

Antimicrobial Use and Informatics Capabilities Survey

Welcome to the survey for Antimicrobial Use and Informatics Capabilities of California Hospitals, sponsored by the California Department of Public Health (CDPH) Healthcare-Associated Infections (HAI) Program. The objectives of this survey are to gain a better understanding of

- how/if hospitals are measuring antimicrobial use,
- what data resources are available in hospitals that may facilitate measuring antimicrobial use using the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) system, and
- how the CDPH HAI Program can help hospitals to advance antimicrobial use measurement.

A PDF of the survey is available [here](#). Please read the survey in its entirety prior to starting. Doing so will better inform you of the types of questions being asked, the individuals at your facility to engage to help respond, and how the questions may best be answered for one or more hospitals in your organization.

The survey will allow you to respond for multiple facilities within your healthcare system; you will be asked to indicate one or multiple individual hospitals that are included in your response.

We ask that you engage the persons who are most knowledgeable about your facility's efforts to track antibiotic use to help complete this assessment in its entirety; this may be a pharmacist, clinician, infection preventionist, IT technician, IT vendor, or administrator. We believe that input from multiple professionals will be needed to provide accurate and complete responses to the entire survey.

You may complete part of the survey, and then forward the link to a colleague to answer additional questions.

Thank you in advance for completing this survey by Friday, July 17, 2015.

Antimicrobial Use and Informatics Capabilities Survey

Please provide contact information for follow-up questions by CDPH:

Name

Title

Email Address

Phone Number

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* Is your hospital part of a healthcare system?

Yes

No

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* Please select the healthcare system with which you are affiliated:

If you selected that your healthcare system is not listed, please fully spell out the healthcare system name and hospitals within it (please no acronyms or abbreviations).

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* Please select the hospital for which you are answering this survey (choose only one).

Antimicrobial Use and Informatics Capabilities Survey

Please mark all vendors that are responsible for implementing and/or supporting the patient registration system (used for admission, discharge, transfer data) at your hospital(s) for which you are answering this survey.

- | | | |
|--------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> AcmeWare Inc | <input type="checkbox"/> IHM Services Company | <input type="checkbox"/> Orion Health |
| <input type="checkbox"/> Allscripts | <input type="checkbox"/> Indian Health Service | <input type="checkbox"/> PatientKeeper |
| <input type="checkbox"/> Cerner Corporation | <input type="checkbox"/> Krames Staywell | <input type="checkbox"/> PatientSafe Solutions |
| <input type="checkbox"/> Community Health Systems | <input type="checkbox"/> McKesson | <input type="checkbox"/> SCC Soft Computer |
| <input type="checkbox"/> CPSI (Computer Programs and Systems) Inc | <input type="checkbox"/> MEDHOST | <input type="checkbox"/> Sunquest Information Systems Inc |
| <input type="checkbox"/> Epic Systems Corporation | <input type="checkbox"/> Medisolv Inc | <input type="checkbox"/> Tenet Healthsystem Medical Inc |
| <input type="checkbox"/> FairWarning Technologies Inc | <input type="checkbox"/> MEDITECH | <input type="checkbox"/> Trinity Health, Trinity Information Services |
| <input type="checkbox"/> HCA Information & Technology Services Inc | <input type="checkbox"/> MedSeek Inc | <input type="checkbox"/> T-System Technologies Ltd |
| <input type="checkbox"/> Health Care Systems Inc | <input type="checkbox"/> Midas+ / ACS a Xerox Company | <input type="checkbox"/> Managed internally |
| <input type="checkbox"/> Healthland Inc | <input type="checkbox"/> NextGen Healthcare | <input type="checkbox"/> N/A - No system in place |
| <input type="checkbox"/> Iatric Systems Inc | <input type="checkbox"/> OptumInsight | |
| <input type="checkbox"/> Other (please specify) | | |

Does your hospital(s) plan to implement a newer version of their patient registration system or change patient registration system vendors within the next 12 months?

- Yes
- No

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* Does your hospital(s) use patient admit/discharge/transfer (ADT) data for surveillance, monitoring, or reporting purposes?

If your hospital's ADT data are only used for billing purposes, please respond as No.

Yes

No

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In regards to patient registration ADT data, indicate what data are available or are tracked.

Please select a response for each row.

	Counts by specific patient care location	Counts but only at the facility-wide level	No counts for this item
Patient admissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Patient days present</u> (specific definition for NHSN AU Option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please mark all vendors that are responsible for implementing and/or supporting Electronic Medical Record (EMR) / Electronic Health Record (EHR) information systems at your hospital(s) for which you are answering this survey.

- | | | |
|--------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> Acmeware Inc | <input type="checkbox"/> IHM Services Company | <input type="checkbox"/> Orion Health |
| <input type="checkbox"/> Allscripts | <input type="checkbox"/> Indian Health Service | <input type="checkbox"/> PatientKeeper |
| <input type="checkbox"/> Cerner Corporation | <input type="checkbox"/> Krames Staywell | <input type="checkbox"/> PatientSafe Solutions |
| <input type="checkbox"/> Community Health Systems | <input type="checkbox"/> McKesson | <input type="checkbox"/> SCC Soft Computer |
| <input type="checkbox"/> CPSI (Computer Programs and Systems) Inc | <input type="checkbox"/> MEDHOST | <input type="checkbox"/> Sunquest Information Systems Inc |
| <input type="checkbox"/> Epic Systems Corporation | <input type="checkbox"/> Medisolv Inc | <input type="checkbox"/> Tenet Healthsystem Medical Inc |
| <input type="checkbox"/> FairWarning Technologies Inc | <input type="checkbox"/> MEDITECH | <input type="checkbox"/> Trinity Health, Trinity Information Services |
| <input type="checkbox"/> HCA Information & Technology Services Inc | <input type="checkbox"/> MedSeek Inc | <input type="checkbox"/> T-System Technologies Ltd |
| <input type="checkbox"/> Health Care Systems Inc | <input type="checkbox"/> Midas+ / ACS a Xerox Company | <input type="checkbox"/> Internally managed |
| <input type="checkbox"/> Healthland Inc | <input type="checkbox"/> NextGen Healthcare | <input type="checkbox"/> N/A - No system in place |
| <input type="checkbox"/> Iatric Systems Inc | <input type="checkbox"/> OptumInsight | |
| <input type="checkbox"/> Other (please specify) | | |

Does your hospital(s) plan to implement a newer version of their EMR/EHR or to change EMR/EHR vendors within the next 12 months?

- Yes
- No

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Please mark all vendors that are responsible for implementing and/or supporting Electronic Medication Administration Record (eMAR) or Bar-Coded Medication Administration (BCMA) information systems at your hospital(s) for which you are answering this survey.

- | | | |
|-------------------------------------------------|------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> Allscripts | <input type="checkbox"/> Healthland | <input type="checkbox"/> Siemens |
| <input type="checkbox"/> Cerner | <input type="checkbox"/> McKesson/Paragon | <input type="checkbox"/> Managed internally |
| <input type="checkbox"/> CPSI | <input type="checkbox"/> Meditech | <input type="checkbox"/> N/A - No system in place |
| <input type="checkbox"/> Epic | <input type="checkbox"/> PatientSafe Solutions | |
| <input type="checkbox"/> Other (please specify) | | |

Does your hospital(s) plan to implement a newer version of their eMAR or BCMA or to change eMAR or BCMA vendors within the next 12 months?

- Yes
- No

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* Does your hospital(s) have experience with Clinical Document Architecture (CDA) development?

CDA is a Health Level 7 (HL7) standard that provides a framework for the encoding, formatting and semantics of electronic documents.

CDA development means data have been extracted and converted into CDA format for successful export. Source: CDC

Yes

No

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* Does your hospital(s) already report data in CDA format to CDC's National Healthcare Safety Network (NHSN)?

CDC's National Healthcare Safety Network is the nation's most widely used healthcare-associated infection (HAI) tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate healthcare-associated infections. Source: CDC

Yes

No

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* Does your hospital(s) produce Quality Reporting Document Architecture (QRDA) reports through a certified Electronic Health Record (EHR)?

QRDA is a standard document format for the exchange of electronic clinical quality measure (eCQM) data. QRDA reports contain data extracted from electronic health records (EHRs) and other information technology systems. The reports are used for the exchange of eCQM data between systems for quality measurement and reporting initiatives. Source: CMS

Yes

No

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* Does your hospital(s) produce any Consolidated-Clinical Document Architecture (C-CDA) documents for any groups?

Consolidated Clinical Document Architecture (C-CDA) was developed by Health Level 7 and includes nine document types, one of which is an updated version of the CCD. The second stage of Meaningful Use requires that healthcare providers use C-CDA document exchange regularly in care transitions. Source: Health Level Seven

Yes

No

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* Does your hospital(s) produce any C32 documents?

A C32 is a type of Continuity of Care Document (CCD) which focuses on the patient's summary information. The content may include administrative (e.g., registration, demographics, insurance, etc.) and clinical (problem list, medication list, allergies, test results, etc) information. Source: Healthcare Information Technology Standards Panel

- Yes
- No

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* Does your hospital(s) currently submit data in any automated, electronic format (e.g. CSV, CDA, QRDA) to the Centers for Disease Control and Prevention (CDC) or the Centers for Medicare and Medicaid Services (CMS)?

If data are manually entered via a CDC or CMS web entry interface, then select No below.

Yes

No

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Please indicate if your hospital(s) currently exchange information electronically with any of the following types of organizations.

Mark all that apply.

- Health Information Exchange (HIE)
- Public Health
- Registry
- Other affiliated hospital(s)
- Other physician offices
- Currently do not exchange information electronically
- Other (please specify)

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Currently how difficult would it be to extract and use the following information electronically from any of your health information system(s).

Please select a response for each row.

	Already exchanged electronically	Fairly easy to extract and use this data	Some effort required	Difficult	Not possible at this time
Medical Record Number	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
DOB and Gender	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient care location of patient when antimicrobial was administered (Unit/Ward)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Routes of administration for antimicrobials administered to patients (IV/IM/Oral/Inhaled)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summary counts reported as Antimicrobial Days or Days of Therapy for each specific antimicrobial administered to patients?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Does your hospital(s) track administration of (select one):

- All antimicrobials on the formulary
- Only a specific subset of antimicrobials
- Other (please specify)

Does your hospital(s) electronic system already produce RxNorm codes for antimicrobials or are antimicrobials already mapped to RxNorm codes within your system?

RxNorm is two things: a normalized naming system for generic and branded drugs; and a tool for supporting semantic interoperation between drug terminologies and pharmacy knowledge base systems. The National Library of Medicine (NLM) produces RxNorm.

Source: National Library of Medicine

- Yes
- No

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Does your hospital(s) currently have an Antimicrobial Stewardship Program?

- Yes
- No (skip to next page)

Does your Antimicrobial Stewardship Program measure antimicrobial use?

- Yes
- No

Does your hospital(s) benchmark your antimicrobial usage against other hospitals?

- Yes
- No

If Yes, please briefly describe the process implemented:

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Would your hospital be interested in working with CDPH so that you can compare antimicrobial usage against other similar hospitals?

- Yes
- No

Is your hospital(s) interested in using the NHSN Antimicrobial Use (AU) Option to benchmark antimicrobial use?

If your hospital(s) has all or any of the below:

- eMAR/BCMA in place
- use RxNorm codes
- submit any HAI CDA data to NHSN

...then you've already implemented some of the most important steps to submit to the NHSN AU Option!

- Yes
- No

If Yes, please briefly describe your level of interest and any steps you have taken towards utilization of the NHSN AU Option:

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Do you have any questions for the CDPH HAI Program?

A large, empty rectangular box with a thin black border, intended for the respondent to write any questions they have for the CDPH HAI Program.

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Thank you for completing the survey.

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