
| d. Decision Support                                                               | П                |                   |                          |      |   |
| ICU                                                                               | Ē                |                   | Ē                        |      |   |
| a. Electronic Clinical Documentation                                              |                  | _                 | _                        |      |   |
| b. Results Viewing                                                                |                  |                   |                          |      |   |
| c. Computerized Provider Order Entry                                              |                  |                   |                          |      |   |
| d. Decision Support                                                               |                  |                   |                          |      |   |
| General Medical/Surgical Wards                                                    | _                | _                 | _                        |      |   |
| <ul><li>a. Electronic Clinical Documentation</li><li>b. Results Viewing</li></ul> |                  | 님                 |                          |      |   |
| c. Computerized Provider Order Entry                                              |                  |                   |                          |      |   |
| d. Decision Support                                                               |                  |                   |                          |      |   |
| Specialty Wards                                                                   | Ш                | Ц                 | Ц                        |      |   |
| a. Electronic Clinical Documentation                                              |                  |                   |                          |      |   |
| b. Results Viewing                                                                |                  |                   |                          |      |   |
| c. Computerized Provider Order Entry                                              |                  |                   |                          |      |   |
| d. Decision Support                                                               |                  |                   |                          |      |   |
| Hospital/System Owned ONSITE<br>Ambulatory Practices                              |                  |                   |                          |      |   |
| a. Electronic Clinical Documentation                                              |                  |                   |                          |      |   |

Hospital/System Owned OFFSITE Ambulatory Practices

c. Computerized Provider Order Entry

b. Results Viewing

d. Decision Support

|    | Electronic Clinical Documentation Results Viewing                                                                                                                                                                                   |                      |                |              |           |                      |             |                |             |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------|--------------|-----------|----------------------|-------------|----------------|-------------|
|    | Computerized Provider Order Entry                                                                                                                                                                                                   |                      |                |              |           |                      |             |                |             |
|    | Decision Support                                                                                                                                                                                                                    |                      |                |              | ∺         |                      |             |                |             |
|    |                                                                                                                                                                                                                                     | L                    |                |              | _         |                      |             |                |             |
| 4. | Does your electronic system allow you to                                                                                                                                                                                            | do the following?    | •              | (1)<br>Yes   | (2)<br>No | (3)<br>Do<br>Not     |             |                |             |
| a. | Develop a list of a patient's current medication                                                                                                                                                                                    | ns                   |                |              |           | Know                 |             |                |             |
| b. | Compare a patient's inpatient and preadmissi                                                                                                                                                                                        | ion medication lists | 5              | _            |           |                      |             |                |             |
| c. | Provide an updated medication list at time of                                                                                                                                                                                       | discharge            |                |              |           |                      |             |                |             |
| d. | Automatically generate Hospital Quality Allian data from an electronic record for a Medicare payment system update                                                                                                                  | •                    | •              |              |           |                      |             |                |             |
| 5. | Please provide your best estimate for                                                                                                                                                                                               |                      |                |              |           |                      |             |                |             |
| b. | The percentage of inpatients at your hospital are written electronically? The percentage of inpatients at your hospital electronically? The percentage of inpatients at your hospital documentation (e.g., physician notes) is done | whom lab orders a    |                | 0%<br>□<br>□ |           | -25%                 | 26-50%      | 51-90%         | 91-100%     |
| 6. | Please indicate whether your hospital's ele                                                                                                                                                                                         | •                    | allows patien  | ts to        |           |                      |             |                |             |
|    |                                                                                                                                                                                                                                     |                      |                | (1)<br>Yes   | (2)<br>No | (3)<br>Don't<br>know |             |                |             |
| a. | View their discharge summary online                                                                                                                                                                                                 |                      |                |              |           |                      |             |                |             |
| b. | View test results online                                                                                                                                                                                                            |                      |                |              |           |                      |             |                |             |
| C. | View operative notes online                                                                                                                                                                                                         |                      |                |              |           |                      |             |                |             |
| d. | View medication lists online                                                                                                                                                                                                        |                      |                |              |           |                      |             |                |             |
| 7. | If your electronic system were to become                                                                                                                                                                                            | disabled due to a    | disaster or o  | other majo   | r malfun  | ction, do            | you have th | e following ir | n place:    |
|    |                                                                                                                                                                                                                                     |                      |                | (1)<br>Yes   |           | (2)<br>No            |             |                |             |
| a. | A disaster recovery plan for the electronic net                                                                                                                                                                                     | work                 |                |              |           |                      |             |                |             |
| h  | If yes – Is the plan tested annually?  Redundant networks                                                                                                                                                                           |                      |                |              |           |                      |             |                |             |
|    | Back-up data source to ensure clinical continu                                                                                                                                                                                      | uitv                 |                |              |           |                      |             |                |             |
|    | Remote Site                                                                                                                                                                                                                         |                      |                |              |           |                      |             |                |             |
| 8. | Does your organization engage in routine paper or electronic systems?                                                                                                                                                               | biosurveillance      | for reportable | e conditio   | ns for yo | our state's          | Departmen   | t of Public He | ealth using |
|    | ☐ We use a paper system                                                                                                                                                                                                             |                      |                |              |           |                      |             |                |             |
|    | ☐ We use a telephone and/or fa                                                                                                                                                                                                      | ax system            |                |              |           |                      |             |                |             |
|    | ☐ We use a part paper/part ele                                                                                                                                                                                                      | -                    |                |              |           |                      |             |                |             |
|    | ☐ We use a fully electronic sys                                                                                                                                                                                                     | · ·                  |                |              |           |                      |             |                |             |

8a. Does your state's Department of Public Health accept electronic reporting of routine biosurveillance?

| ☐ Yes                                                                                                                         |                      |                         |                         |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|-------------------------|------------------|------------------|
| □ No                                                                                                                          |                      |                         |                         |                  |                  |
| Don't know                                                                                                                    |                      |                         |                         |                  |                  |
|                                                                                                                               |                      |                         |                         |                  |                  |
| <ol><li>Does your hospital participate in any regional arrang<br/>information exchange, such as a RHIO (Regional He</li></ol> |                      |                         | el clinical data thro   | ough an electror | nic health       |
| ☐ Participate, we actively exchange data                                                                                      | a                    |                         |                         |                  |                  |
| ☐ Participate but we DO NOT exchange                                                                                          |                      |                         |                         |                  |                  |
| We do not participate in any regional a                                                                                       | arrangements for ele | ectronic health informa | ation exchange          |                  |                  |
| 10. Does your hospital electronically exchange any of                                                                         | the following nation | nt data with any of th  | he nrovidere lieted     | helow? (Check    | all that annly ) |
| To. Does your nospital electronically exchange any or                                                                         | ine following patie  | in data with any or th  | ne providers listed     | Delow: (Oncor    | an triat apply.) |
|                                                                                                                               |                      |                         |                         |                  |                  |
|                                                                                                                               | (1)                  | (2)                     | (3)                     |                  |                  |
|                                                                                                                               | With                 | With                    | With                    |                  |                  |
|                                                                                                                               | Hospitals<br>in your | Hospitals<br>Outside of | Ambulatory<br>Providers |                  |                  |
|                                                                                                                               | System               | your System             | outside of              |                  |                  |
|                                                                                                                               | •                    |                         | your system             |                  |                  |
| a. Patient Demographics                                                                                                       |                      |                         |                         |                  |                  |
| b. Clinical Care Record (clinical history, exam)                                                                              |                      |                         |                         |                  |                  |
| c. Laboratory Results                                                                                                         |                      |                         |                         |                  |                  |
| d. Medication lists                                                                                                           |                      | П                       |                         |                  |                  |
| e. Radiology Reports                                                                                                          |                      |                         | _                       |                  |                  |
| Discharge Summaries                                                                                                           | ä                    |                         | ä                       |                  |                  |
| 5                                                                                                                             | Ь                    | Ь                       |                         |                  |                  |
| 11. Does your hospital use an electronic health record  Yes, all electronic  Part paper/part electronic                       | system?              |                         |                         |                  |                  |
| = : a.r. paper/pair electronic                                                                                                |                      |                         |                         |                  |                  |
| ∐ No                                                                                                                          |                      |                         |                         |                  |                  |
| ☐ Don't know                                                                                                                  |                      |                         |                         |                  |                  |
|                                                                                                                               |                      |                         |                         |                  |                  |
| Please answer questions 12 and 13, regardless of whet                                                                         | her or not your ho   | spital has implemen     | ted an EHR systen       | <u>ı.</u>        |                  |
|                                                                                                                               |                      |                         |                         |                  |                  |
| 12. If your hospital has implemented an EHR system, p                                                                         | lease tell us how r  | much of a barrier ead   | ch of the following     | was to impleme   | ntation.         |
| If your hospital has NOT implemented an EHR, pleasimmediate plans to implement a system.                                      | se indicate how mo   | uch of a barrier it is  | to implementation,      | even if you hav  | e no             |
|                                                                                                                               |                      |                         | (1)                     | (2)              | (3)              |
|                                                                                                                               |                      |                         | Major                   | Minor            | Not a            |
| a. The amount of capital needed to purchase and impleme                                                                       | nt an FHR            |                         | Barrier                 | Barrier          | Barrier          |
| b. Uncertainty about the return on investment (ROI) from a                                                                    |                      |                         | <u> </u>                |                  |                  |
| ` '                                                                                                                           |                      |                         |                         | 님                |                  |
| c. Concerns about the ongoing cost of maintaining an EHR                                                                      | system               |                         | ╚                       | ╚                | ╚                |
| d. Resistance to implementation from physicians                                                                               |                      |                         |                         |                  |                  |
| e. Resistance to implementation from other providers (e.g.,                                                                   | ,                    |                         |                         |                  |                  |
| f. Lack of capacity to select, contract for, and implement an                                                                 | EHR                  |                         |                         |                  |                  |
| g. Disruption in clinical care during implementation                                                                          |                      |                         |                         |                  |                  |
| n. Lack of adequate IT staff                                                                                                  |                      |                         |                         |                  |                  |
| . Concerns about inappropriate disclosure of patient inform                                                                   | nation               |                         |                         |                  |                  |
| . Concerns about the legality of donating a system to asso                                                                    | ciated physician     |                         |                         |                  |                  |

k. Concerns about illegal record tampering or "hacking"

|                                                                                      |                                              | 0011222                      |           |
|--------------------------------------------------------------------------------------|----------------------------------------------|------------------------------|-----------|
| I. Finding an EHR system that meets your org                                         | anization's needs                            |                              |           |
| m. Lack of interoperable IT systems in the ma                                        | rket place                                   |                              |           |
| n. Concerns about a lack of future support from                                      | m vendors for upgrading and maintaining t    | he system                    |           |
|                                                                                      |                                              | _                            | _         |
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|                                                                                      |                                              |                              |           |
| Thank you for your cooperation in completing t this survey, who should be contacted? | this survey. If there are any questions abou | ut your responses to         |           |
| this survey, who should be contacted?                                                |                                              |                              |           |
|                                                                                      |                                              |                              |           |
| Name (please print)                                                                  | Title                                        | (Area Code) Telephone No     | umbor     |
| rvanie (piease piini)                                                                | riue                                         | (Area Code) Telephone Ni     | umber     |
|                                                                                      |                                              |                              |           |
| Date of Completion                                                                   | Chief Executive Officer                      | ()<br>Hospital's Main Fax Ni | ımher     |
| Date of Completion                                                                   | CHIEF EXECUTIVE OFFICER                      | i iospitai s iviaiti rax ivi | ui ii DEi |

NOTE: PLEASE PHOTOCOPY THE INFORMATION FOR YOUR HOSPITAL FILE BEFORE RETURNING THE ORIGINAL FORM TO THE AMERICAN HOSPITAL ASSOCIATION.

**THANK YOU**