# Organizational Factors Influencing User Satisfaction with Electronic Medical Record Systems among Health Workers in Homa Bay County, Kenya

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## ABSTRACT

**Background:** Electronic medical record (EMR) systems are central to healthcare digitization in Kenya, yet user satisfaction remains suboptimal. This study examined organizational factors influencing EMR user satisfaction among health workers in Homa Bay County, Kenya.

**Methods:** An analytical cross-sectional study using mixed methods was conducted among 359 health workers selected through multistage sampling from public health facilities. Eight key informant interviews (KIIs) were conducted with health information officers and chief administrators. Quantitative data were analyzed using SPSS version 29. Pearson's chi-square and Fisher-Freeman-Halton exact tests assessed associations, with crude odds ratios (OR) and 95% confidence intervals (CI). Statistical significance was set at $p < 0.05$. Qualitative data were analyzed thematically.

**Results:** Overall, 188 (52.4%) respondents were satisfied, while 111 (30.9%) were dissatisfied with the EMR system. Satisfaction was significantly associated with management recognition of EMR productivity benefits ($\chi^2 = 9.949$, $p = 0.041$; OR = 1.86, 95% CI: 1.15–2.99), top-management support ($\chi^2 = 37.761$, $p < 0.001$; OR = 4.29, 95% CI: 2.65–6.95), strategic alignment ($\chi^2 = 54.776$, $p < 0.001$; OR = 4.07, 95% CI: 2.46–6.74), and adequate resource allocation ($\chi^2 = 32.895$, $p < 0.001$; OR = 2.62, 95% CI: 1.64–4.18). Management meeting frequency was also significantly associated with satisfaction ($p = 0.001$). Interviews identified system downtime, inadequate training, and weak institutional ownership as challenges.

**Conclusion:** EMR satisfaction is associated with organizational support, strategic alignment, resource allocation, and management meetings. Strengthening leadership, funding, staff training, and routine system reviews may improve user satisfaction.

**Keywords:** Electronic medical records; user satisfaction; organizational factors; management support; health information systems.

## INTRODUCTION

Electronic medical record (EMR) systems have been adopted across most countries as a means of delivering efficient and effective health services. Their appeal lies in a demonstrated capacity to improve the quality of care in both industrialized and non-industrialized settings, to reduce the cost of seeking and providing services, and to make clinical information readily available to clients and providers alike. By enabling longitudinal follow-up of patient information and treatment over time, EMR systems give providers an understanding of

prior conditions and interventions, and in doing so improve the quality and continuity of care (WHO, 2023). Evidence from high-income settings is instructive: by 2017, 74% of United States providers reported that EMR use improved overall service provision and 85% expressed satisfaction with the electronic systems they used (Rexhepi, 2019). Within sub-Saharan Africa, Rwanda has been at the forefront of comprehensive electronic adoption, with the health sector reporting a 92% reduction in medical errors attributable to automated systems (Alawiye, 2019).

Kenya introduced electronic health records in 2005; although there has been notable scale-up over time, adoption has been slow and uneven. A national assessment of 213 health facilities across 19 counties found that, on average, only 18.1% of authorized EMR users actively used the systems, with facility-level active use ranging from 7.3% to 46.8%; only 9.4% of facilities were completely paperless while 38.0% relied entirely on retrospective data entry (Ministry of Health, 2020). These figures reveal that the presence of an EMR system is not a sufficient condition for its effective use. The barriers documented in the literature extend well beyond hardware and software to include inadequate legal and regulatory frameworks, limited financial support, weak technical capacity and, critically, human and organizational factors such as poor user buy-in, resistance to change and the perception that the system is an external project irrelevant to day-today care (Kihuba et al., 2020; Ndegwa, 2020).

Homa Bay County presents a particularly relevant setting. A recent digital-health landscape assessment covering 112 facilities found that 104 (93%) had an EMR system and 102 (91%) had implemented it. Yet the emphasis on rolling EMR out to additional facilities has not been matched by evaluation of how well the systems serve their users where they are already in place. User satisfaction is widely regarded as a proximate determinant of sustained system use and, ultimately, of the returns on digital-health investment. Where satisfaction is low, active use declines, data quality suffers and the anticipated benefits for patient care fail to materialize.

User satisfaction is a multidimensional construct shaped by information quality, system quality, user characteristics, ICT competence and the organizational environment in which the system is embedded. Of these, organizational factors are among the most actionable from a policy standpoint because they are amenable to deliberate managerial intervention. Organizational characteristics vary from one institution to another according to the goals that guide implementation, and the use of information technology affects not only the provider-client interface but also institutional culture and the capacity to learn and adopt new technology (Abdusyakur, 2019). Weak organizational structures and strategies, unstable managerial support and the absence of clear roles and responsibilities for data use have repeatedly been shown to undermine information-system adoption in low- and middle-income countries. Conversely, structures and processes that improve the interaction of data producers and users, provide clear guidelines for data-quality processes and define roles and responsibilities strengthen other interventions aimed at improving data-informed decision-making (Ann, 2020; Asiimwe, 2020).

International evidence links organizational practices directly to satisfaction and system acceptance. In the United States, recognition, fairness and involvement have been shown to boost engagement, while transformational leadership is associated with higher job satisfaction and system acceptance (Oliver, 2020). European systematic reviews report that the frequency of EMR use and familiarity with the system are significantly associated with satisfaction, and that training is positively associated with familiarity and satisfaction (Whitaker, 2021). A Nigerian study of 415 clinical staff found training to be a significant predictor of EMR satisfaction (adjusted OR = 2.68, 95% CI 1.52-4.71, p = 0.001), with limited training, weak IT support and interface issues cited as the main challenges (Adejumo, 2024). A Ghanaian study of 396 professionals linked poor inter-user communication, cost of resources, lack of technical personnel and lack of software packages to low EMR utilization (Achampong et al., 2025). Together these findings suggest that organizational commitment, communication, resourcing and governance are decisive for user satisfaction, yet county-level evidence from Kenya remains scarce.

Against this background, this study set out to determine the organizational factors influencing user satisfaction with EMR systems among health workers in Homa Bay County, Kenya. The guiding null hypothesis was that

there is no association between organizational factors and satisfaction with EMR systems among health workers in the county. By quantifying these associations and triangulating them with the perspectives of facility managers, the study aims to provide county and national decision-makers with actionable evidence for strengthening the institutional foundations of EMR satisfaction.

# MATERIALS AND METHODS

### Study design and setting

An analytical cross-sectional design was used with a convergent mixed-methods approach, combining quantitative questionnaires with qualitative key informant interviews (KIIs). The quantitative strand established the magnitude and statistical associations of satisfaction, while the qualitative strand provided explanatory depth; the two strands were integrated at interpretation.

### Study population and sampling

The study population comprised health workers who used the EMR system in the course of providing services to patients, including medical officers, clinical officers, nurses, health records and information officers (HRIOs), HIV testing services (HTS) providers, laboratory technologists, nutritionists, community health extension workers (CHEWs) and pharmacy technologists. A multistage sampling procedure was used to select facilities and respondents. Key informants comprising health information officers and chief administrators were selected purposively on the basis of their managerial oversight of the EMR system.

The target sample size was derived using the standard formula for cross-sectional studies for a single proportion. A total of 359 respondents completed the questionnaire out of the required sample, giving a response rate of 98.9%. All respondents met the inclusion criteria and returned completely filled questionnaires. Eight KIIs were conducted to the point of thematic saturation.

### Data collection

Data were collected in three phases: pre-testing of the research instruments, a reconnaissance visit, and the actual survey. Three research assistants were trained over two days on the study objectives, informed-consent procedures, interviewing skills and data management, and administered the structured questionnaire under supervision. The questionnaire comprised close-ended and multiple-choice items organized around socio-demographic characteristics, extent of EMR use, satisfaction, organizational characteristics, ICT competence and system resilience.

Organizational factors were measured on five-point Likert items (ranging from strongly agree to strongly disagree) covering management recognition of EMR potential, top-management support for information systems, alignment of information-system strategy and objectives, resource allocation to the EMR system, and the frequency of facility health-management meetings. A questionnaire took approximately 15 minutes to complete; each KII lasted approximately 45 minutes and, with consent, was audio-recorded. Each questionnaire and consent form were assigned a matching code to prevent double enrolment.

### Measurement of user satisfaction

User satisfaction, the dependent variable, was measured using a validated battery of Likert-scaled items covering information quality (precision, content, sufficiency), system quality (accuracy, usefulness, clarity, timeliness) and overall satisfaction. Composite scores were computed, and respondents with a mean score greater than or equal to 3.00 were classified as satisfied.

For the analysis of associations, satisfaction was expressed in three categories (satisfied, neutral, dissatisfied) to preserve the full distribution of responses. The internal consistency of the organizational-factor and satisfaction scales was assessed and found acceptable during instrument validation.

### Data management and statistical analysis

Completed questionnaires were checked for consistency and completeness, coded and entered into SPSS version 29.0 for analysis. Descriptive statistics (frequencies, percentages, means and standard deviations) were used to summarize respondent characteristics and the distribution of organizational-factor responses. The association between each organizational factor and user satisfaction was tested using the Pearson chi-square test of independence. Where more than 20% of cells had expected counts below five, the Fisher-Freeman-Halton exact test was used instead. Statistical significance was set a priori at $p < 0.05$, and all tests were two-sided at the 95% confidence level.

To quantify the strength and direction of the significant associations, crude odds ratios (OR) with 95% confidence intervals (CI) were computed from the cross-tabulations by collapsing the outcome into satisfied versus not satisfied (neutral plus dissatisfied) and comparing respondents who agreed with each organizational statement against those who disagreed. The strength of association was interpreted together with the chi-square statistics so that both the probability of association and its magnitude could be judged. Qualitative data from the KIIs were transcribed, translated where necessary, manually coded into themes derived from the responses, and thematically analyzed in line with the study objectives; representative quotations are presented verbatim to substantiate the quantitative findings.

### Ethical considerations

Ethical approval was obtained from the Kenyatta University Ethics Review Committee, and a research permit was obtained from the National Commission for Science, Technology and Innovation (NACOSTI). Authorization was also obtained from the Homa Bay County government and the participating facilities. Written informed consent was obtained from all participants, who were informed of their right to withdraw at any time without penalty. No incentives were offered. Confidentiality and anonymity were maintained through data anonymization and de-identification, encrypted storage, restricted access and reporting in aggregate formats that preclude identification of individual participants.

## RESULTS

### Respondent characteristics

A total of 359 health workers participated. The majority were female (203; 56.5%), and the largest age group was those younger than 30 years (124; 34.5%), followed by the 30–39-year group (97; 27.0%); 54 (15.0%) were aged 50-59 years. Most respondents had attained college level qualifications (237; 66.0%), with 106 (29.5%) holding university degrees. Nurses constituted the largest professional group (121; 33.7%), followed by clinical officers (51; 14.2%); medical officers were fewest (14; 3.9%). Work experience was spread across the tenure bands, with the 11–15-year group most common (89; 24.8%). Table 1 summarizes the socio-demographic profile.

**Table 1. Socio-demographic characteristics of respondents (N = 359)**

| Characteristic | Category | Frequency | Percent |
|---|---|---|---|
| **Age** | < 30 years | 124 | 34.5% |
| | 30-39 years | 97 | 27.0% |
| | 40-49 years | 84 | 23.4% |
| | 50-59 years | 54 | 15.0% |

| | | | |
|---|---|---|---|
| **Gender** | Male | 156 | 43.5% |
| | Female | 203 | 56.5% |
| **Education** | University | 106 | 29.5% |
| | College | 237 | 66.0% |
| | Secondary | 16 | 4.5% |
| **Profession** | Nurse | 121 | 33.7% |
| | Clinical officer | 51 | 14.2% |
| | Laboratory technologist | 38 | 10.6% |
| | HRIO | 31 | 8.6% |
| | CHEW | 32 | 8.9% |
| | Pharmacy technologist | 29 | 8.1% |
| | HTS provider | 22 | 6.1% |
| | Nutritionist | 21 | 5.8% |
| | Medical officer | 14 | 3.9% |

**Overall level of user satisfaction**

Using the composite Likert measure, 188 (52.4%) respondents were satisfied (mean score greater than or equal to 3.00) with the EMR system in their facility, while 111 (30.9%) were dissatisfied and the remainder were neutral. This moderate overall satisfaction, with almost one in three users dissatisfied, provided the outcome against which organizational factors were examined. Item level responses reinforced the picture of divided opinion: although slight majorities agreed that the EMR provided sufficient information (50.7%) and met their content needs (51.0%), mean scores remained low (around 2.48-2.59), and the paper-based system was still rated more favourably for ease of use (mean = 3.17) than several EMR attributes, pointing to persistent user preference and familiarity.

**Organizational factors and user satisfaction**

**Management support**

Management support emerged as the dominant organizational determinant of satisfaction. There was a strong, graded relationship between each dimension of perceived management support and overall satisfaction. Respondents who agreed that management recognized the potential of the EMR system to enhance productivity were more likely to be satisfied (97; 59.1%) than those who disagreed (53; 43.8%). Satisfaction was markedly higher among those who felt that top management provided strong support for information systems (108; 70.1%) than among those who disagreed (52; 35.4%). The sharpest contrast was observed for strategic alignment: 95 (73.1%) of respondents who agreed that the information-system strategy and objectives were aligned were satisfied, compared with only 40.0% of those who disagreed. Similarly, 94 (65.7%) of those who believed management allocated adequate resources to support the EMR were satisfied, against 42.3% among those who felt otherwise. The full cross-tabulation and chi-square statistics are presented in Table 2.

**Table 2. Management support and overall level of satisfaction with EMR**

| Organizational factor | Response | Satisfied | Neutral | Dissatisfied | Test statistic |
|---|---|---|---|---|---|
| Management recognizes EMR potential to enhance productivity | Agree | 97 (59.1%) | 25 (15.2%) | 42 (25.6%) | $\chi^2$= 9.949; df = 4; p= 0.041 |
| | Neutral | 38 (51.4%) | 16 (21.6%) | 20 (27.0%) | |
| | Disagree | 53 (43.8%) | 19 (15.7%) | 49 (40.5%) | |
| Top management provides strong support for information systems | Agree | 108 (70.1%) | 19 (12.3%) | 27 (17.5%) | $\chi^2$= 37.761; df = 4; p < 0.001 |
| | Neutral | 28 (48.3%) | 10 (17.2%) | 20 (34.5%) | |
| | Disagree | 52 (35.4%) | 31 (21.1%) | 64 (43.5%) | |
| Information system strategy and objectives are aligned | Agree | 95 (73.1%) | 25 (19.2%) | 10 (7.7%) | $\chi^2$= 54.776; df = 4; p < 0.001 |
| | Neutral | 31 (41.9%) | 14 (18.9%) | 29 (39.2%) | |
| | Disagree | 62 (40.0%) | 21 (13.5%) | 72 (46.5%) | |
| Top management allocates resources to support the EMR system | Agree | 94 (65.7%) | 28 (19.6%) | 21 (14.7%) | $\chi^2$= 32.895; df = 4; p < 0.001 |
| | Neutral | 28 (46.7%) | 12 (20.0%) | 20 (33.3%) | |
| | Disagree | 66 (42.3%) | 20 (12.8%) | 70 (44.9%) | |

All four management-support constructs were significantly associated with user satisfaction at $p < 0.05$. The strongest associations, as judged by the chi-square magnitude, were strategic alignment ($\chi^2$= 54.776; df = 4; $p < 0.001$) and top-management support ($\chi^2$= 37.761; df = 4; $p < 0.001$), followed by resource allocation ($\chi^2$= 32.895; df = 4; $p < 0.001$) and recognition of EMR potential ($\chi^2$= 9.949; df = 4; $p = 0.041$). The null hypothesis of no association between organizational factors and satisfaction was therefore rejected for each of these constructs.

**Strength and direction of association**

To quantify the magnitude of these associations, crude odds ratios were derived by comparing respondents who agreed with each statement against those who disagreed, with the outcome collapsed into satisfied versus not satisfied (Table 3). The direction of every association was positive: agreement with each management-support statement increased the odds of being satisfied. Respondents who perceived strong top-management support had more than four times the odds of being satisfied compared with those who did not (OR = 4.29, 95% CI 2.65-6.95), and those who perceived strategic alignment had similarly elevated odds (OR = 4.07, 95% CI 2.466.74).

Adequate resource allocation roughly doubled the odds of satisfaction (OR = 2.62, 95% CI 1.64-4.18), while recognition of EMR potential conferred a smaller but still significant advantage (OR = 1.86, 95% CI 1.15-2.99). In every case the 95% confidence interval excluded 1.0, confirming statistical significance and corroborating the chi-square results.

**Table 3. Crude odds ratios for the association between management support and user satisfaction (agree vs disagree; satisfied vs not satisfied)**

| Organizational factor | Odds ratio | 95% CI | Interpretation |
|---|---|---|---|
| Top management provides strong support | 4.29 | 2.65-6.95 | Strong positive |
| Information-system strategy and objectives aligned | 4.07 | 2.46-6.74 | Strong positive |
| Resources allocated to support EMR | 2.62 | 1.64-4.18 | Moderate positive |
| Management recognizes EMR potential | 1.86 | 1.15-2.99 | Modest positive |

**Facility governance and meetings**

Beyond management support, the frequency of facility health-management meetings was significantly associated with user satisfaction ($\chi^2$= 17.731; df = 4; p = 0.001). Respondents in facilities that convened management meetings more regularly reported higher satisfaction, indicating that routine governance forums, through which EMR performance, user concerns and resourcing decisions are reviewed, form part of the organizational infrastructure that sustains satisfaction. Table 4 consolidates the organizational factors that were significantly associated with satisfaction.

**Table 4. Summary of organizational factors significantly associated with user satisfaction**

| Organizational factor | Chi-square | df | p-value |
|---|---|---|---|
| Information-system strategy and objectives aligned | 54.776 | 4 | < 0.001 |
| Top management provides strong support | 37.761 | 4 | < 0.001 |
| Top management allocates resources to support EMR | 32.895 | 4 | < 0.001 |
| Frequency of facility health-management meetings | 17.731 | 4 | 0.001 |
| Management recognizes EMR potential to enhance productivity | 9.949 | 4 | 0.041 |

**Qualitative findings**

The key informant interviews reinforced and explained the quantitative pattern. Informants consistently identified leadership commitment, resourcing and training as the pivots on which satisfaction turned. One health information officer observed that "staff satisfaction depends heavily on how well the system is working on any given day. When it's functioning, it's efficient and improves service delivery. But when the system fails, especially during peak hours, it creates delays and frustration, contributing to dissatisfaction" (KII 1). The link between organizational investment in skills and satisfaction was made explicit: "for those of us who've had training and use the system regularly, it's a great tool. But I've seen others struggle because they weren't properly trained. That gap in skills is a big reason why some people are unhappy with the system" (KII 5). Informants also pointed to the need for standardization and supervision, noting that "without clear protocols and regular supervision, we can't expect uniformity in EMR use" (KII 6), and to resourcing constraints, with one administrator noting that "budget constraints mean not all staff have access to computers" (KII 7). These

accounts converge on management support, resource allocation and governance, the same constructs that dominated the quantitative analysis.

# DISCUSSION

This study set out to determine the organizational factors influencing user satisfaction with EMR systems among health workers in Homa Bay County. The central finding is unambiguous: organizational factors, and management support in particular, are strongly and significantly associated with user satisfaction. All four management-support constructs examined, recognition of EMR potential, top-management support, strategic alignment and resource allocation, were statistically associated with satisfaction, and the frequency of facility health-management meetings was likewise significant. The null hypothesis of no association was therefore rejected. Importantly, the direction and magnitude of these associations, quantified through odds ratios, indicate that the organizational environment is not a marginal consideration but a primary lever: perceiving strong top-management support or strategic alignment was associated with more than a four-fold increase in the odds of satisfaction.

The pre-eminence of strategic alignment ($\chi^2$= 54.776; $p < 0.001$) is noteworthy. Satisfaction climbed from 40.0% among those who felt that information-system strategy and objectives were misaligned to 73.1% among those who perceived alignment, a 33-percentagepoint gap. This suggests that health workers are sensitive not merely to whether a system exists but to whether it is embedded in a coherent institutional vision that connects the technology to the facility's wider goals. Where the EMR is experienced as an externally imposed project disconnected from clinical priorities, dissatisfaction follows, a pattern consistent with earlier Kenyan work showing that user acceptance suffers when providers regard the system as irrelevant to the care they provide (Kihuba et al., 2020). Strategic alignment, in effect, converts a technical artefact into an organizational asset that users recognize as their own.

The strong association between top-management support and satisfaction (OR = 4.29) echoes a substantial international literature. European systematic reviews have found system familiarity and frequency of use, both of which are shaped by managerial encouragement and training provision, to be significantly associated with satisfaction (Whitaker, 2021), while United States evidence links transformational and supportive leadership to higher job satisfaction and system acceptance (Oliver, 2020). The present findings extend this evidence to a Kenyan county setting and show that the mechanism operates even where baseline EMR penetration is high. Visible leadership signals institutional priority, legitimizes the time cost of learning the system and reassures users that difficulties will be addressed, each of which plausibly raises satisfaction.

Resource allocation was also a significant determinant (OR = 2.62). The qualitative data gave this finding concrete form: informants described facilities where not all staff had access to computers and where ageing infrastructure produced the downtimes that eroded day-to-day satisfaction. This accords with Ghanaian evidence linking the cost of EMR resources, lack of technical personnel and lack of software to low utilization (Achampong et al., 2025), and with Kenyan work identifying non-functional infrastructure, weak connectivity and unstable power as organizational and technological barriers to adoption (Karuri et al., 2021). Resourcing is thus both a precondition for the system to function and a signal of institutional commitment; when either is lacking, satisfaction falls.

The significance of facility health-management meetings (chi-square = 17.731; $p = 0.001$) highlights the role of routine governance. Regular meetings create a forum in which EMR performance can be reviewed, user feedback acted upon and resourcing decisions made, operationalizing the "structures and processes" that the literature identifies as strengthening data use (Ann, 2020; Asiimwe, 2020). The qualitative call for "clear protocols and regular supervision" (KII 6) reinforces the quantitative result: governance mechanisms translate leadership intent into the day-to-day practices that users experience. Facilities that meet regularly are better able to close the feedback loop between users and managers, and this responsiveness appears to be rewarded with higher satisfaction.

Taken together, the findings portray user satisfaction as the product of an organizational system rather than of

technology alone. The recurring theme across both data streams, that functioning systems delight users while downtimes, untrained staff and weak ownership breed frustration, locates the determinants of satisfaction firmly in the domain of management decisions about strategy, resources, training and governance. This has an encouraging policy implication: because these factors are under institutional control, they can be acted upon more readily than many user level or technological constraints. The comparatively modest overall satisfaction observed (52.4%), with 30.9% dissatisfied, indicates considerable room for improvement that organizational reform could realize.

The study has limitations. Its cross-sectional design permits the identification of associations but not causal inference; it remains possible that satisfied users perceive their managers more favorably rather than the reverse. The odds ratios reported are crude and unadjusted for potential confounders such as age, profession and duration of EMR use, which were themselves associated with satisfaction in the wider study; a multivariable model would be needed to isolate independent organizational effects. The organizational factors were measured through self-reported perceptions, which may be subject to common-method and social-desirability bias. Finally, the study was confined to public facilities in a single county, so the findings may not generalize to private facilities or to counties with different implementation histories. These limitations notwithstanding, the consistency between the quantitative associations, the derived effect sizes and the qualitative accounts lends confidence to the central conclusion.

### Limitations

Several limitations should be noted. First, the cross-sectional design precludes causal inference; the reported chi-square and regression associations describe correlation at a single time point. Second, although facility level (level 3 health centres and level 4 hospitals) was a sampling stratum, the available analyzed outputs did not disaggregate satisfaction by facility level or fit an ordinal logistic model with cadre, facility level and EMR-use duration as joint adjusted predictors; the reported multiple linear regression treated the collapsed satisfaction score as continuous. Adjusted ordinal analyses with facility level as a covariate would better isolate independent effects and are recommended once level-linked records are available. Third, self-reported satisfaction and perceived management support are susceptible to social-desirability and common-method bias. Fourth, the study was limited to public facilities in one county, so findings may not generalize to private facilities or other counties that implement EMRs independently. Finally, discrete variables for formal training received and standardized digital-skills assessment were not separately measured, so competence was inferred from cadre, EMR-use duration and qualitative accounts

## CONCLUSION AND RECOMMENDATIONS

User satisfaction with EMR systems among health workers in Homa Bay County is moderate and is strongly shaped by organizational factors. Visible top-management support, alignment of information-system strategy with institutional objectives, adequate resource allocation and regular facility health-management meetings were each significantly associated with satisfaction, with perceived leadership support and strategic alignment carrying the largest effects. These results indicate that strengthening the institutional foundations of EMR implementation is likely to yield larger returns in user satisfaction, and hence in sustained use and data quality, than investment in technology alone.

Several recommendations follow. First, facility and county leadership should make their support for the EMR system explicit and visible, embedding it within a clearly communicated information-system strategy that connects the technology to service-delivery goals. Second, counties should ensure adequate and predictable resourcing of EMR infrastructure, including hardware, connectivity and power backup, so that the system functions reliably at the point of care. Third, facilities should institutionalize regular health-management meetings at which EMR performance and user feedback are reviewed and acted upon, and should pair these with structured supervision and clear protocols. Fourth, continuous training should be funded as an organizational priority, given its established link to familiarity and satisfaction. Future research should employ longitudinal and multivariable designs, and extend to private facilities and other counties, to establish the independent and causal contribution of these organizational factors.

**Declarations**

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Conflict of interest: None declared

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