



CALIFORNIA HEALTHCARE FOUNDATION



## Health Information Technology in California: Milestones and Miles to Go

Snapshot

November 2013

# Introduction

Interest continues to grow among Californians for using technology to support their health care needs, with 60% saying they would like online access to their health information. Similar percentages want online appointment scheduling, email appointment reminders, and the ability to email their health care professionals. This third edition of *Health Information Technology in California* also shows that despite significant growth in the use of these tools among California's physicians, hospitals, and health centers, the state lags behind the US in a number of areas, such as e-prescribing.

Highlights of the report include:

- ▶ A majority of California adults (77%) see an electronic health record (EHR) as a valuable tracking tool, and a greater percentage (85%) say doctors should have access to a patient's personal health information.
- ▶ Of the 57% of Californians who reported having access to their EHR, most used them to look at a lab test, schedule an appointment, or email their doctor.
- ▶ Physician use of EHRs has increased steadily over the past five years. In 2008, 37% of physicians used the technology; in 2013, 59% did.
- ▶ About half of California hospitals used EHRs in 2012, which is a significant increase from 13% in 2007.
- ▶ EHR availability among community health centers has grown tremendously. In 2005, 3% of health centers reported having an EHR. At the end of 2011, 65% said they did.
- ▶ Nationally, California ranked 49th on e-prescribing adoption and use.

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# Consumer Attitudes Toward EHRs, California, 2013

Percentage of consumers strongly/somewhat agreeing that...

All physicians treating me should have access to information contained in my EHR.

85%

An EHR would be a valuable tool to track the progress of my health.

77%

My health records are for my own use and should not be provided to other parties.

49%

My insurer should have access to the information in my EHR.

37%

n=319

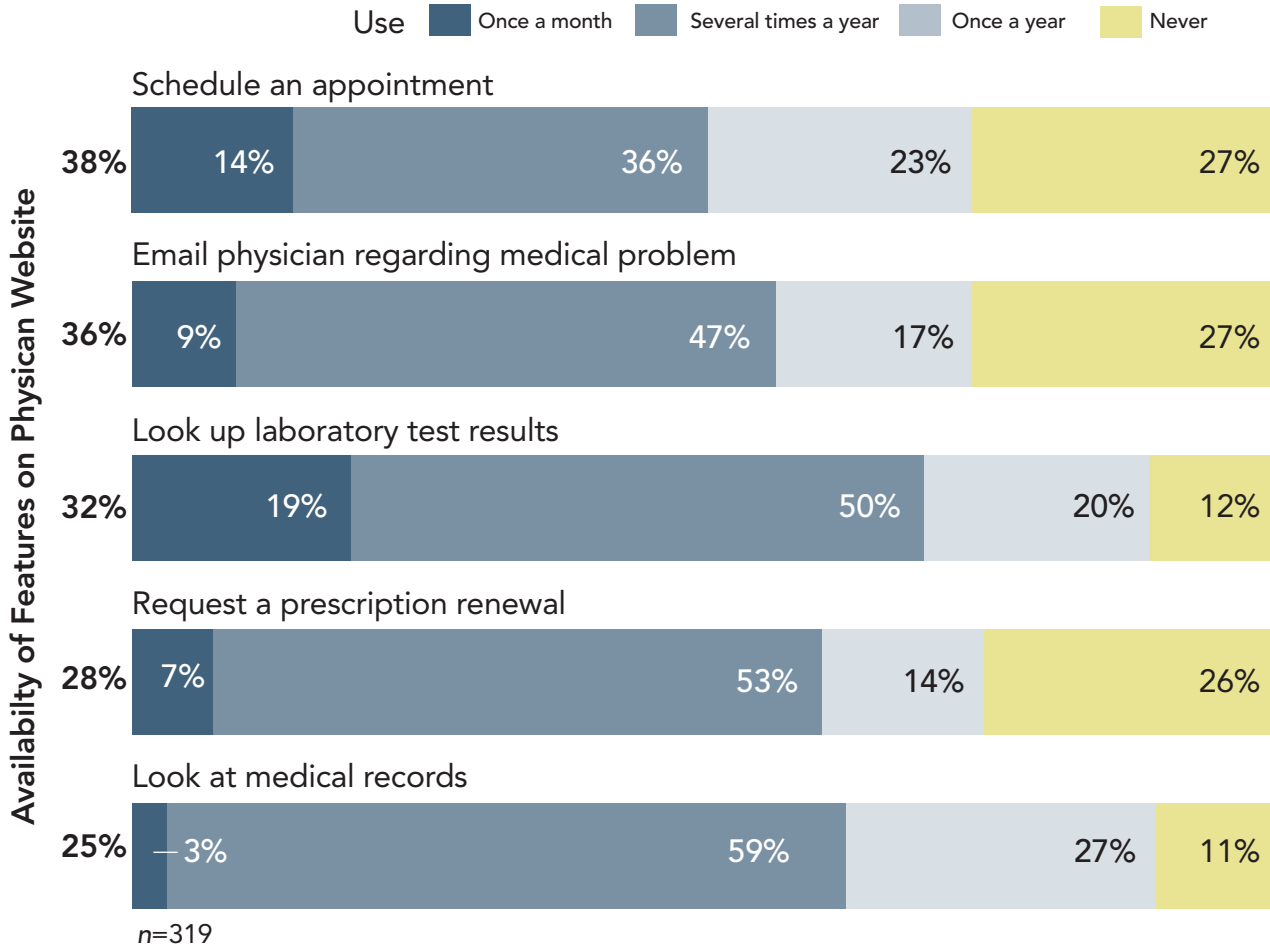
Note: This online survey was conducted by Harris Interactive, a market research firm, February 13–26, 2013, among 2,501 US adults age 18 and older. The sample included 319 California residents. Data were weighted to reflect the composition of the adult population.

Source: Harris Interactive, Strategic Health Perspectives 2013 Consumer Survey.

## Consumers

More than three-quarters of California consumers believed that electronic health records (EHRs) were valuable tools, although many were not comfortable with insurers having electronic access to the consumers' personal information.

# Availability and Use by Consumers of Features on Physicians' Websites, California, 2013



## Consumers

More California consumers reported that they were able to schedule appointments (38%) using their physician's websites than those who said they could look at medical records (25%) from physician sites. The largest percentage of consumers used features of their physicians' websites several times per year to look at medical records or test results or to renew a prescription.

Note: This online survey was conducted by Harris Interactive, a market research firm, February 13–26, 2013, among 2,501 US adults age 18 and older. The sample included 319 California residents. Data were weighted to reflect the composition of the adult population.

Source: Harris Interactive, Strategic Health Perspectives 2013 Consumer Survey.

# Consumer Interest in Physician Interactions, California, 2013

Percentage of consumers who are extremely/very interested in, but do not have access to...

A portal where you can log in and see lab tests, imaging results, or other sensitive information



Online appointment scheduling



Email appointment reminders



Phone call appointment reminders



Email correspondence about your health



Communication via an online secure messaging platform that requires you to set up a log-in and a password



Text appointment reminders



Postal mail appointment reminders



n=319

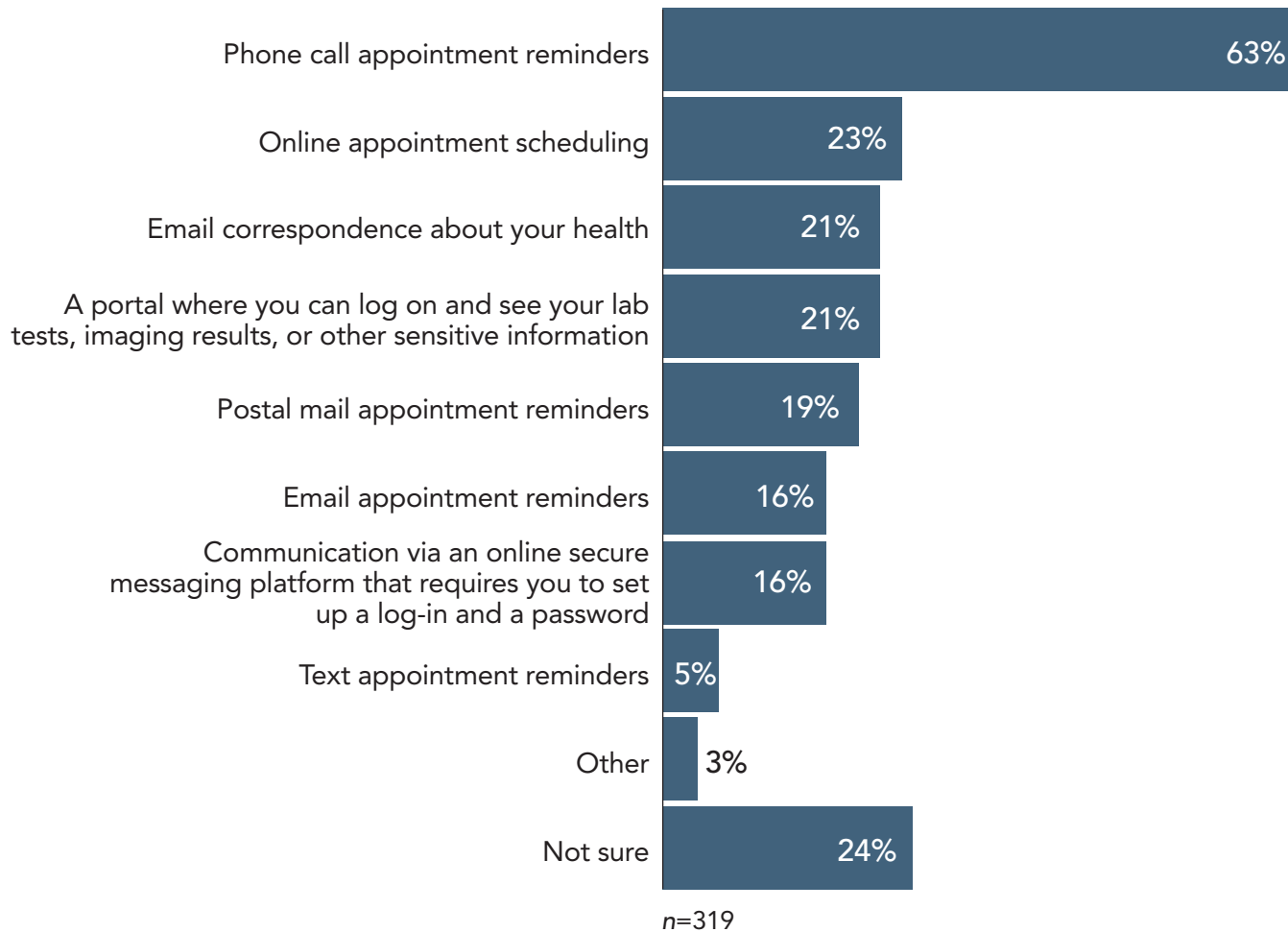
Note: This online survey was conducted by Harris Interactive, a market research firm, February 13–26, 2013, among 2,501 US adults age 18 and older. The sample included 319 California residents. Data were weighted to reflect the composition of the adult population.

Source: Harris Interactive, Strategic Health Perspectives 2013 Consumer Survey.

## Consumers

California consumers were interested in online and electronic interactions with their primary care provider.

# Consumer Access to Physician Interactions, California, 2013



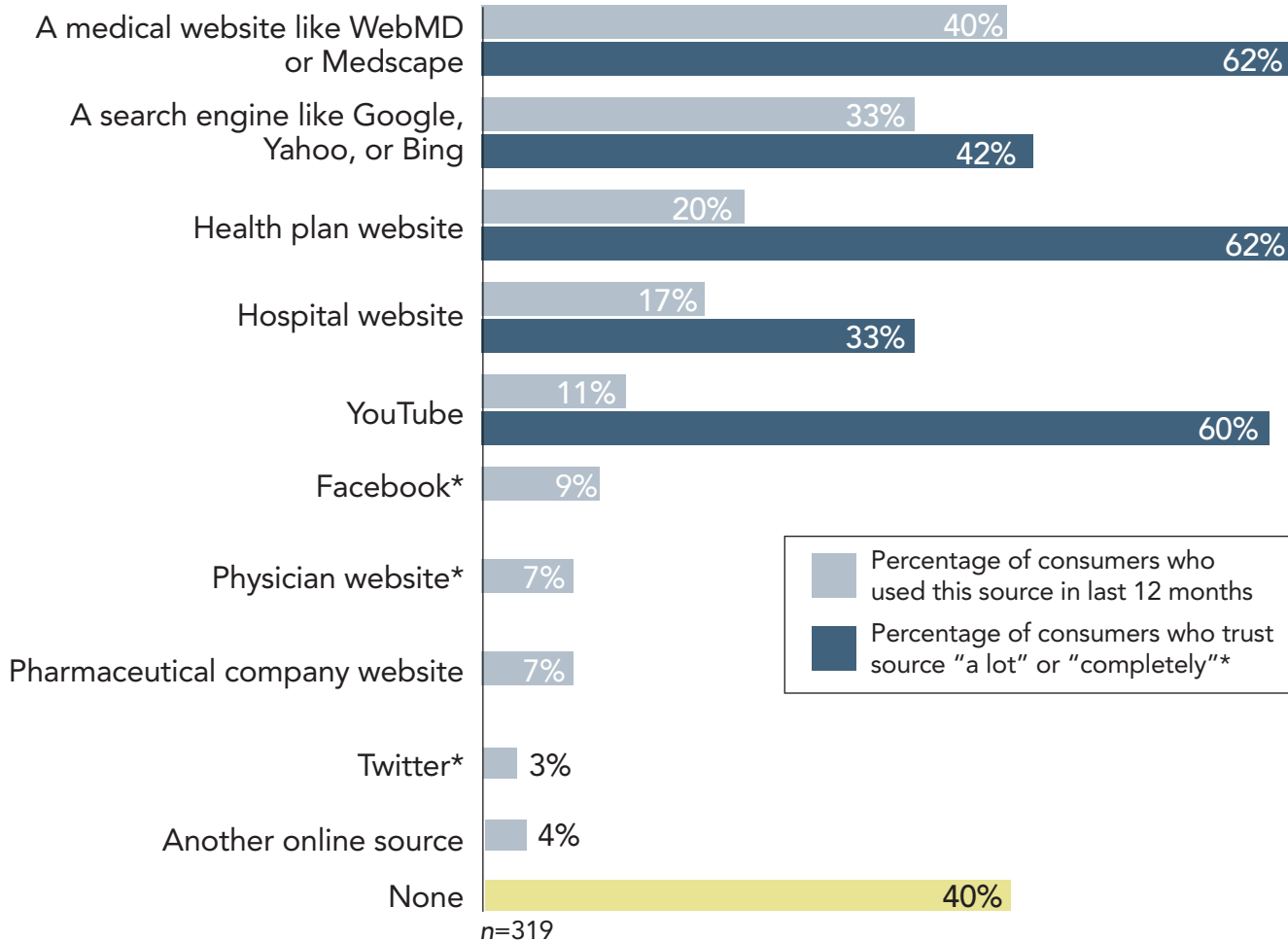
## Consumers

California consumers reported that phone reminders were the most common form of interaction with their physicians outside of the office. Only 5% of California patients received appointment reminders by text message from their providers' offices.

Note: This online survey was conducted by Harris Interactive, a market research firm, February 13–26, 2013, among 2,501 US adults age 18 and older. The sample included 319 California residents. Data were weighted to reflect the composition of the adult population.

Source: Harris Interactive, Strategic Health Perspectives 2013 Consumer Survey.

# Consumer Use of Internet Sources for Health Information, California, 2013



\*Bases vary, as only consumers that used a source were asked to rate their level of trust. These sources had a very small n value, resulting in unreliable estimates.

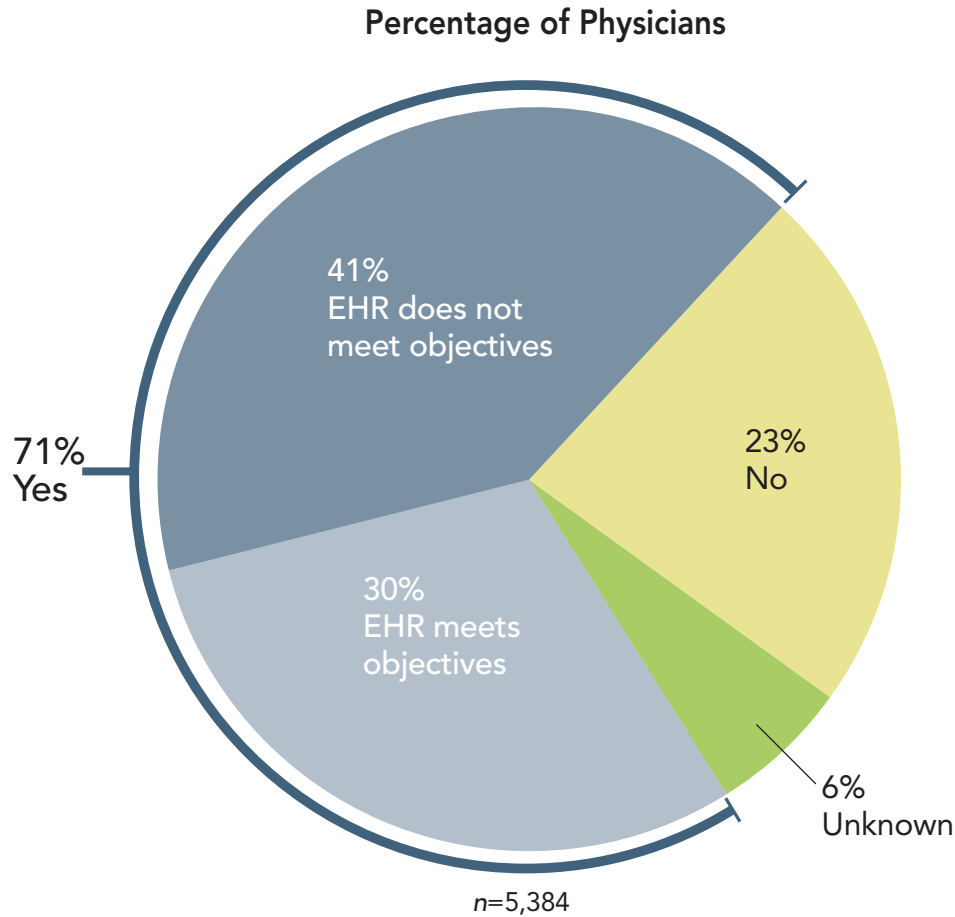
Note: This online survey was conducted by Harris Interactive, a market research firm, February 13–26, 2013, among 2,501 US adults age 18 and older. The sample included 319 California residents. Data were weighted to reflect the composition of the adult population.

Source: Harris Interactive, Strategic Health Perspectives 2013 Consumer Survey.

## Consumers

More than half of California consumers used an online source of health information in the past year. Forty percent used a medical website.

# EHR Availability, California, 2011



## Physicians

To increase the adoption and use of EHRs, the federal government offers incentive payments to hospitals and providers that achieve “meaningful use” of the technology as defined by federal regulations. While most physicians had an EHR available in their practice, only 30% had one that met the 12 CMS meaningful use objectives.

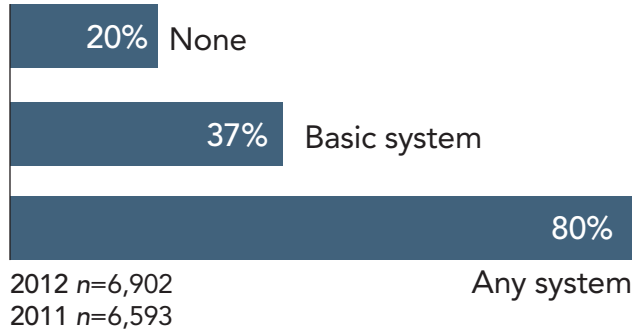
Note: For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services’ (CMS) “Meaningful Use” page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html).

Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

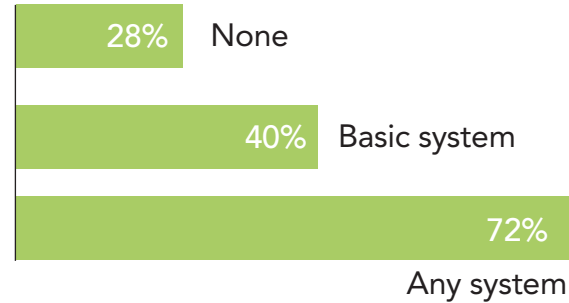


# Physician EHRs Use, California vs. US, 2011 and 2012

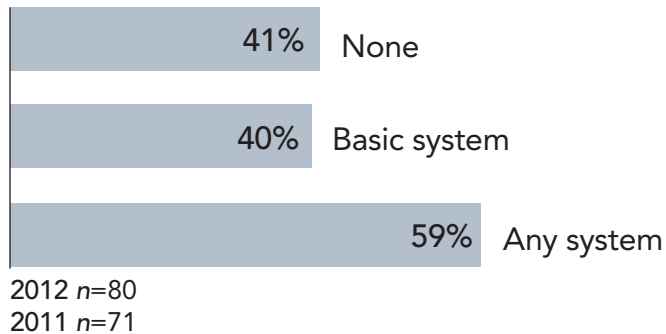
California, 2012



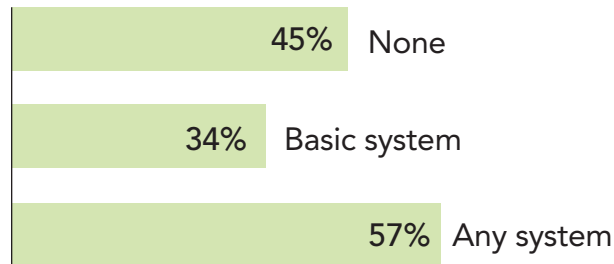
US, 2012



California, 2011



US, 2011



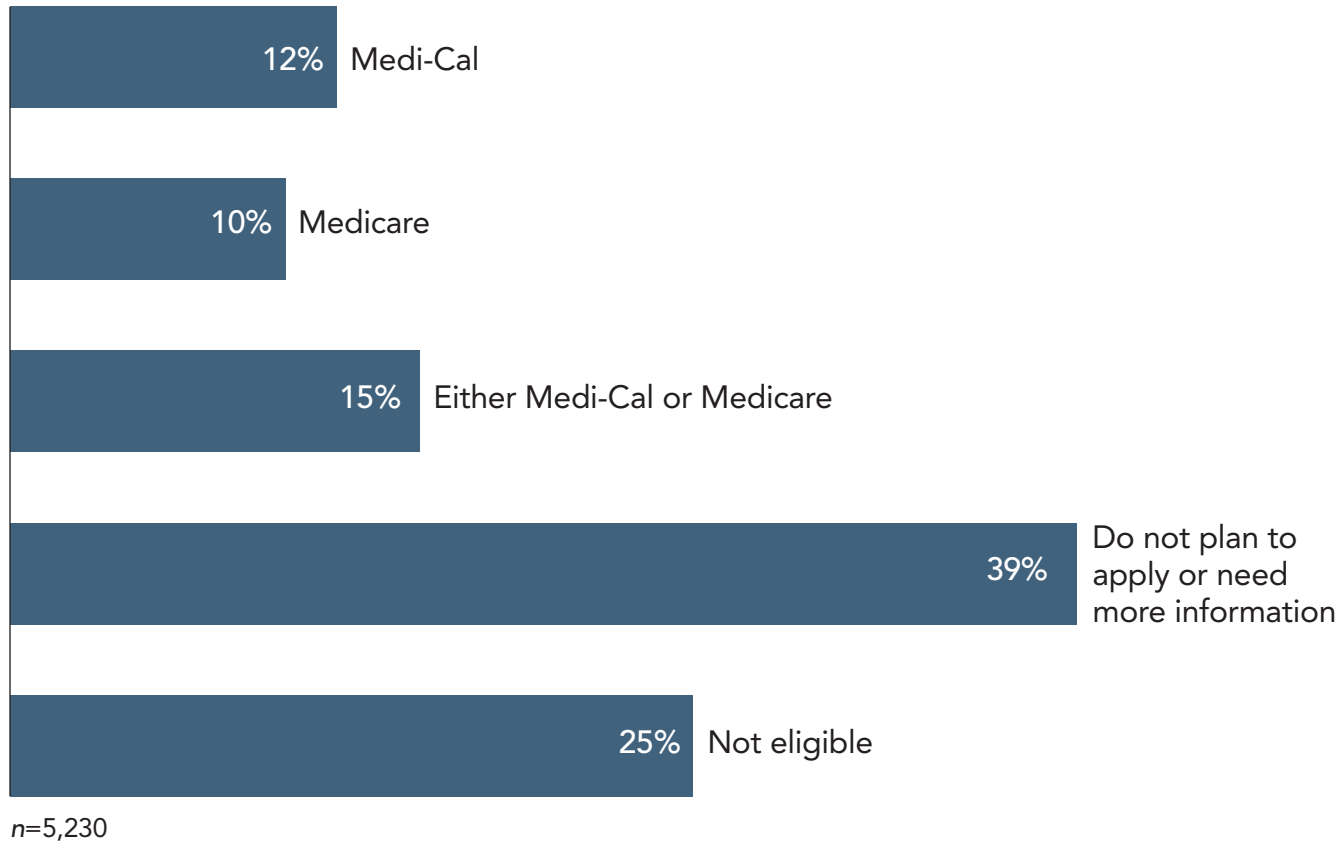
Note: Only office-based physicians were surveyed. Physicians are considered to be using any EHR if they answered yes to the question, "Does your practice use EHRs?" A basic system is one that has all of the following functionality: patient history and demographics, patient problem list, physician clinical notes, comprehensive list of patient's medications and allergies, computerized orders for prescriptions, and the ability to view laboratory and imaging results electronically.

Sources: C. J. Hsiao and E. Hing, *Use and Characteristics of Electronic Health Record Systems Among Office-Based Physician Practices: United States, 2001–2012*, NCHS Data Brief no. 111 (Hyattsville, MD: National Center for Health Statistics, 2012), [www.cdc.gov/nchs/data/databriefs/db111.pdf](http://www.cdc.gov/nchs/data/databriefs/db111.pdf); C. J. Hsiao et al., *Electronic Health Record Systems and Intent to Apply for Meaningful Use Incentives Among Office-Based Physician Practices: United States, 2001–2011*, NCHS Data Brief no. 79 (Hyattsville, MD: National Center for Health Statistics, 2011), [www.cdc.gov/nchs/data/databriefs/DB79.pdf](http://www.cdc.gov/nchs/data/databriefs/DB79.pdf).

## Physicians

More than three-quarters of California physicians used an EHR in 2012. This adoption rate was similar to the national average and higher than the previous year's.

# Physician Intent to Participate in an Incentive Program, California, 2011



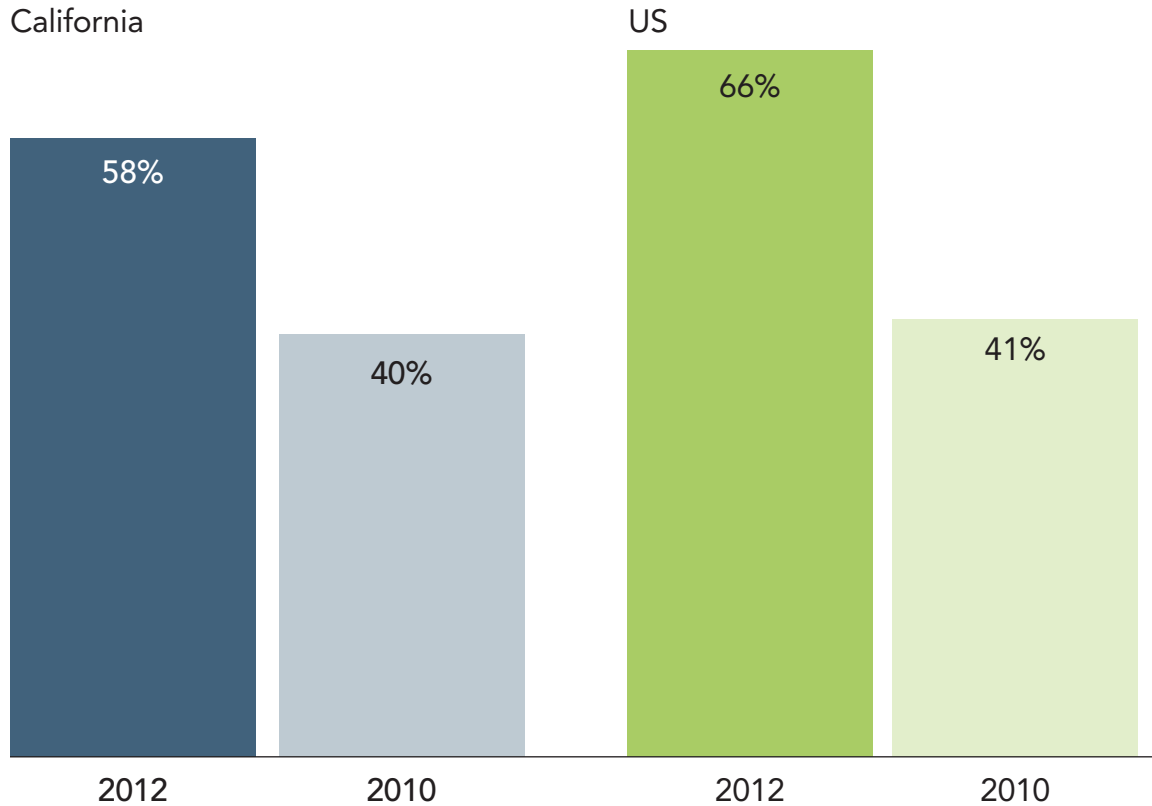
Note: Only office-based physicians were surveyed. HITECH created the Medicare and Medicaid EHR Incentive Programs, which provide financial incentives to eligible professionals and hospitals to adopt, implement, and meaningfully use certified EHR technology.

Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

## Physicians

Thirty-seven percent of California physicians surveyed in 2011 planned to participate in the Medi-Cal or Medicare EHR incentive programs.

# Physician Intent to Participate in an Incentive Program, California vs. US, 2010 and 2012



2012  $n=6,902$   
2010  $n=7,005$

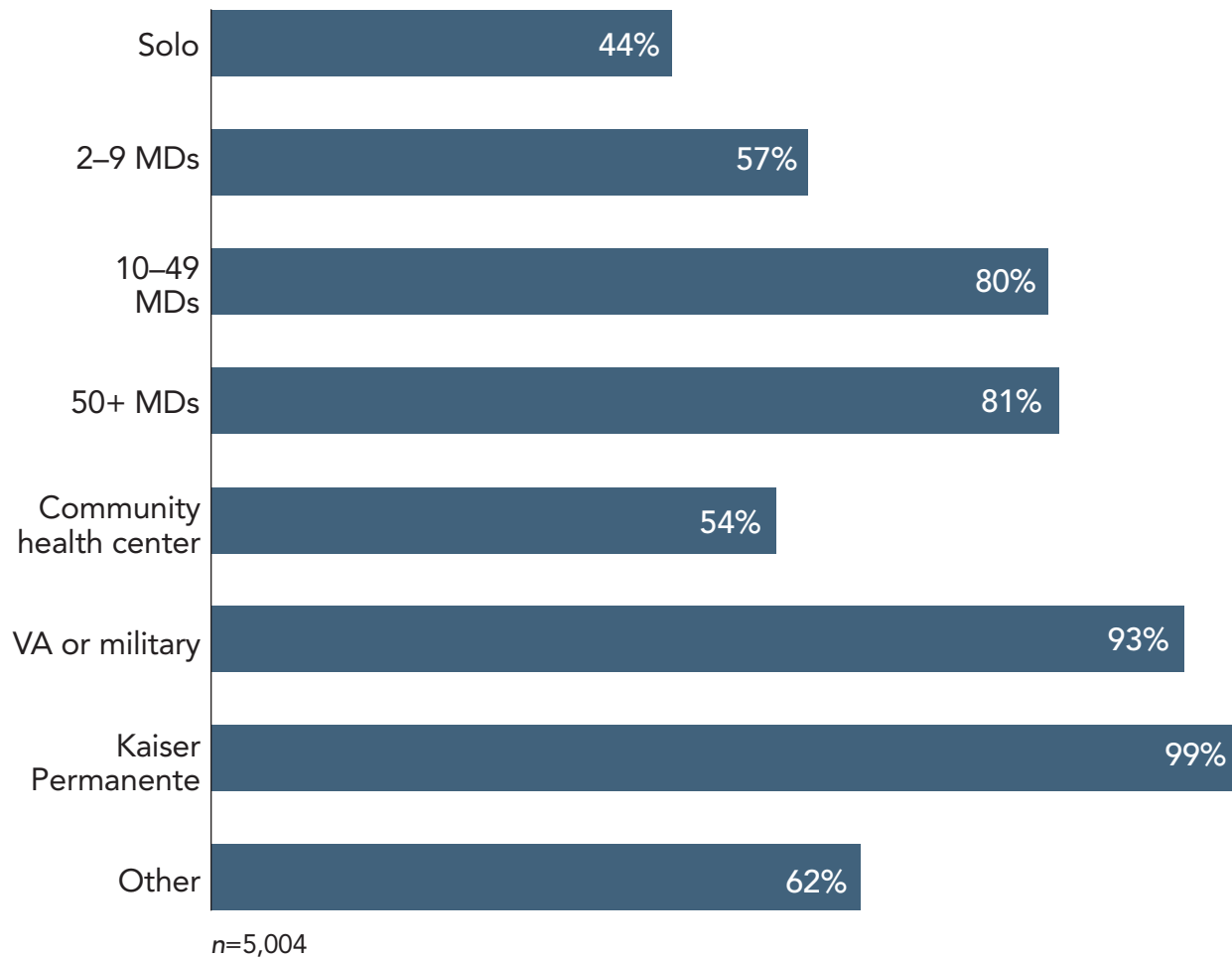
Note: Only office-based physicians were surveyed. These results may differ from the Coffman et al. results due to differences in the sample characteristics. This sample includes a larger number of physicians who practice at Kaiser Permanente or at other large practices.

Sources: C. J. Hsiao and E. Hing, *Use and Characteristics of Electronic Health Record Systems Among Office-Based Physician Practices: United States, 2001–2012*, NCHS Data Brief no. 111 (Hyattsville, MD: National Center for Health Statistics, 2012), [www.cdc.gov/nchs/data/databriefs/db111.pdf](http://www.cdc.gov/nchs/data/databriefs/db111.pdf);  
C. J. Hsiao et al., *Electronic Health Record Systems and Intent to Apply for Meaningful Use Incentives Among Office-Based Physician Practices: United States, 2001–2011*, NCHS Data Brief no. 79 (Hyattsville, MD: National Center for Health Statistics, 2011), [www.cdc.gov/nchs/data/databriefs/DB79.pdf](http://www.cdc.gov/nchs/data/databriefs/DB79.pdf).

## Physicians

Of California physicians surveyed in 2012, 58% planned to participate in an incentive program, a marked increase from 40% in 2010.

# EHR Availability, by Practice Size and Type, California, 2011



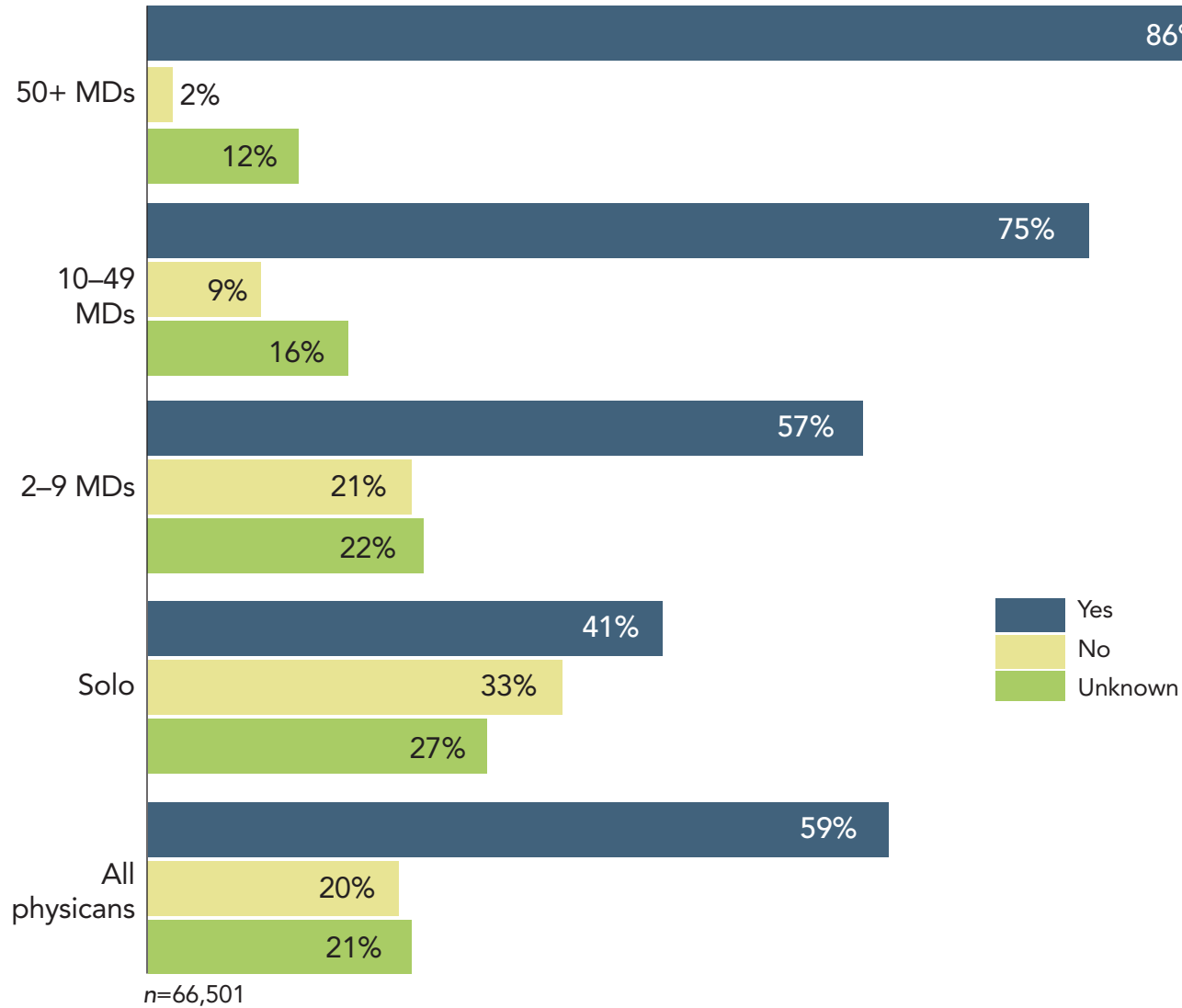
Note: Only office-based physicians were surveyed. Segments may not add to 100% due to rounding

Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

## Physicians

Solo practitioners in California had the lowest rate of EHR availability compared to physicians in group practices. Nearly all of Kaiser Permanente's physicians had access to an EHR.

# EHR Availability, by Practice Size, California, 2012



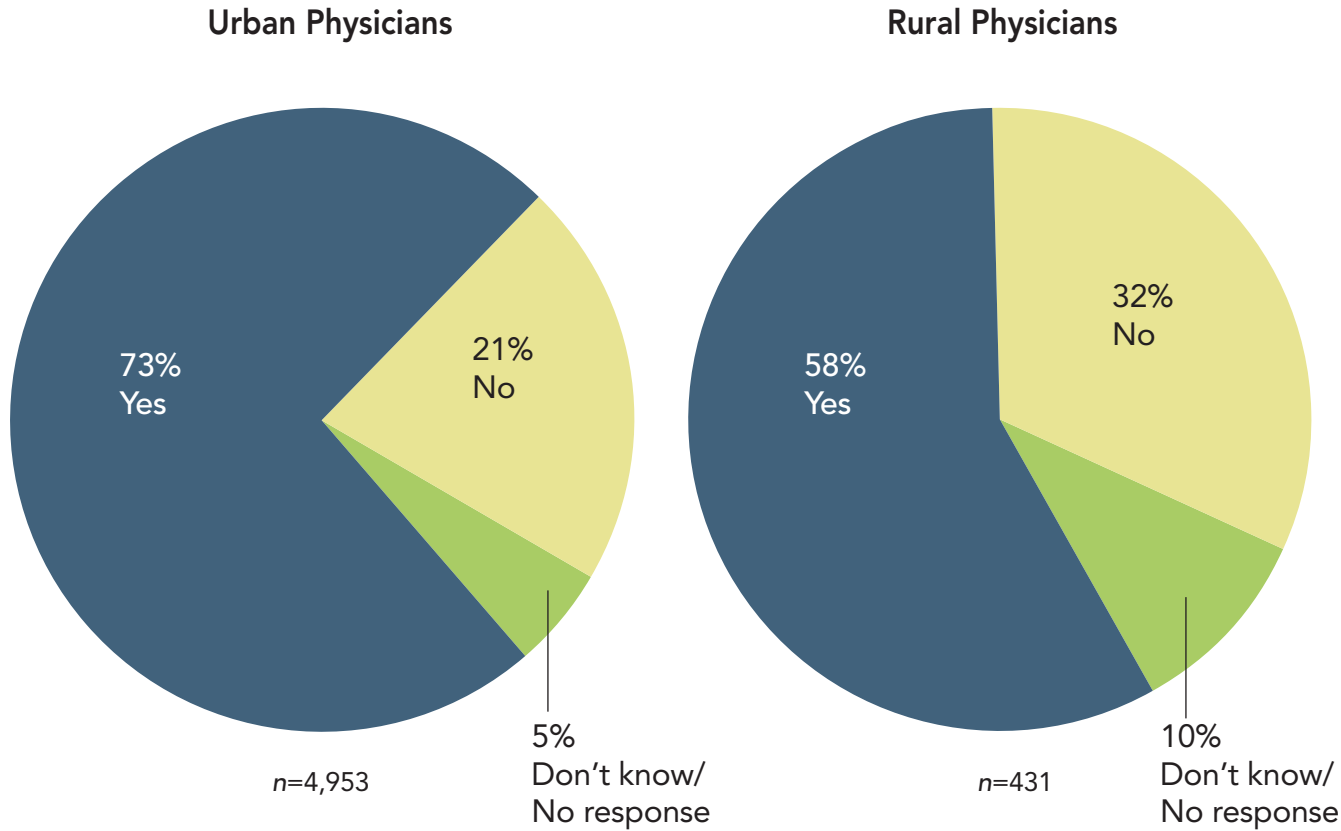
## Physicians

The majority of physicians (59%) had access to an EHR. Physicians in larger practices, which often have the infrastructure and resources to devote to information technology, were more likely than those in small and solo practices to have access to EHRs.

Note: Only office-based physicians were surveyed. Segments may not add to 100% due to rounding.

Source: SK&A database of office-based US physicians, 2013.

# EHR Availability, Urban vs. Rural Areas, California, 2011



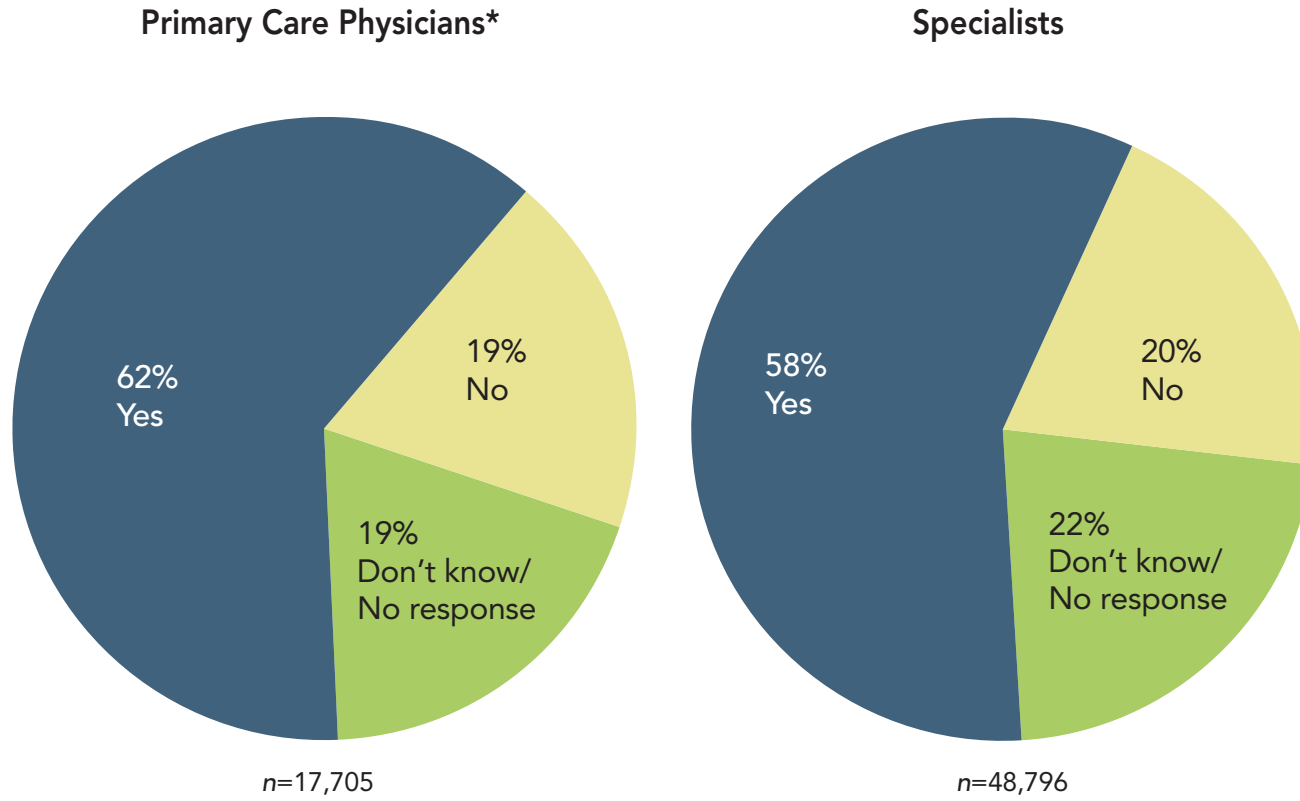
## Physicians

California physicians in urban areas were more likely than those in rural areas to have an EHR available at their main practice location.

Note: Only office-based physicians were surveyed. Segments may not add to 100% due to rounding.

Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

# EHR Availability, Primary Care Providers vs. Specialists, California, 2012



## Physicians

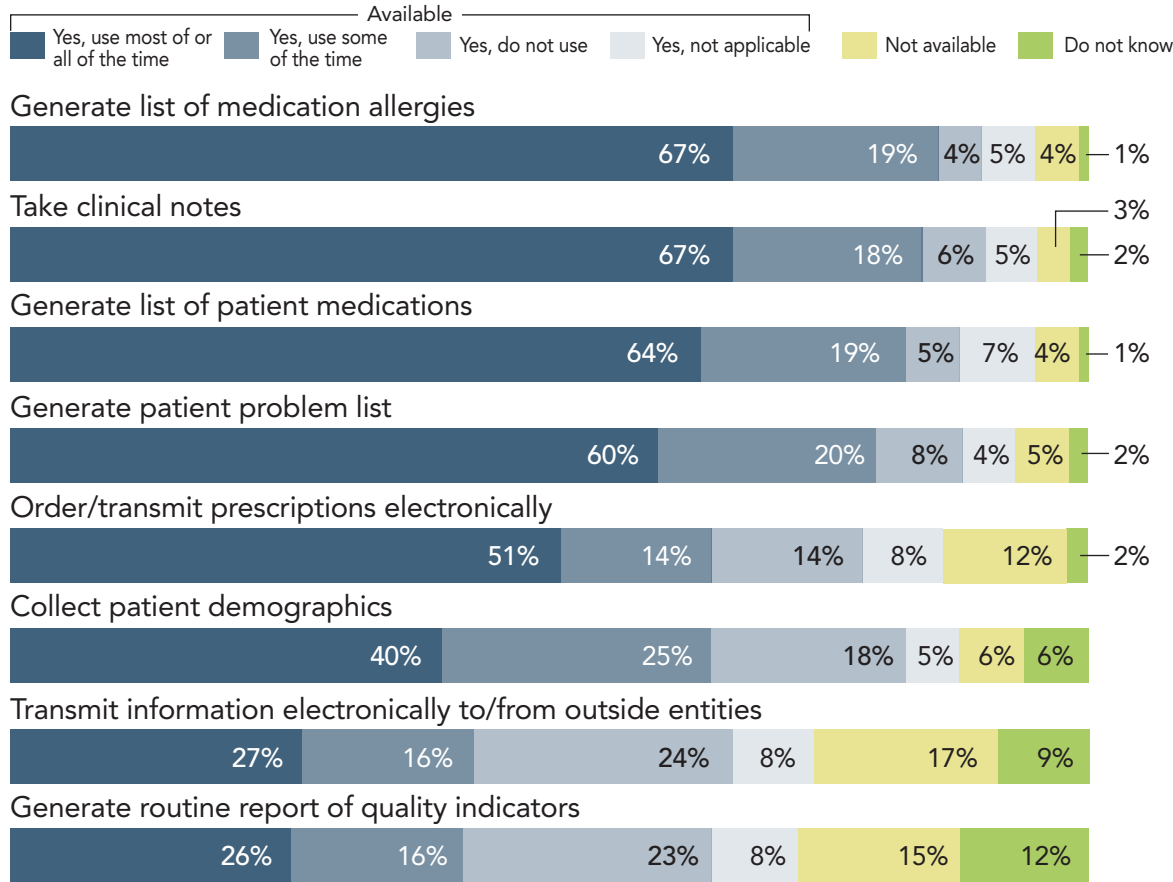
A 2012 survey found that California's primary care physicians had only slightly greater rates of EHR availability than specialists. Physician specialty is not a strong predictor of EHR availability.

\*Primary care includes family practice, general practice, and internal medicine.

Note: Only office-based physicians were surveyed.

Source: SK&A database of office-based US physicians, 2013.

# Availability of EHR Functions Meeting Core Objectives, California, 2011



n=3,420 to 3,473\*

\*The value of n varies across the functions, as some respondents chose not to answer some questions.

Note: Only office-based physicians were surveyed. Achieving meaningful use requires meeting "core" and "menu" objectives. All core objectives are required. Providers and hospitals may choose which objectives to meet from the meaningful use menu set. For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services' (CMS) "Meaningful Use" page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html). Segments may not add to 100% due to rounding.

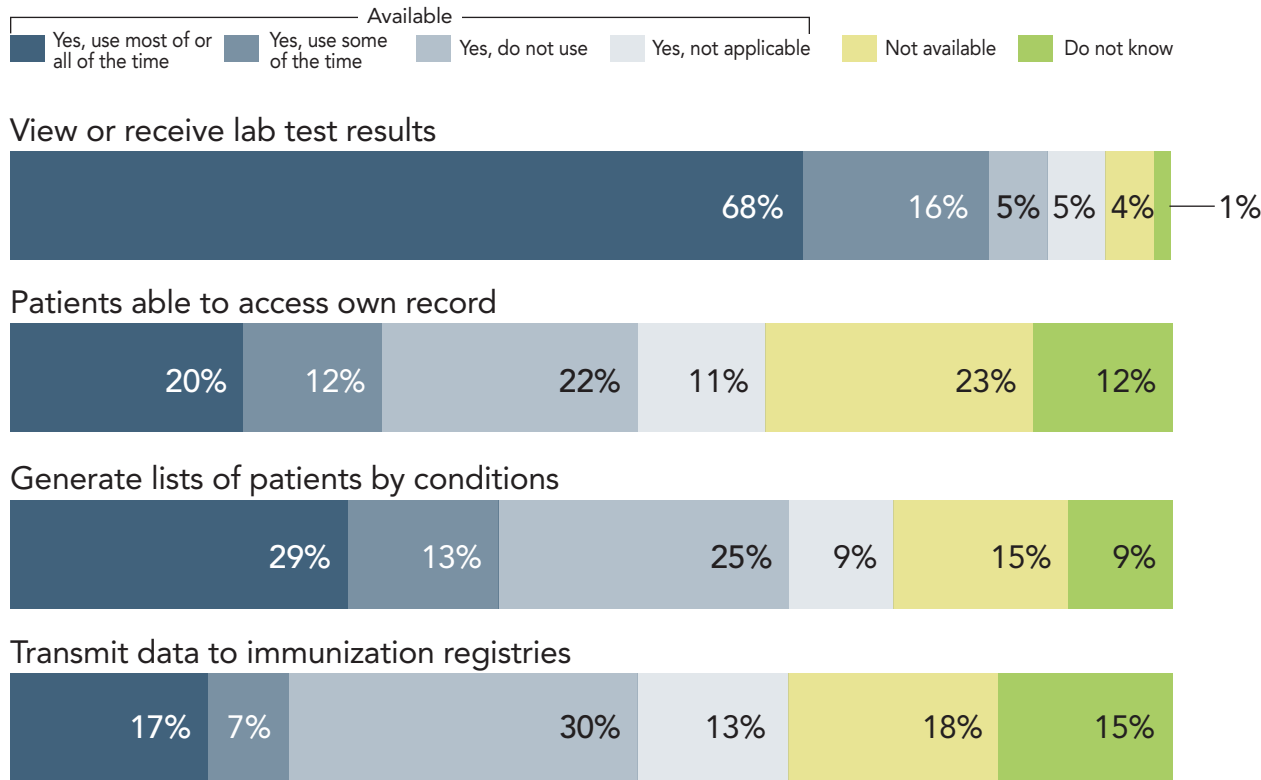
Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

## Physicians

Physicians with EHRs used certain features of the technology more than others. The majority of physicians reported that they use their EHR to generate lists of medication allergies (86%) and to take clinical notes (85%). Fewer physicians used their EHRs to generate reports of quality indicators (42%) or to transmit information to outside entities (43%).



# Availability of EHR Functions Meeting Menu Objectives, California, 2011



n=3,420 to 3,473\*

\*The value of n varies across the functions, as some respondents chose not to answer some questions.

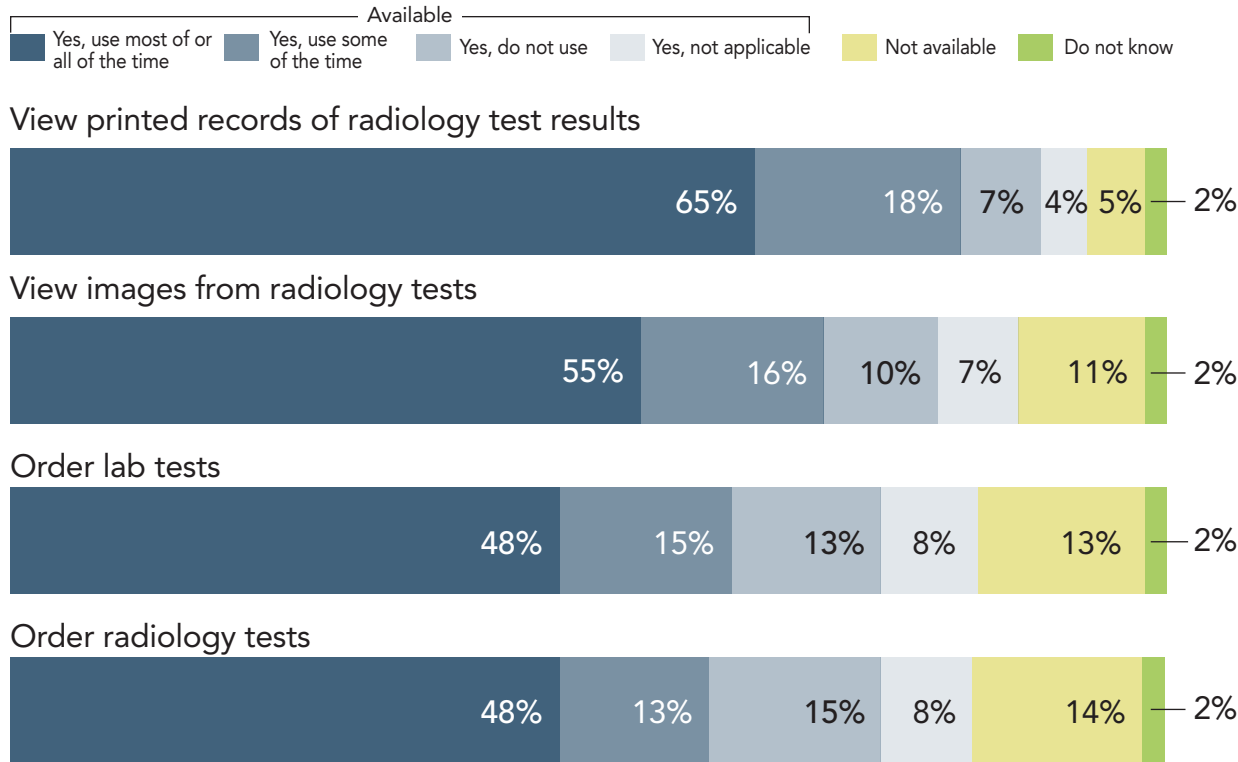
Note: Only office-based physicians were surveyed. Achieving meaningful use requires meeting "core" and "menu" objectives. All core objectives are required. Providers and hospitals may choose which objectives to meet from the meaningful use menu set. For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services' (CMS) "Meaningful Use" page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html). Segments may not add to 100% due to rounding.

Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

## Physicians

Of the EHR meaningful use menu objectives that providers can choose from to satisfy incentive requirements, physicians were more likely to use features of their EHRs that facilitated direct patient care (viewing lab results) than those intended for population health management (transmitting data to immunization registries).

# Availability of Lab and Radiology EHR Functions Not Included in Core Objectives, California, 2011



n=3,420 to 3,473\*

\*The value of n varies across the functions, as some respondents chose not to answer some questions.

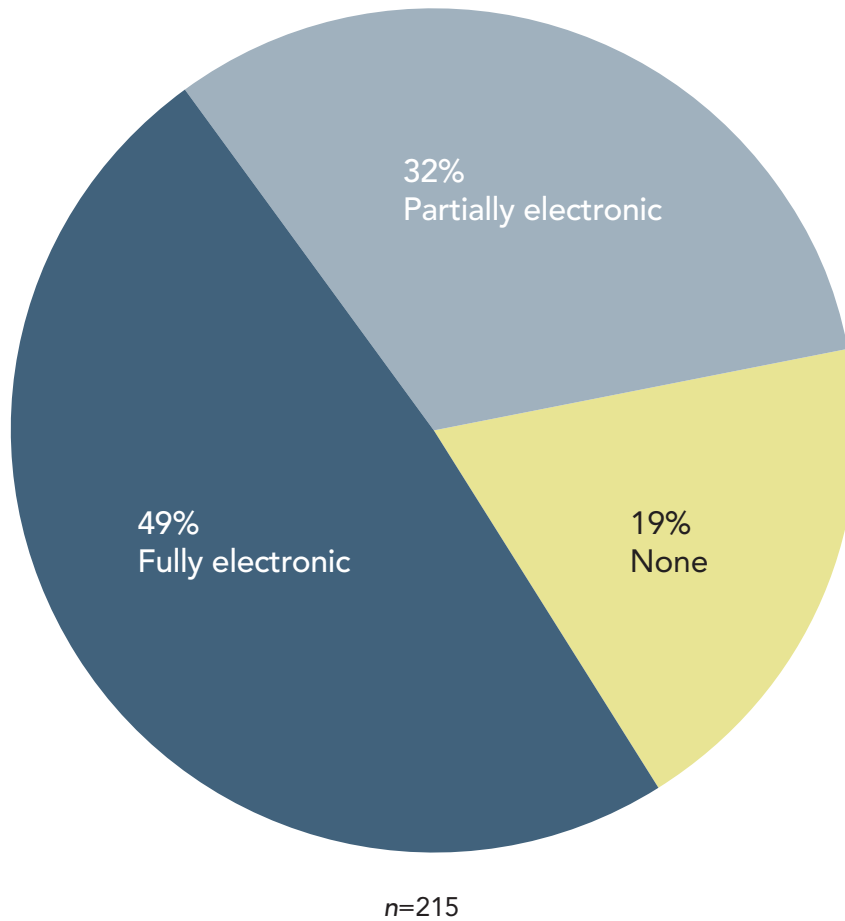
Note: Only office-based physicians were surveyed. For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services' (CMS) "Meaningful Use" page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html). Segments may not add to 100% due to rounding.

Source: Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians* (Oakland CA: California HealthCare Foundation), [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

## Physicians

Many California physicians use their EHRs for tasks that are not included in the CMS core or menu objectives required for incentive payments. More than 60% of physicians with EHRs used their systems to order lab or radiology tests some or most of the time.

# Hospital EHR Implementation Status, California, 2012

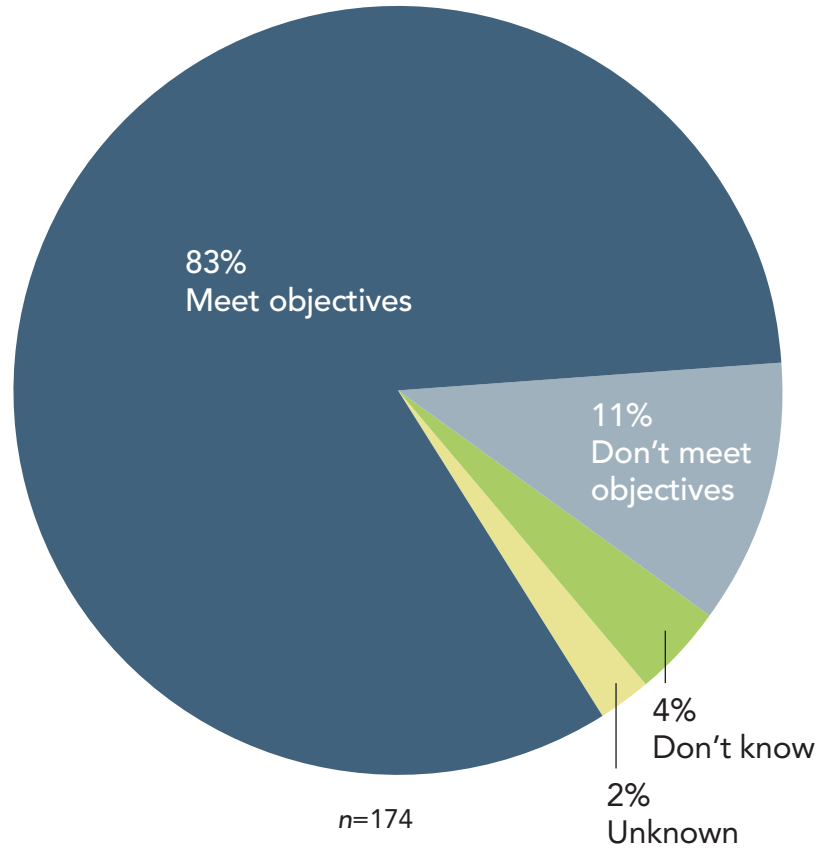


## Hospitals

About half of California hospitals had an EHR in 2012. An additional 32% had a system that was partially electronic and partially paper-based. Use of EHRs in a hospital can improve the coordination and quality of care.

Source: AHA Annual Survey Information Technology Supplement Survey, 2012.

# Hospital EHRs Meeting Meaningful Use Objectives, California, 2012



## Hospitals

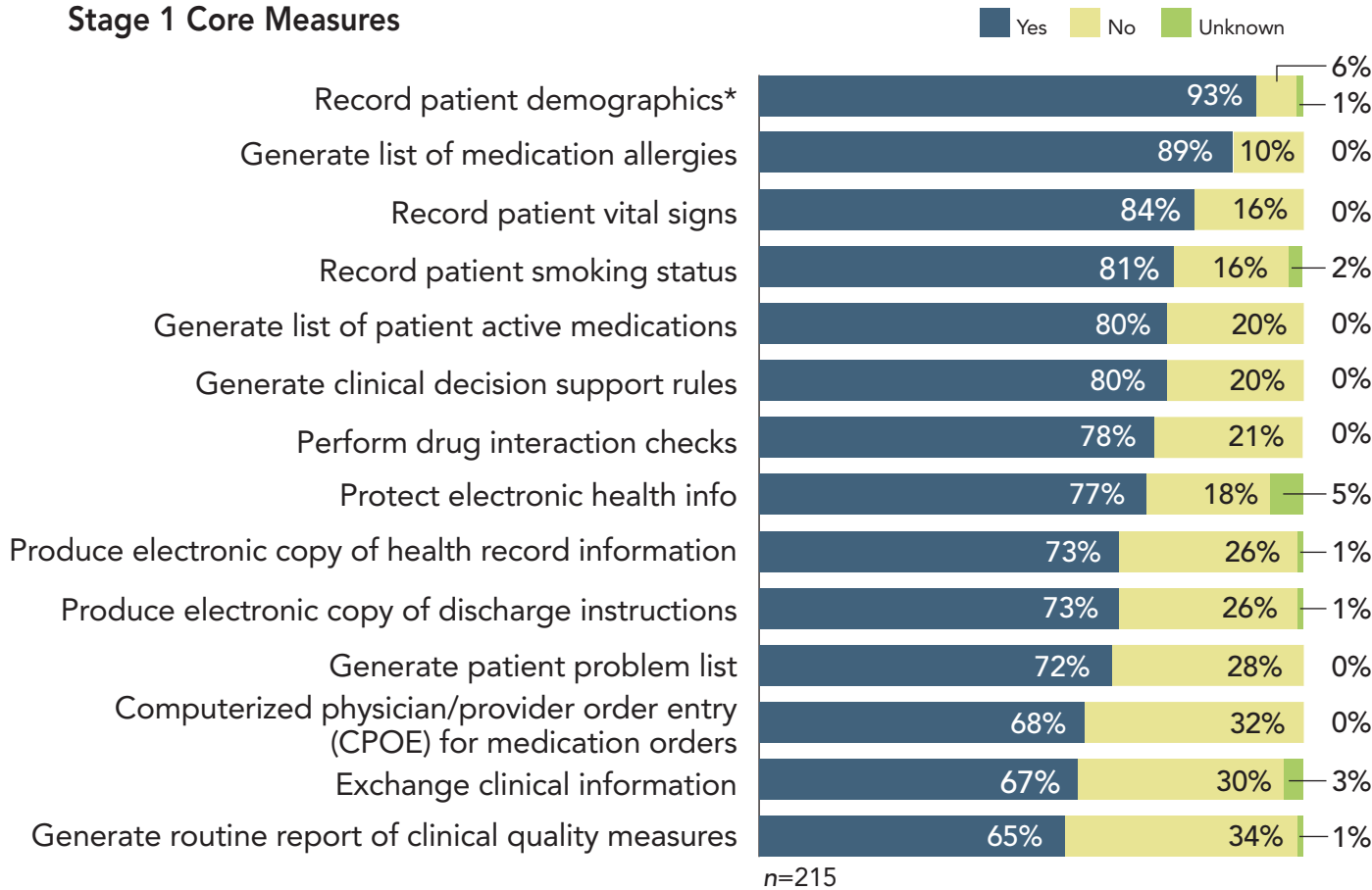
Among California hospitals with EHRs, 83% had a system that met all of the objectives and completed the certification process.

Note: To increase the adoption and use of EHRs, the federal government is offering incentive payments to hospitals and providers that achieve "meaningful use" of the technology as defined by federal regulations. A certified EHR has been approved by CMS as able to meet 100% of the meaningful use requirements. For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services' (CMS) "Meaningful Use" page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html).

Source: AHA Annual Survey Information Technology Supplement Survey, 2012.

# Hospital Capability to Meet Meaningful Use Core Objectives, California, 2012

## Stage 1 Core Measures



\*Stage 1 demographics measure includes gender, date of birth, race, ethnicity, and preferred language.

Note: The EHR incentive programs involve three stages, with increasing requirements for participation as the stages progress. Achieving meaningful use requires meeting "core" and "menu" objectives. All core objectives are required. Providers and hospitals are also required to choose objectives to meet from the menu set. For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services' (CMS) "Meaningful Use" page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html). Segments may not add to 100% due to rounding.

Source: AHA Annual Survey Information Technology Supplement Survey, 2012.

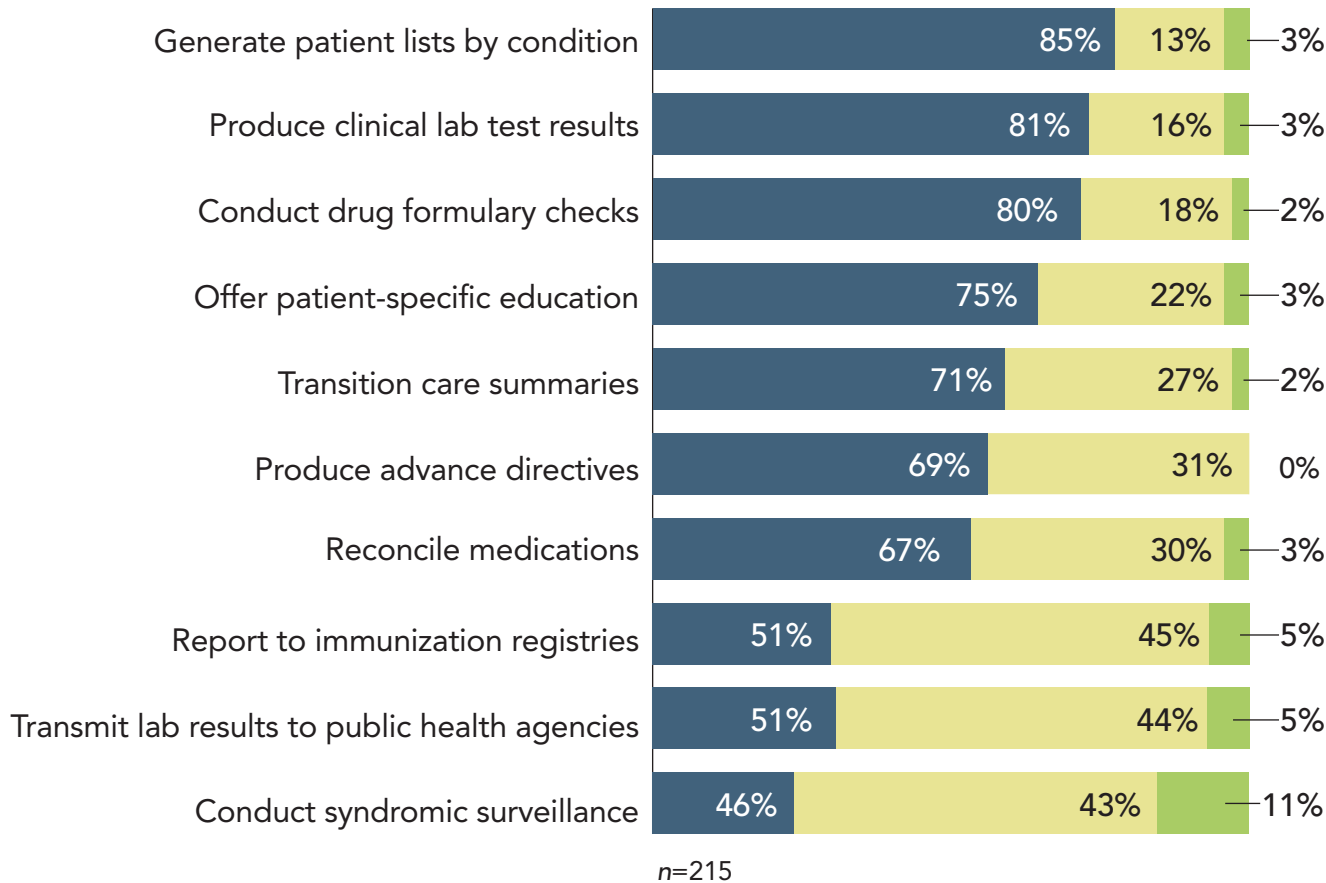
## Hospitals

Hospitals must demonstrate that their EHRs meet the "core" objectives as defined by CMS before receiving incentive payments. California hospitals' EHRs varied in their ability to meet these objectives. Almost all hospitals' EHR systems were able to record demographics (93%), while 65% could track clinical quality measures.

# Hospital Ability to Meet Meaningful Use Menu Objectives, California, 2012

## Stage 1 Menu Measures

■ Yes ■ No ■ Unknown



Note: The EHR incentive programs involve three stages, with increasing requirements for participation as the stages progress. Achieving meaningful use requires meeting “core” and “menu” objectives. All core objectives are required. For a full list of meaningful use objectives, visit the Centers for Medicare Medicaid Services’ (CMS) “Meaningful Use” page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html). Segments may not add to 100% due to rounding.

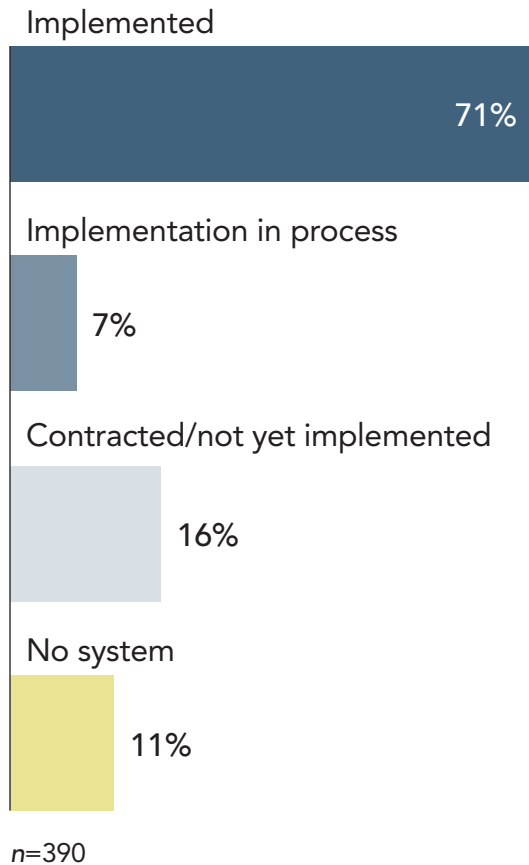
Source: AHA Annual Survey Information Technology Supplement Survey, 2012.

## Hospitals

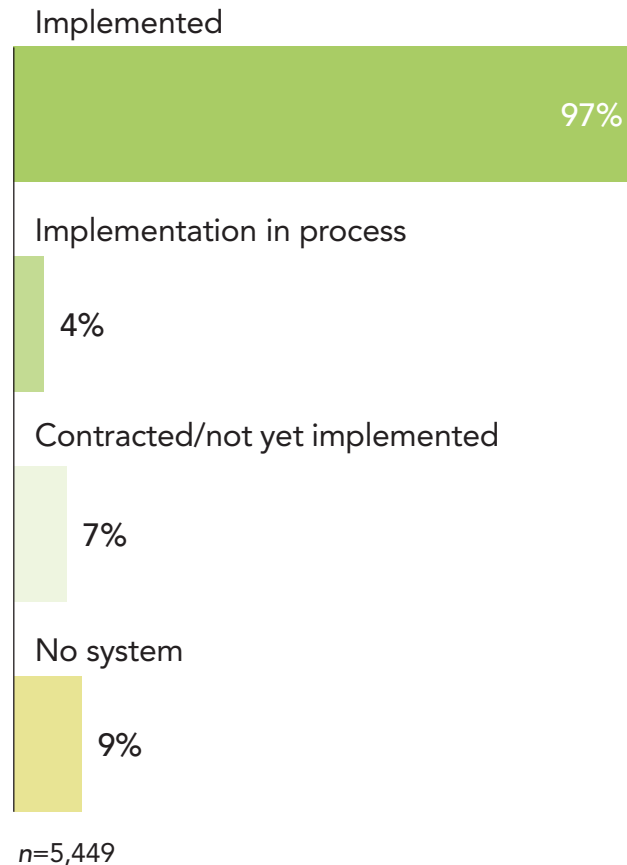
Providers and hospitals are also required to choose from a menu of noncore meaningful use objectives — “menu” objectives — that they will meet before receiving incentive payments. Some of these objectives were more easily met than others. Almost all hospitals’ EHR systems were able to provide patient lists by condition (85%), while less than half (46%) were able to conduct syndromic surveillance, which helps with early detection of disease outbreaks.

# Implementation of Hospital Clinical Decision Support Systems, California vs US, 2012

## California



## US



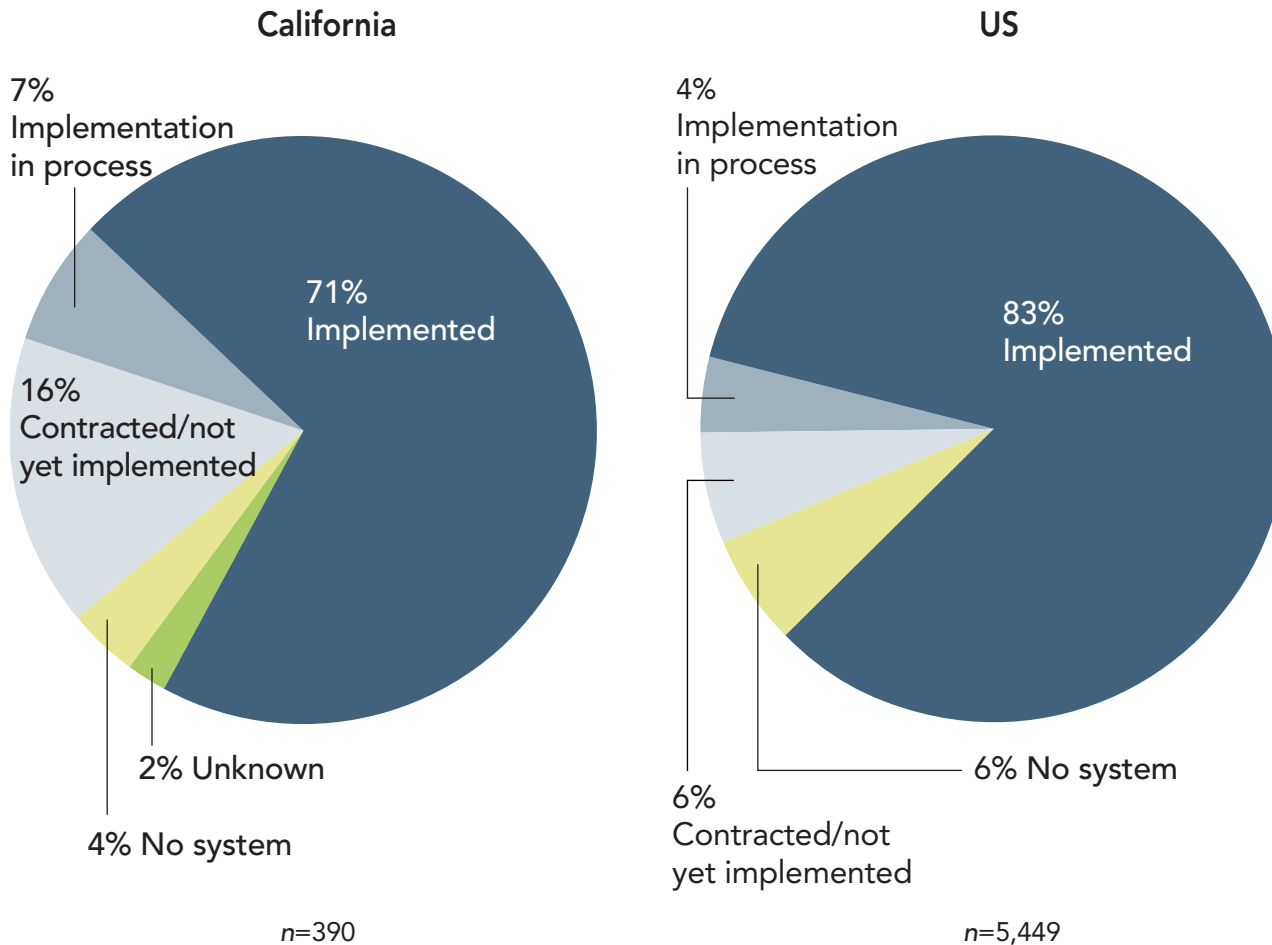
## Hospitals

Clinical decision support systems are software tools designed to help care providers with decisionmaking tasks. Although the majority of California hospitals (71%) had these systems installed, the state lags behind the national average of 97%.

Note: Percentages total more than 100%, as 18 California and 665 US hospitals have more than one system installed.

Source: HIMSS Analytics Database, 2013.

# Implementation of Hospital Clinical Data Repository, California vs US, 2012



## Hospitals

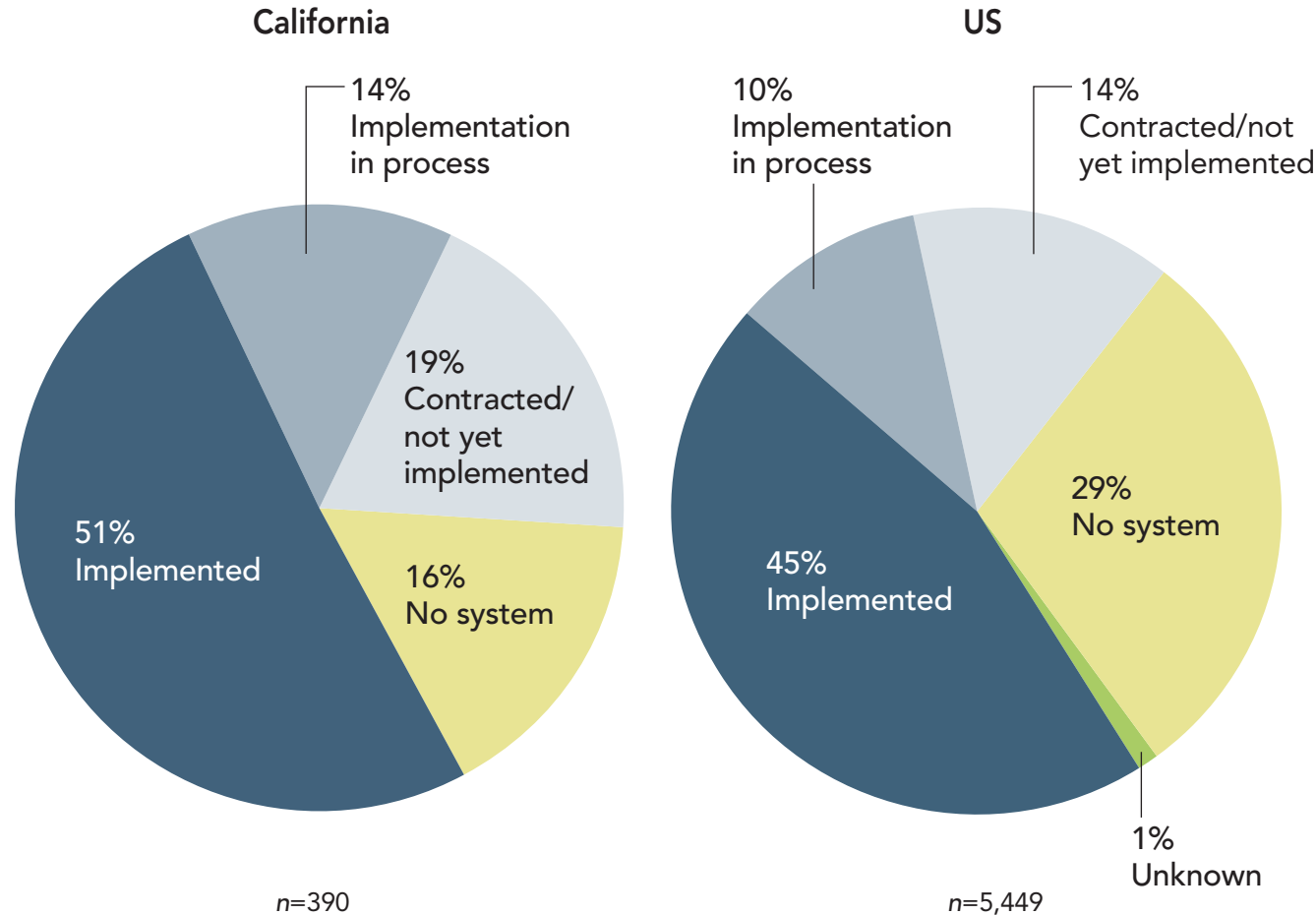
Seventy-one percent of California hospitals had a clinical data repository, a centralized database that consolidates data from different clinical sources to provide a unified view of a single patient. This rate is slightly lower than the nation's (83%).

Note: Segments may not add to 100% due to rounding.

Source: HIMSS Analytics Database, 2013.



# Implementation of Hospital Computerized Provider Order Entry, California vs. US, 2012



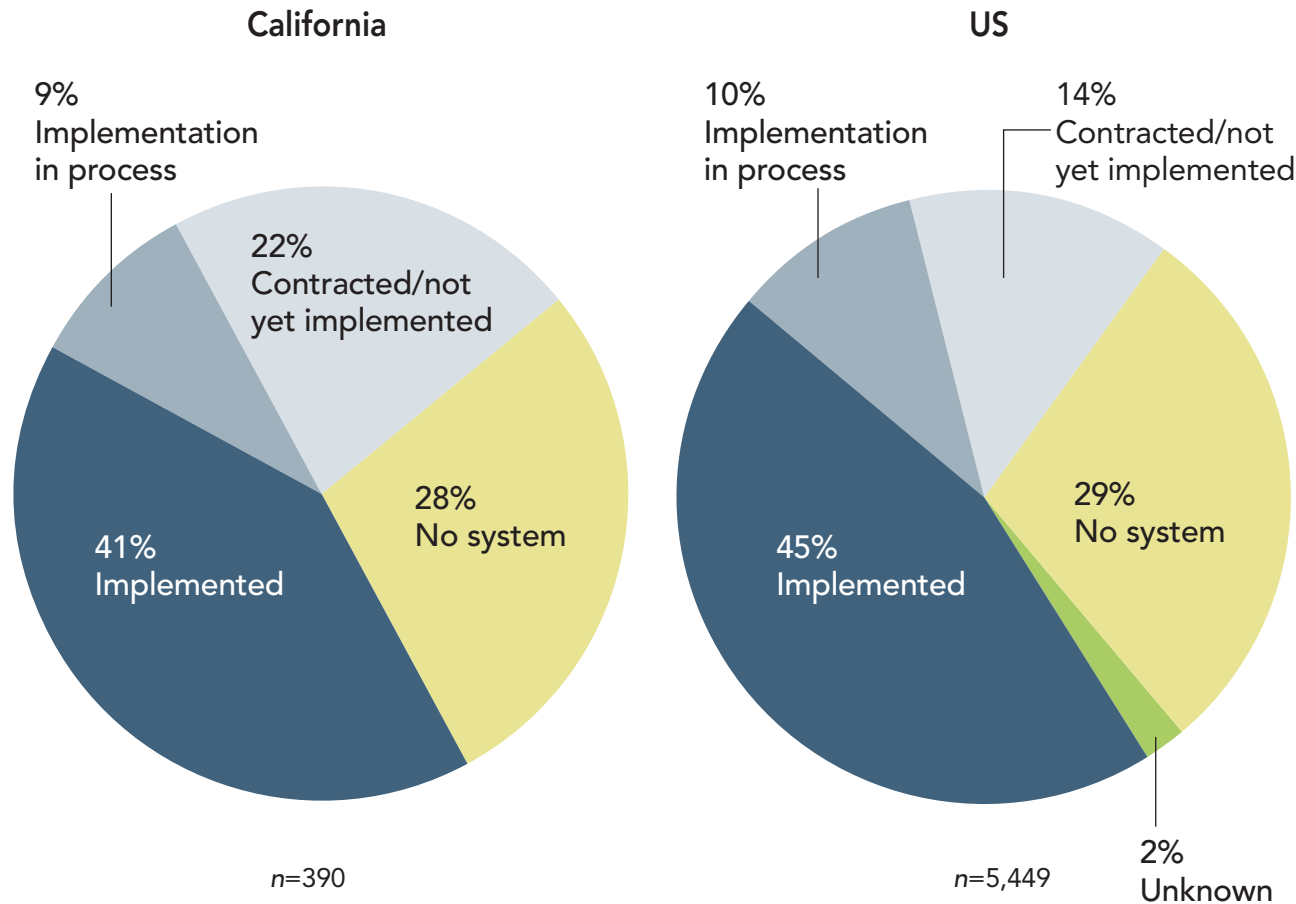
## Hospitals

Slightly more than half of California hospitals had computerized physician/provider order entry (CPOE) systems, compared to 45% of US hospitals. CPOE allows providers to electronically order and manage patient services such as lab tests, diagnostic procedures, and medication orders.

Note: Segments may not add to 100% due to rounding.

Source: HIMSS Analytics Database, 2013.

# Implementation of Hospital Physician Documentation Function, California vs US, 2012



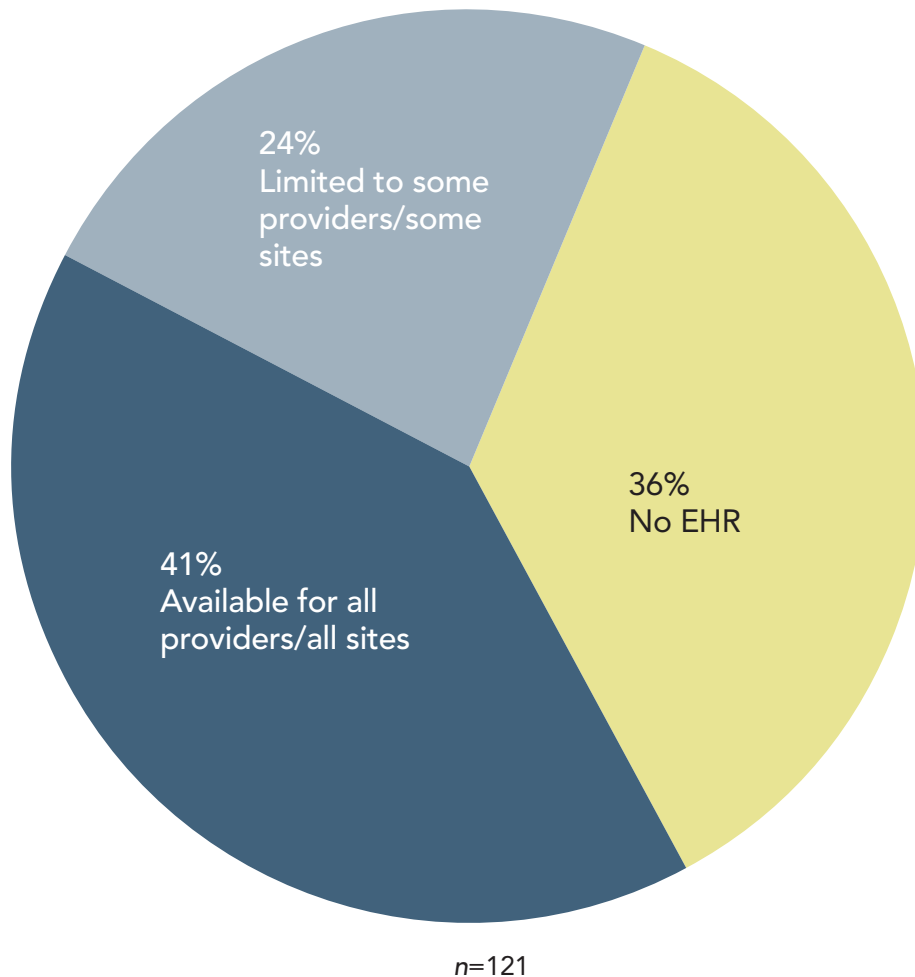
## Hospitals

About half of California hospitals had a physician documentation system installed or were in the process of installing one. These systems enable providers to electronically enter patient encounter notes directly into an EHR.

Note: Nine US hospitals had more than one system installed. Only structured template documentation was considered physician documentation in this study; dictation and transcription applications did not qualify.

Source: HIMSS Analytics Database, 2013.

# EHR Availability at Community Health Centers, California, 2011



Note: Segments may not add to 100% due to rounding.

Source: "Electronic Health Record (EHR) Information: 2011 California Data," Health Resources and Services Administration, <http://bphc.hrsa.gov/uds/view.aspx?q=rehr&year=2011&state=CA>.

## Community Health Centers

Sixty-five percent of community health centers had an EHR, although only 41% had a system that was available to all providers at all sites. More than one-third of community health centers had no EHR.

# Available Meaningful Use Functionality, Community Health Centers with EHRs, California, 2011

Patient history and demographic information

99%

Protection of electronic health information

97%

Computerized physician/provider order entry (CPOE) for lab tests

96%

Capacity to provide clinical summaries for patients for each office visit

95%

Ability to provide patients with a copy of their health information on request

94%

Reminders for guideline-based interventions or screening tests

94%

Capability to exchange key clinical information among providers of care and patient-authorized entities electronically

86%

Reporting to immunization registries done electronically

59%

n=78

Note: Includes health centers whose systems have the capability but it is turned off or not used. To increase the adoption and use of EHRs, the federal government is offering incentive payments to hospitals and providers that achieve “meaningful use” of the technology as defined by federal regulations. For a full list of meaningful use objectives, visit the Centers for Medicare and Medicaid Services’ (CMS) “Meaningful Use” page, [www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html).

Source: “Electronic Health Record (EHR) Information: 2011 California Data,” Health Resources and Services Administration, <http://bphc.hrsa.gov/uds/view.aspx?q=rehr&year=2011&state=CA>.

## Community Health Centers

Of those community health centers with EHRs, almost all have EHRs with functions that meet meaningful use objectives. Functions used in individual patient care (such as ordering lab tests and providing clinical summaries) were the most prevalent.

# Available Functionality,\* Community Health Centers with EHRs, California, 2011

Clinical notes

99%

Electronic entry of prescriptions

96%

Computerized physician/provider order entry (CPOE) for radiology tests

76%

Use an EHR to report clinical uniform data system data†

73%

Notifiable diseases: notification sent electronically

44%

n=78

\*Functionality that is not part of meaningful use objectives.

†Uniform data system (UDS) is a system of information appropriate for reviewing the operation and performance of health centers. UDS is a reporting requirement for Health Resources and Service Administration grantees. The data are used to improve health center performance and operation, and to identify trends over time.

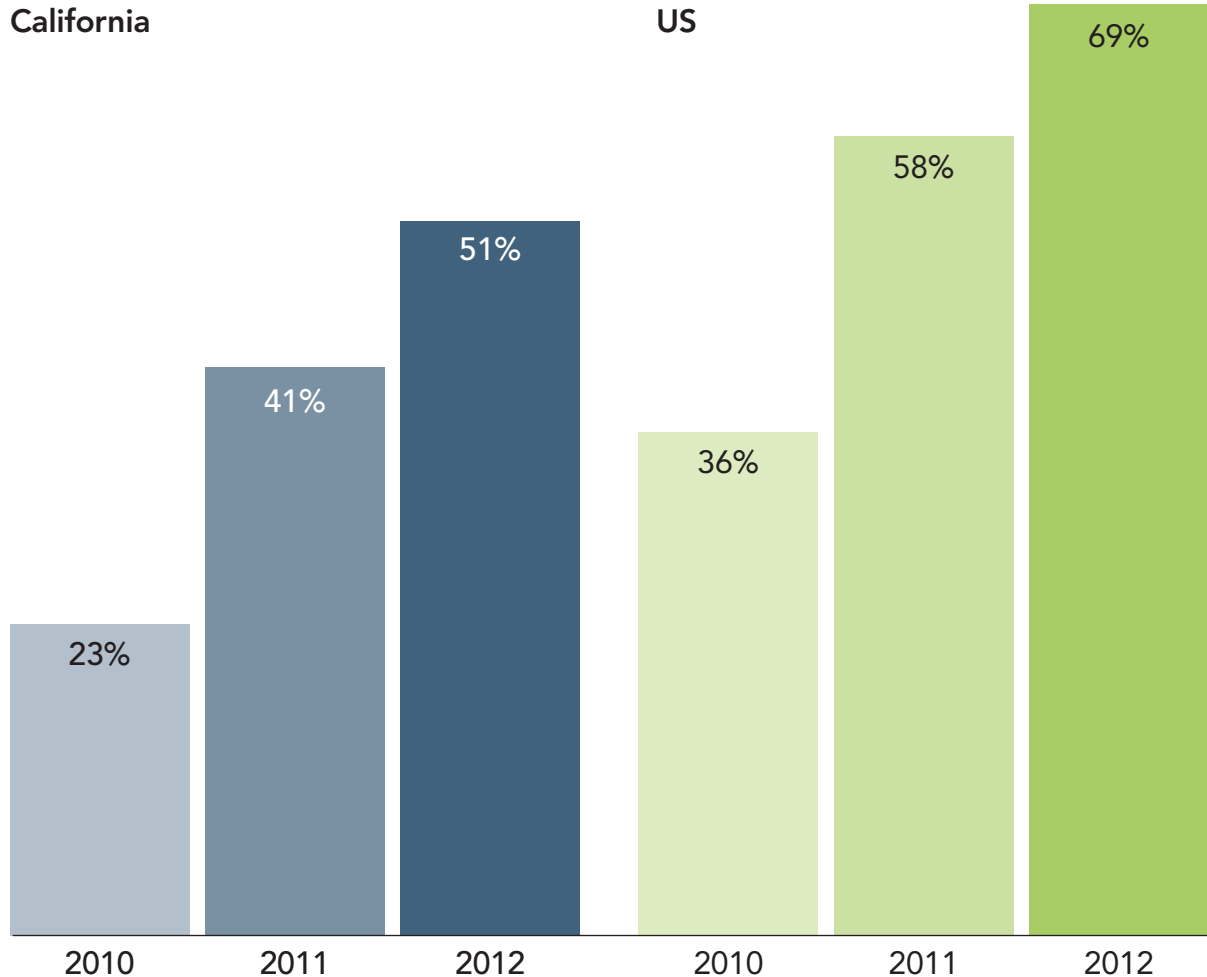
Note: Includes health centers whose systems have the capability but have it turned off or do not use it. CMS is Centers for Medicare and Medicaid Services.

Source: "Electronic Health Record (EHR) Information: 2011 California Data," Health Resources and Services Administration, <http://bphc.hrsa.gov/uds/view.aspx?q=rehr&year=2011&state=CA>.

## Community Health Centers

EHRs come equipped with functions that are not part of CMS's meaningful use objectives. Among health centers with EHRs, the least used of these functions was the ability to electronically inform government authorities of notifiable diseases, which are those that must be reported to public health authorities upon diagnosis, usually because they spread quickly and pose a serious public health threat.

# Physician E-prescribing Adoption, California vs. US, 2010–2012



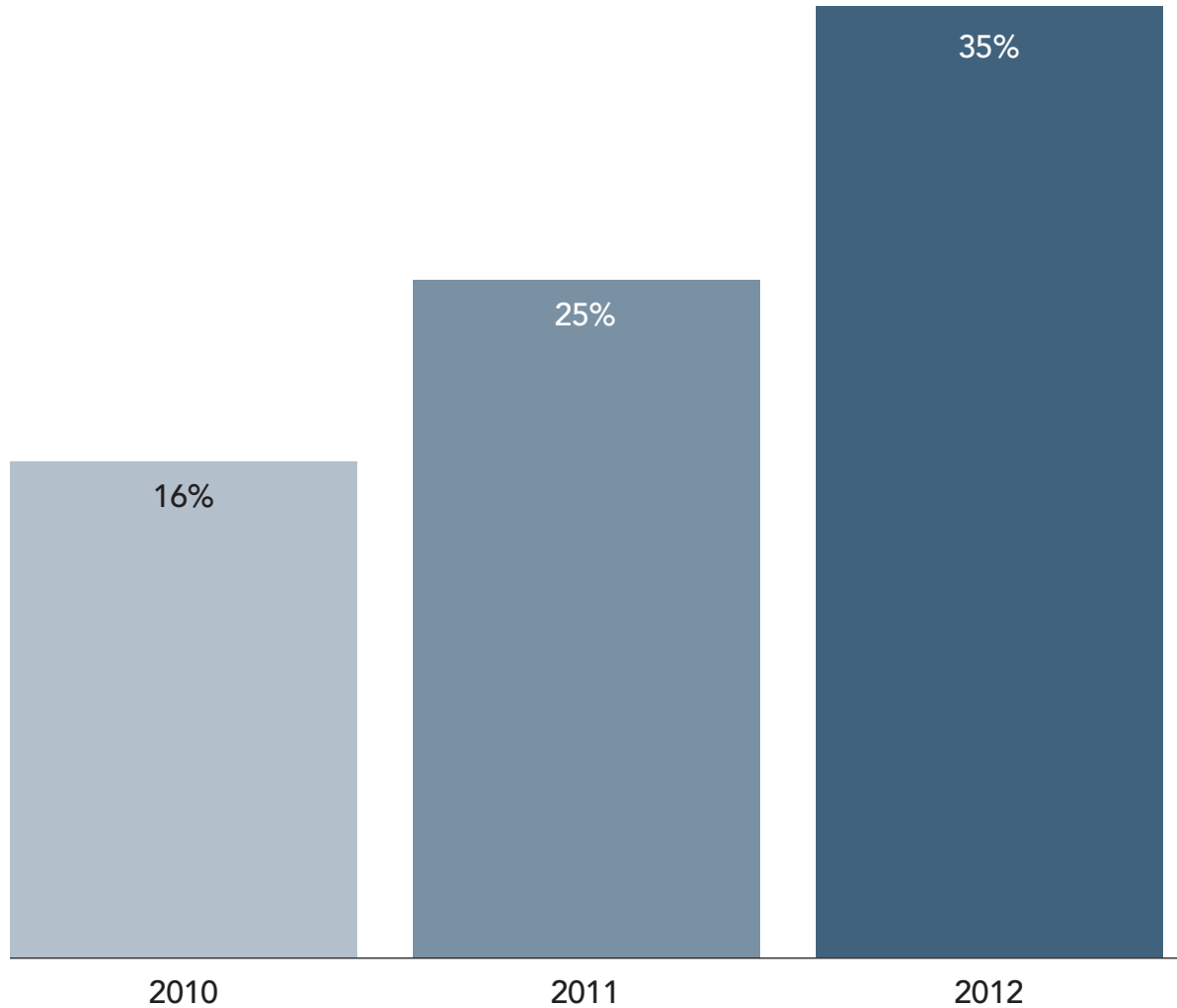
Note: Total number of physicians per state sourced from SK&A. In addition to physicians, nurse practitioners and physician assistants may also e-prescribe.

Source: *National Progress Report on ePrescribing and Safe-Rx Rankings* (Surescripts, 2010, 2011, 2012), [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).

## E-prescribing

In 2012, slightly more than half of California physicians sent prescriptions electronically to pharmacies. Nationally, 69% of physicians were e-prescribing. Electronic routing eliminates re-keying information at the pharmacy, increasing accuracy and improving efficiency.

## Electronic Routing of Prescriptions, California, 2010–2012



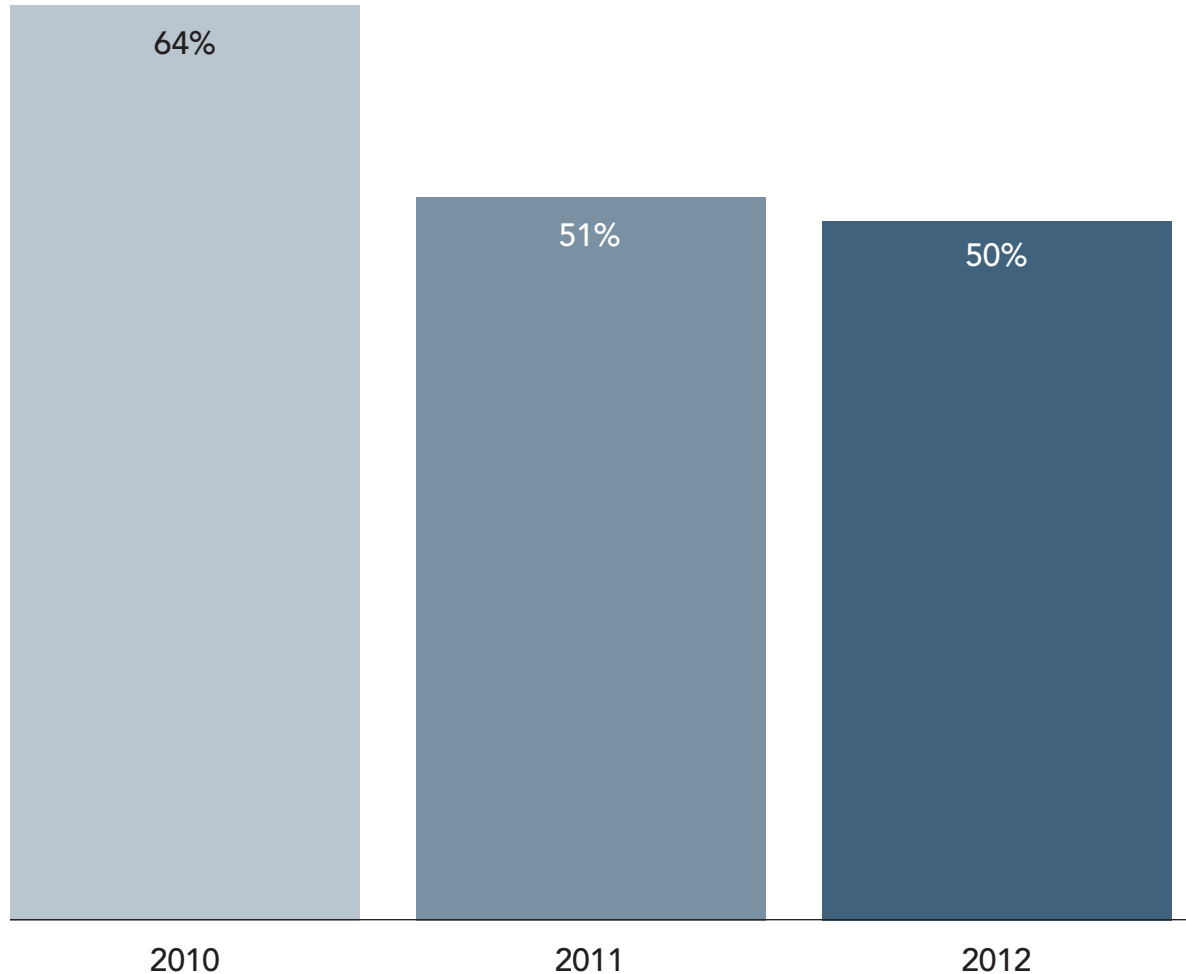
### E-prescribing

In 2012, 35% of prescriptions in California were routed electronically, compared to 25% in 2011.

Nationally, e-prescription routing increased 38% in 2012 (not shown).

Sources: Surescripts National Progress Report of ePrescribing and Safe Rx Rankings, Year 2012, [www.surescripts.com/saferx](http://www.surescripts.com/saferx);  
National Progress Report of ePrescribing and Interoperable Health Care (Surescripts, 2010, 2011, 2012), [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).

## Patients with Electronically Available Prescription Benefit Information, California, 2010–2012



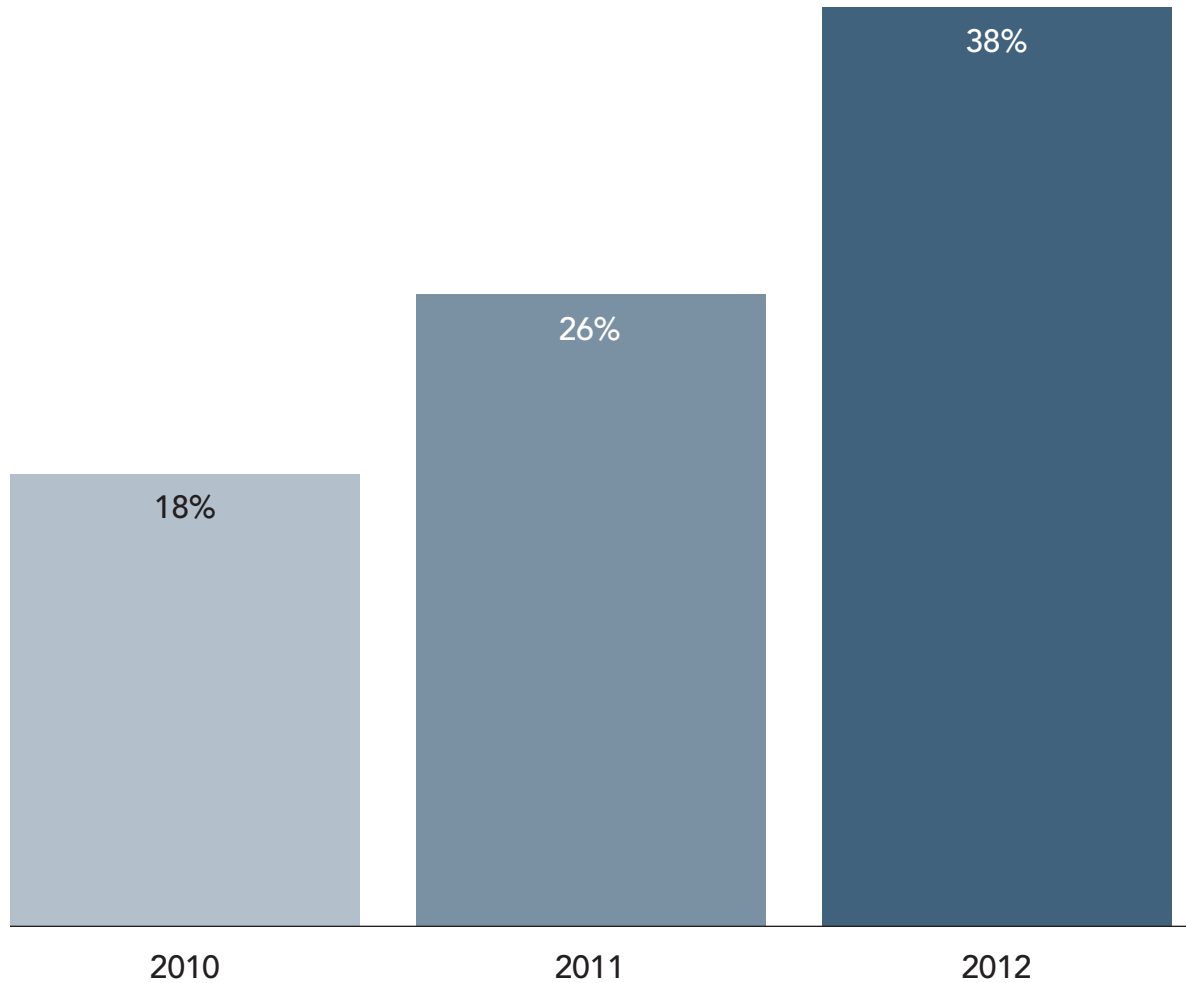
### E-prescribing

The percentage of California patients with electronically available formulary and eligibility information has decreased since 2010, despite the cost savings that can result from electronic access to this information. When formulary issues can be resolved electronically, administrative costs are reduced, and patients may save money when prescribers can choose lower-cost drug alternatives.

Source: *National Progress Report of ePrescribing and Interoperable Health Care* (Surescripts, 2010, 2011, 2012), [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).



## Patient Visits Involving Prescription Benefit Request, California, 2010–2012

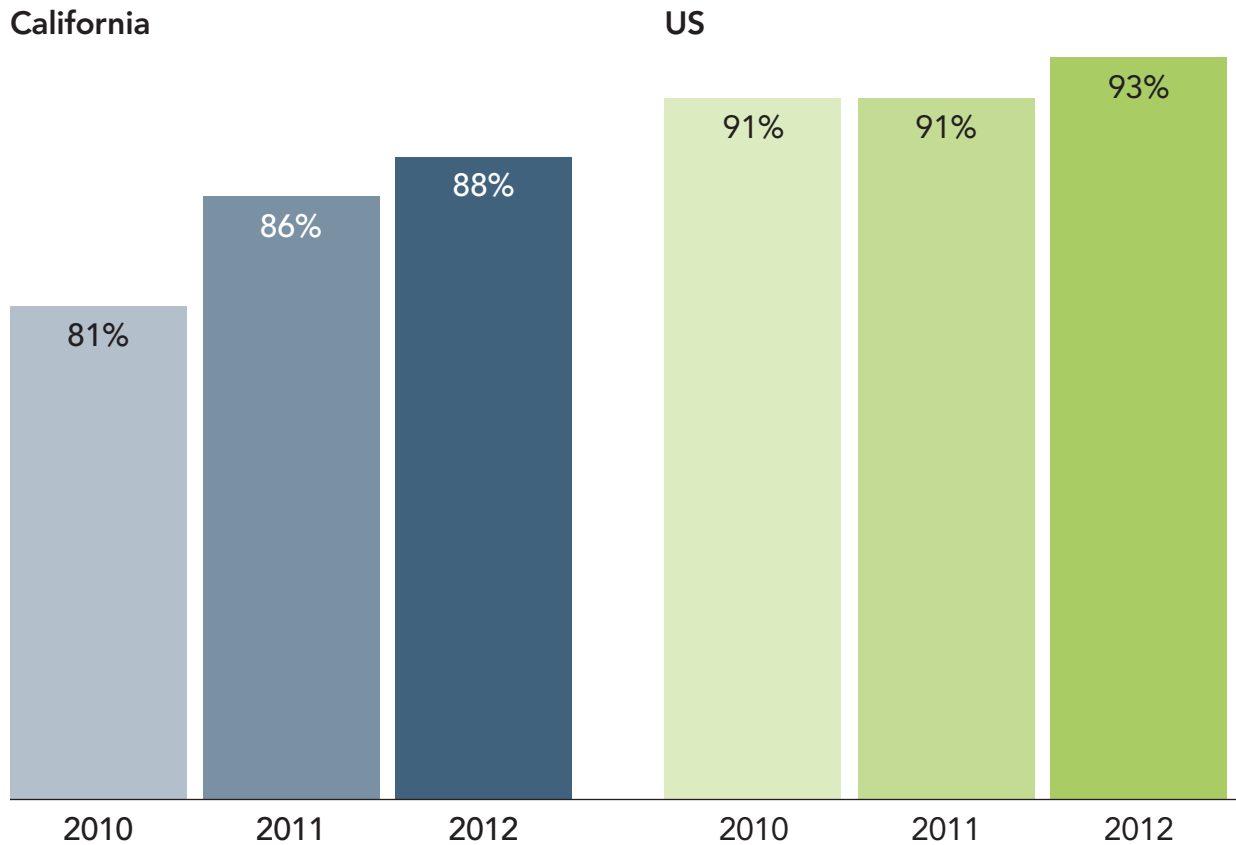


### E-prescribing

Physicians electronically requested prescription benefit information in 38% of patient visits in 2012. This percentage has increased steadily since 2010, even though less patient eligibility and formulary information is electronically available than in prior years (see page 31).

Source: *National Progress Report of ePrescribing and Interoperable Health Care* (Surescripts, 2010, 2011, 2012), [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).

# Pharmacies Activated for E-prescribing, California vs. US, 2010–2012



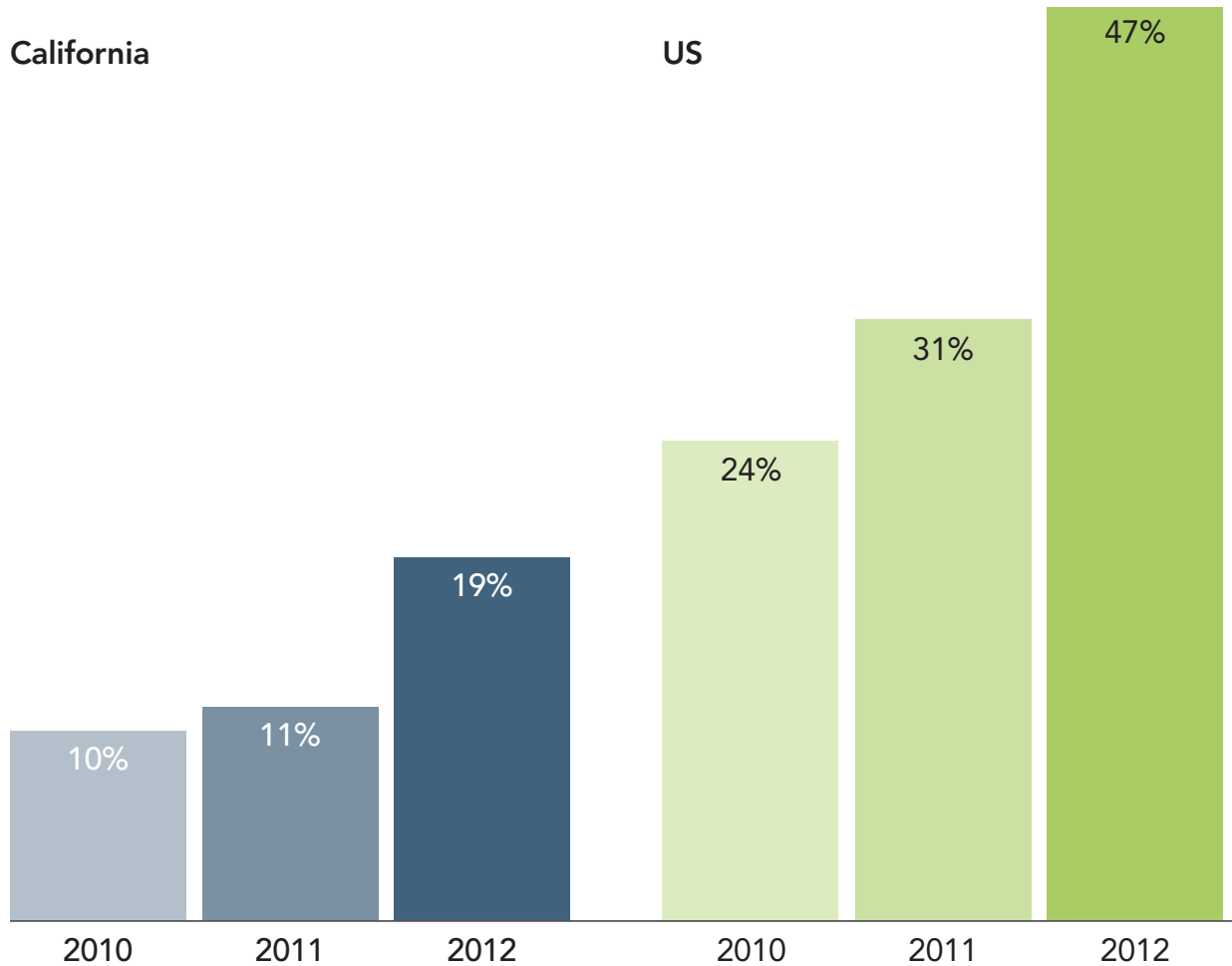
## E-prescribing

In 2012, 88% of California's local, community pharmacies were connected for e-prescription routing, compared to 93% nationally.

Note: Pharmacy calculations use National Council for Prescription Drug Program-supplied data showing total numbers of community pharmacies in each state.

Source: *National Progress Report of ePrescribing and Interoperable Health Care* (Surescripts, 2010, 2011, 2012), [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).

# Patient Visits Involving Electronically Delivered Medication History, California vs. US, 2010–2012



## E-prescribing

Only 19% of patient visits in California involved the electronic delivery of the patient's medication history from pharmacies and payers to providers. The national rate was considerably higher (47%).

Source: *National Progress Report of ePrescribing and Interoperable Health Care* (Surescripts, 2010, 2011, 2012), [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).

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## Appendix: Sources and Methodologies

This report is based on data from eight sources, which used diverse methodologies to collect the data between 2010 and 2013.

The **University of California, San Francisco**, partnered with the Medical Board of California to conduct a survey of physicians renewing their licenses. The survey achieved a 68% response rate and included only California physicians with at least one hour per week in patient care. Data for this report were drawn from Janet M. Coffman et al., *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians*, See p. 7. California HealthCare Foundation, [www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians](http://www.chcf.org/publications/2012/06/meaningful-use-ehrs-physicians).

The **Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS)** conducts the **National Ambulatory Medical Care Survey (NAMCS)**. This annual survey gathers information on EHR adoption and use by office-based physicians. The following NCHS data briefs were used for this report: C. J. Hsiao and E. Hing, *Use and Characteristics of Electronic Health Record Systems Among Office-Based Physician Practices: United States, 2001–2012*, NCHS Data Brief no. 111 (Hyattsville, MD: National Center for Health Statistics, 2012), [www.cdc.gov/nchs/data/databriefs/db111.pdf](http://www.cdc.gov/nchs/data/databriefs/db111.pdf); C. J. Hsiao et al., *Electronic Health Record Systems and Intent to Apply for Meaningful Use Incentives Among Office-Based Physician Practices: United States, 2001–2011*, NCHS Data Brief no. 79 (Hyattsville, MD: National Center for Health Statistics, 2011), [www.cdc.gov/nchs/data/databriefs/DB79.pdf](http://www.cdc.gov/nchs/data/databriefs/DB79.pdf).

**SK&A**, a provider of multichannel health care marketing information databases and solutions, maintains a database of over 740,000 office-based US physicians. The database contains contact information, as well as selections that provide ownership, size, health system and hospital affiliations, EHR use, physician access, and specialty. SK&A has been compiling their databases for 29 years, and the physician database is phone verified every six months.

The **Healthcare Information and Management Systems Society (HIMSS)** analytics database collects data on 30,000+ acute care and ambulatory facilities in the US. Information in the database is updated annually and voluntarily by hospitals via the web. The California sample used for this report has 390 hospitals, and the US sample has 5,449.

The **American Hospital Association (AHA)** annual survey of hospitals profiles more than 6,500 hospitals throughout the United States and associated areas. The survey historically has achieved a response rate of over 70% every year. In 2008 the AHA began conducting a health care IT supplement survey and maintaining the AHA health care IT database, which contains hospital-specific details on EHR adoption and meaningful use planning from more than 3,200 hospitals. The database is updated every May. In 2012 data were collected on 215 California hospitals, achieving a 50% response rate within the state.

The **Health Resources and Services Administration (HRSA)** requires health center grantees to report a core set of information annually for monitoring and evaluation. In 2011 data were collected on the EHR adoption status of 121 California health centers. See <http://bphc.hrsa.gov/uds/view.aspx?q=rehr&year=2011&state=CA>.

**Surescripts** runs a national health care information network supporting pharmacies, payers, pharmacy benefit managers, physicians, hospitals, health information exchanges, and health technology firms to more easily and securely share health information. Surescripts publishes the *National Progress Report of ePrescribing and Safe Rx Rankings* and progress reports for each state. See [www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports](http://www.surescripts.com/about-e-prescribing/progress-reports/national-progress-reports).

**Harris Interactive**, a market research firm, conducted an online survey in February 2013 among 2,501 US adults age 18 and older. Respondents for this survey were selected from among those who have agreed to participate in Harris Interactive surveys. The sample included 319 California residents. The data have been weighted to reflect the composition of the adult population. The research was conducted for Strategic Health Perspectives, a multienterprise subscription service (of which CHCF is a member) that brings together data and industry expertise to help clients plan for change in the health care marketplace.

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## Author

Jodi Simon, DrPH, independent contractor

## About the Foundation

The **California HealthCare Foundation** works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit [www.chcf.org](http://www.chcf.org).

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