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Physician Workflow Supplement 2011

The purpose of the Physician Workflow study is to collect information about the adoption of **electronic health records (EHR)**. Your participation is greatly appreciated. Your answers are completely confidential. Participation in this survey is voluntary. If you have questions or comments about this survey, please call 866-966-1473.

For the following questions, please respond about your use of EHRs at the location where you see the most **ambulatory patients**. Ambulatory patients are defined as any patients coming to see you for personal health services.

1. **Which of the following best describes your practice's current EHR implementation status?**
 - 1 We have implemented and are actively using an EHR system.
 - 2 We are in the process of implementing an EHR system.
2. **Overall, how satisfied or dissatisfied are you with your EHR system?**
 - 1 Very satisfied
 - 2 Somewhat satisfied
 - 3 Somewhat dissatisfied
 - 4 Very dissatisfied
3. **Would you purchase this EHR again?**
 - 1 Yes
 - 2 No
4. **Including your current system, how many EHR systems have you used? _____ systems**
5. **Estimate the approximate number of years you have used any EHR system.**
 - 1 Under 1 year
 - 2 _____ year(s)
6. **Which of the following best represents your EHR system?**
 - 1 **Stand alone** (Client server) – A self-contained system, where data and application functionality are delivered onsite.
 - 2 **Web-based design** (Cloud system or Application Service Provider (ASP)) – Service provider hosts the EHR system and stores data. Practice accesses the system and data through the Internet.
7. **Does your current system meet meaningful use criteria as defined by the Centers for Medicare & Medicaid Services (CMS)?**
 - 1 Yes
 - 2 No
 - 3 Uncertain

8. Please indicate to what extent you experienced the following as a barrier to implementing an EHR system.	Major Barrier	Minor Barrier	Not a Barrier
a. Reaching consensus within the practice to select an EHR	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
b. Finding an EHR system that meets your practice's needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
c. Effort needed to select an EHR system	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
d. Cost of purchasing an EHR system	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
e. Ability to secure financing for an EHR system	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
f. Annual cost of maintaining an EHR system	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
g. Loss of productivity during the transition to an EHR system	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
h. Adequacy of training for you and your staff	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
i. Adequacy of EHR technical support	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
j. Access to high speed Internet (e.g., broadband, cable)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
k. Reliability of the system (e.g., EHR down or unavailable when needed)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
l. Resistance of your practice to change work habits	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

9. Please indicate whether you agree or disagree with the following statements about using your EHR system.	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a. Overall, my practice has functioned more efficiently with an EHR system.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
b. The amount of time spent to plan, review, order, and document care has increased.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
c. The amount of time spent responding to pharmacy calls increased.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
d. Sending prescriptions electronically saves me time.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
e. The number of weekly office visits increased.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
f. My practice receives lab results faster.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
g. My practice saves on costs associated with managing and storing paper records.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
h. Billing for services is less complete.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
i. My EHR produces financial benefits for my practice.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
j. My EHR produces clinical benefits for my practice.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
k. My EHR allows me to deliver better patient care.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
l. My EHR makes records more readily available at the point of care.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
m. My EHR disrupts the way I interact with my patients.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
n. My EHR is an asset when recruiting physicians to join the practice.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
o. My EHR enhances patient data confidentiality.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

10. Are you familiar with the following:	Not familiar	Familiar, but do not participate	Familiar and plan to participate	Participate in program
a. Incentive payments for the <i>meaningful use</i> of EHRs for Medicare physicians?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
b. Incentive payments for the <i>meaningful use</i> of EHRs for Medicaid physicians?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
c. Assistance available through regional extension centers on EHR selection, implementation, and use?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

11. How much of an influence did the following have on your decision to adopt an EHR system?	Major Influence to Adopt	Minor Influence to Adopt	Not an Influence
a. Government incentive payments for EHR use	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
b. Proposed financial penalties for not using an EHR	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
c. Availability of government-certified products	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
d. Assistance with selecting an EHR system	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
e. Technical assistance with EHR implementation in my practice	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
f. EHR systems being used by trusted colleagues	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
g. Capability of exchanging information electronically within my referral network	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
h. Requirement to use an EHR for maintenance of board certification	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

12. This question is about ways that an EHR system might affect your practice. Has use of your EHR system:	Yes, within the past 30 days	Yes, but not within the past 30 days	No	Not Applicable
a. Alerted you to a potential medication error?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
b. Alerted you to critical lab values?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
c. Reminded you to provide preventive care (e.g., vaccine, cancer screening)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
d. Reminded you to provide care that meets clinical guidelines for patients with chronic conditions?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
e. Helped you identify needed lab tests (such as HbA1c or LDL)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
f. Helped you order fewer tests due to better availability of lab results?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
g. Helped you order more on-formulary drugs (as opposed to off-formulary drugs)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
h. Facilitated direct communication with a patient (e.g., email or secure messaging)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
i. Helped you access a patient's chart remotely (e.g., to work from home)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
j. Overall, has use of your EHR system enhanced patient care?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

13. Please indicate your level of ease or difficulty for each EHR function below. If your EHR does not have this function or you do not use it, mark not applicable. How easy or difficult is the EHR function for:	Very Easy	Easy	Difficult	Very Difficult	Not Applicable
a. Electronic billing?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Recording a patient problem list?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Recording clinical notes?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. Recording a comprehensive list of the patient's medication and allergies?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e. Ordering prescriptions electronically (sending a prescription directly to a pharmacy at the point-of-care)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f. Clinical decision support (e.g., alerts for drug interactions or contraindications)?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
g. Providing reminders for guideline-based interventions or screening tests?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
h. Ordering lab tests electronically at point-of-care?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
i. Providing standard order sets related to a particular condition or procedure?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
j. Viewing lab results?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
k. Viewing imaging reports?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
l. Viewing data on quality of care measures?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
m. Exchanging patient clinical summaries with other physicians?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
n. Public health reporting?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
o. Providing patients with clinical summaries for each visit?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
p. Exchanging secure messages with patients?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

14. How did you finance your EHR purchase? (CHECK ALL THAT APPLY)

- Cash or operating expense State grants Hospital/plan subsidized financing
 Commercial bank loan Federal grants Government incentives
 Local grants Foundation grants Other (specify: _____)

15. Please estimate the total per physician purchase cost for your practice's EHR system. Include software, hardware, cabling, telecommunication upgrades, building modifications, & training.

- 1 under \$10,000
- 2 \$10,000 to \$19,999
- 3 \$20,000 to \$29,999
- 4 \$30,000 to \$39,999
- 5 \$40,000 to \$49,999
- 6 \$50,000 to \$59,999
- 7 \$60,000 and over

16. Please estimate the annual per physician maintenance cost for your practice's EHR system. Include all infrastructure (software/ hardware), support, trainings, add-ons, server & vendor costs.

- 1 Under \$4,000
- 2 \$4,000 to \$5,999
- 3 \$6,000 to \$7,999
- 4 \$8,000 to \$9,999
- 5 \$10,000 to \$11,999
- 6 \$12,000 and over

17. How many hours, on average, did clinical staff spend in training to implement your practice's EHR system?

- 1 1 to 8 hours
- 2 9 to 40 hours
- 3 41 to 80 hours
- 4 Over 80 hours
- 5 Did not receive training

18. How many hours, on average, did non-clinical staff spend in training to implement your EHR system?

- 1 1 to 8 hours
- 2 9 to 40 hours
- 3 41 to 80 hours
- 4 Over 80 hours
- 5 Did not receive training

19. Did implementing an EHR system adversely affect your productivity?

- 1 Yes (Go to 19a)
- 2 No (SKIP to 20)

19a. If so, how long did it take your practice to overcome any productivity challenges?

- 1 Within 1 month
- 2 >1 to 3 months
- 3 > 3 to 6 months
- 4 >6 to 12 months
- 5 >12 to 24 months
- 6 Over 24 months
- 7 Not yet returned to pre-EHR productivity levels

20. Did you receive help from EHR vendors in analyzing your practice workflow?

- 1 Yes (Go to 20a)
- 2 No (SKIP to 21)

20a. How satisfied or dissatisfied were you with the help you received from EHR vendors?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Somewhat dissatisfied
- 4 Very dissatisfied

21. Did you receive help from regional extension centers in analyzing your practice workflow?

- 1 Yes (Go to 21a)
- 2 No (SKIP to 22)

21a. How satisfied or dissatisfied were you with the help you received from regional extension centers?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Somewhat dissatisfied
- 4 Very dissatisfied

22. How many of the following support staff (FTE) work at this location?

- _____ Nurses (RN/LPN)
- _____ Medical Assistants (MA)
- _____ Administrative staff
- _____ IT staff
- _____ Other staff

The following are about the physician to whom this survey was addressed:

23. Please think about your experiences with new computer systems and software. Overall, how easy or difficult is it for you to use new technology?

- 1 Very difficult
- 2 Somewhat difficult
- 3 Neither difficult nor easy
- 4 Somewhat easy
- 5 Very easy

24. In what year did you complete residency or fellowship? _____(YYYY)

25. What is your race? (CHECK ALL THAT APPLY)

- 1 White
- 2 Black/African American
- 3 Asian
- 4 Native Hawaiian/Other Pacific Islander
- 5 American Indian/Alaskan Native

26. What is your ethnicity?

- 1 Hispanic or Latino
- 2 Not Hispanic or Latino

27. Who completed this survey?

- 1 The physician to whom it was addressed
- 2 Office staff
- 3 Other

Boxes for Admin Use

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Thank you for your participation. Please return your survey in the envelope provided. If you have misplaced this envelope, please send this survey to the following address: 2605 Meridian Parkway, Suite 200, Durham, NC 27713