Technical appendix

We tested whether the pace of EHR market changes for small, medium, and large hospitals were statistically different from each other. We estimated random intercept regression models, separately for vendor numbers, HHI and paper record usage, that included a linear trend variable, the interaction of the trend variable, and a dichotomous indicator for medium-sized hospital, and the interaction of the trend variable and a dichotomous indicator for large hospital. Coefficients on the interaction variables served as a test for whether the trends in the number of vendors, competition and paper record usage differ by hospital size.

	# of vendors β (p-value)	HHI β (p-value)	% paper records β (p-value)
All hospitals	n=3992	n=3906	n=4047
Intercept	1.61	71.10	41.36
Year	0.07 (0.000)	-1.00 (0.000)	-2.33 (0.000)
Medium size * year	0.02 (0.000)	-0.35 (0.001)	-1.75 (0.000)
Large size * year	-0.01 (0.023)	0.39 (0.000)	-2.24 (0.000)
Test of joint significance Large size * year = 0 Medium size * year = 0	p = 0.000	0.000	0.000

As noted in our manuscript, we measured the market for purchased CDRs and not specifically EHRs. To demonstrate that CDR vendors are representative of EHR vendors, we compared the 10 most common hospital CDR vendors in 2006 to the current ONC certified EHR product listing (according healthit.hhs.gov). This list represents about 88% of all installed systems in the survey for 2006 and each one of these vendors currently has an ONC certified EHR product. As an additional check, the 2008 survey provides the same vendors as well as additional names like Keane, Medsphere, Allscripts, Nextgen, and 3M, which again are current EHR vendors according to ONC.

10 most common CDR vendors in 2006	Vendor has ONC certified EHR product in 2012?
MEDITECH	Yes
MCKESSON PROVIDER TECHNOLOGIES	Yes
CERNER CORPORATION	Yes
SIEMENS MEDICAL SOLUTIONS	Yes
EPIC SYSTEMS CORP.	Yes
ECLIPSYS CORPORATION	Yes
CPSI	Yes
GE HEALTHCARE	Yes
HEALTHCARE MANAGEMENT SYSTEMS, INC.	Yes
DAIRYLAND HEALTHCARE SOLUTIONS	Yes
QUADRAMED CORP.	Yes