

Digital Work Transformation and Healthcare Worker Outcomes in Nigeria: Remote-Work Support, Motivation, Job Satisfaction, And Retention Intention

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ARTICLE INFORMATION	ABSTRACT
Article history: Published: August 2026 Keywords: Digital Work Transformation Digital Technology Support Healthcare Workers Remote Work Retention Intention	This study examined the relationships between digital technology support, work flexibility and autonomy, organisational remote-work support, and three workforce outcomes—motivation, job satisfaction, and retention intention—among healthcare workers in Nigeria. A quantitative cross-sectional survey design was used. Six hundred and twenty-two questionnaires were distributed to clinical and non-clinical healthcare workers, and 552 complete responses were retained for analysis, yielding a 88.0% usable response rate. All constructs were measured with multi-item five-point Likert scales. Internal consistency coefficients ranged from .819 to .871. Multiple linear regression was used to test the study relationships. Results: The fully reported motivation model was statistically significant ($R = .724$, $R^2 = .524$, adjusted $R^2 = .521$, $F = 201.847$, $p < .001$). Digital technology support made the largest unique contribution to motivation ($\beta = .412$, $t = 8.421$, $p < .001$), followed by organisational remote-work support ($\beta = .315$, $t = 6.702$, $p < .001$) and work flexibility and autonomy ($\beta = .221$, $t = 4.673$, $p < .001$). The retained hypothesis summary also indicated statistically significant relationships between work flexibility/autonomy and job satisfaction and between organisational support and retention intention (both $p < .05$), although coefficient-level estimates for those two focal tests were not available in the reported output. The findings position digital work transformation as a workforce-design issue rather than solely an information-technology investment. The study recommends that healthcare organisations and health authorities should prioritise policies and investment in reliable digital infrastructure.

1. Introduction

Digital transformation has become a central feature of contemporary healthcare, but its implications extend beyond the adoption of individual clinical technologies. Electronic medical records, telemedicine platforms, secure messaging, virtual training; decision-support systems, remote diagnostics, digital scheduling, and data-driven coordination alter how work is organised, how information moves, and how professionals interact with patients, managers, and one another. This distinction matters because the value of digital health is not produced by technology alone. It emerges from the interaction between technological capability, workflow design, worker competence, organisational support, and the institutional environment in which digital systems are embedded (Jeilani & Hussein, 2025; Oke & Sibomana, 2025).

Nigeria provides an important context in which to examine these relationships. Recent reviews describe expanding digital-health activity alongside persistent constraints involving connectivity, power supply, technical infrastructure, digital skills, implementation capacity, interoperability, and organisational readiness (Egwudo et al., 2025; Oke & Sibomana, 2025). Evidence on electronic medical records in Nigerian healthcare facilities suggests that digitalisation can improve data completeness and documentation quality, yet the national evidence base remains comparatively limited and uneven across outcomes and settings (Olukorode et al., 2024). These conditions imply that workforce outcomes may depend not only on whether a digital tool exists but also on whether healthcare workers can access it reliably, obtain technical assistance, exercise appropriate discretion in digitally mediated tasks, and work within clear organisational expectations.

Healthcare is also a distinctive setting for remote and hybrid work. Many frontline clinical activities—physical examination, bedside nursing, procedures, emergency response, specimen collection, and other forms of direct care—require physical presence. At the same time, parts of healthcare work can be separated from location, including documentation, care coordination, case review, reporting, continuing professional education, selected consultations, administrative meetings, scheduling, informatics, and some diagnostic interpretation. Systematic and empirical studies therefore caution against treating healthcare telework as an all-or-nothing arrangement. Its feasibility and consequences are task-dependent and depend on technological and managerial support (Garavand et al., 2022; Jones et al., 2023).

This work-design perspective is especially relevant because digitalisation can generate both resources and demands. Effective digital systems may reduce duplication, improve access to information, facilitate coordination, and give workers greater control over suitable tasks. Conversely, unreliable systems, excessive notifications, poorly defined communication expectations, inadequate support, and blurred work–nonwork boundaries can generate frustration, overload, isolation, and technostress (Allen et al., 2021;

Beckel & Fisher, 2022; Lyzwinski, 2024; Wang et al., 2021). The effect of digital work transformation on employees should therefore be evaluated through the quality of the work environment that accompanies technology adoption rather than through adoption status alone.

The workforce implications are particularly important in Nigeria because health-worker shortages, retention challenges, and professional migration place sustained pressure on service delivery. Comparative policy analysis has highlighted the structural significance of health-workforce shortages for progress toward universal health coverage, while Nigerian evidence links employment conditions, organisational commitment, burnout, and migration governance to intentions to remain or emigrate (Ajayi et al., 2025; Chukwu & Essue, 2024; Yakubu et al., 2023). In such an environment, organisational resources that improve daily work experience may have implications not only for motivation and satisfaction but also for workforce stability.

Despite the rapid growth of remote-work scholarship since the COVID-19 pandemic, three gaps remain relevant. First, a large share of the literature concerns occupations that can be performed fully away from the workplace, whereas healthcare requires a more differentiated, task-level approach. Second, Nigerian digital-health scholarship has concentrated heavily on adoption, implementation challenges, readiness, and system performance, with less empirical attention to the psychological and employment outcomes of digitally enabled work. Third, motivation, job satisfaction, and retention intention are related but conceptually distinct outcomes; combining them into a single generic indicator can conceal different mechanisms. Motivation concerns effort and goal-directed energy, job satisfaction concerns evaluative and affective responses to the work environment, and retention intention concerns the employee's expressed willingness to remain in the organisation or professional setting (de Vries et al., 2023; Kitsios & Kamariotou, 2021; Olaniran et al., 2022).

Against this background, the present study examines digital work transformation through three actionable job resources: digital technology support, work flexibility and autonomy, and organisational remote-work support. It evaluates how these resources relate to healthcare worker motivation, job satisfaction, and retention intention in Nigeria. The study contributes by shifting the analytical focus from technology adoption alone to the organisational conditions under which digitally mediated work is experienced, while also recognising that remote work in healthcare is most appropriately understood as task-specific rather than as a universal replacement for physical clinical work.

The following null hypotheses were tested:

H₀₁: Digital technology support is not significantly associated with healthcare worker motivation.

H₀₂: Work flexibility and autonomy are not significantly associated with healthcare worker job satisfaction.

H₀₃: Organisational remote-work support is not significantly associated with healthcare worker retention intention.

2. Literature Review

2.1 Digital Work Transformation in Healthcare

Digital work transformation differs from simple computerisation because it changes both the technical tools used by employees and the organisation of work around those tools. In healthcare, digital systems can compress communication time, increase information availability, support remote collaboration, and standardise documentation, but they can also create new dependencies on connectivity, system usability, cybersecurity procedures, and technical support. Jeilani and Hussein (2025) found that digital-health technology adoption can improve healthcare-worker performance and reduce workload when implementation is supported by appropriate organisational and environmental conditions. Nigerian reviews similarly identify infrastructure, implementation capacity, and workforce readiness as central conditions for deriving value from digital health (Egwudo et al., 2025; Oke & Sibomana, 2025). The evidence also cautions against technological determinism. Olukorode et al. (2024) found that electronic medical records in Nigeria were associated with meaningful improvements in data quality, yet the evidence on patient-centred outcomes remained limited. This suggests that the existence of a digital system should not be equated automatically with broad organisational effectiveness. The consequences of digitalisation depend on how the technology fits existing tasks, how well workers are supported to use it, and whether the redesign of work reduces or merely relocates burdens.

Remote and hybrid work represent one component of this wider transformation. A systematic review of teleworking in healthcare institutions identified benefits such as flexibility and continuity alongside disadvantages involving communication, technology, and work-life boundaries (Garavand et al., 2022). In post-pandemic healthcare settings, employees who had experienced telework frequently expressed a preference to retain some form of it, but feasibility varied according to role and work characteristics (Jones et al., 2023). Accordingly, the appropriate unit of analysis is often the task rather than the occupation: some duties may be digitally mediated while other duties remain physically anchored.

2.2 Digital Technology Support and Motivation

Digital technology support refers to the availability, reliability, security, and usability of the technical environment required to perform digitally mediated work. It includes access to suitable hardware and software, dependable network connectivity, secure systems, timely troubleshooting, and responsive helpdesk assistance. In resource-constrained settings, these factors are not peripheral conveniences; they determine whether digital tools function as enabling resources or as recurrent sources of interruption. From a work-design perspective, reliable technology can strengthen motivation by reducing avoidable effort and allowing employees to direct cognitive and emotional resources toward meaningful professional tasks. When systems are unstable, workers must devote effort to repeated logins, workaround processes, duplicated documentation, or delays. In contrast, dependable digital systems can increase perceptions of competence and task accomplishment. Wang et al. (2021) similarly show that effective remote work depends on work-design conditions rather than location alone, while Nigerian evidence identifies infrastructure and technical readiness as persistent determinants of digital-health implementation (Egwudo et al., 2025).

Motivation is particularly salient in healthcare because professional effort is shaped by both intrinsic commitment to patient care and the conditions that enable workers to perform effectively. Evidence from health workers across Africa and Asia indicates that

motivation and job satisfaction are influenced by organisational conditions, recognition, resources, and the work environment (Olaniran et al., 2022). The present study therefore expects digital technology support to operate as a job resource that supports effort, persistence, and professional enthusiasm.

2.3 Work Flexibility, Autonomy, and Job Satisfaction

Work flexibility and autonomy refer to discretion over how, when, and—where appropriate—where eligible tasks are performed. In healthcare, autonomy should not be interpreted as unrestricted location choice. Rather, it concerns reasonable control over task methods, scheduling, sequencing, and the location of duties that do not require direct physical presence. This distinction preserves patient-safety and service-delivery requirements while recognising that documentation, reporting, learning, planning, and some consultative activities may permit greater discretion.

Autonomy is a recognised job resource because it provides employees with a sense of control and can improve the fit between job demands and individual work strategies. In remote-work settings, however, flexibility can be beneficial only when boundaries are manageable. Allen et al. (2021) emphasise that boundary management affects work–nonwork balance, and reviews of remote work note that flexibility can coexist with blurred boundaries, isolation, and extended availability when organisational expectations are unclear (Beckel & Fisher, 2022; Lyzwinski, 2024). Thus, flexibility should be understood as structured discretion rather than permanent accessibility. Job satisfaction represents an employee's overall evaluative and affective response to the work environment. Research linking telecommuting resources to job satisfaction suggests that supportive work conditions can improve how employees evaluate their jobs (Jamal et al., 2021). Buonomo et al. (2024) further show that perceived support among remote workers is associated with job satisfaction and work–life balance. In healthcare, the relevance of flexibility may be amplified by shift work, workload intensity, and competing family responsibilities, although the degree of feasible autonomy varies by professional role.

2.4 Organisational Remote-Work Support and Retention Intention

Organisational remote-work support captures the institutional arrangements that make digitally mediated work predictable and sustainable. It includes clear policies, supervisory guidance, training, workload expectations, communication norms, data-security procedures, and explicit boundaries regarding working time and responsiveness. Such support is conceptually distinct from the technology itself: a worker may have access to a functional digital platform but still experience uncertainty if roles, response expectations, or supervisory practices are unclear.

Organisational support is relevant to retention because employees interpret supportive treatment as evidence of how the organisation values their contribution and wellbeing. In nursing, Galanis et al. (2024) reported a moderate negative relationship between organisational support and turnover intention across the studies included in their systematic review and meta-analysis. De Vries et al. (2023) similarly identify organisational and work-environment factors among important influences on healthcare-worker retention. In Nigeria, retention is further complicated by workforce shortages and emigration pressures, making supportive organisational conditions strategically important (Ajayi et al., 2025; Chukwu & Essue, 2024; Yakubu et al., 2023).

Remote-work support may therefore influence retention intention not because employees expect all healthcare work to be conducted remotely, but because supportive policies signal responsiveness to contemporary work needs. Where organisations provide realistic flexibility for eligible tasks, maintain clear boundaries, and invest in the resources required for digital work, employees may perceive greater organisational care, better work–life fit, and stronger reasons to remain.

2.2 Theoretical Framework

This study reviews two relevant theories: Job Demands–Resources and Boundary-Management Perspectives which forms the framework of the study

2.2.1 Job Demands–Resources and Boundary-Management Perspectives

The Job Demands–Resources (JD–R) theory provides the principal explanatory framework for the study. JD–R theory proposes that job characteristics can be organised broadly into demands that require sustained effort and resources that assist employees in achieving work goals, reducing the costs of demands, and supporting learning, growth, and engagement (Bakker & Demerouti, 2017). The framework is especially useful for digital work because the same technology can function either as a resource or a demand depending on reliability, usability, task fit, and organisational context.

Within the present model, digital technology support is a technical job resource, work flexibility and autonomy are work-design resources, and organisational remote-work support is an institutional and supervisory resource. Their combined availability should increase the likelihood that digitally mediated work supports rather than obstructs professional functioning. This interpretation is consistent with contemporary applications of JD–R in which resources are associated with engagement and performance processes (Lee & Jo, 2023). Boundary-management theory complements JD–R by explaining why flexibility can produce different outcomes depending on how transitions between work and nonwork roles are managed. Ashforth et al. (2000) conceptualised everyday role transitions as boundary-crossing processes, and later remote-work research has shown that employees differ in their preferences and capacity for segmentation and integration (Allen et al., 2021). In healthcare, where urgent communication and shift-based work can intensify boundary permeability, flexibility without clear limits may become an additional demand. Organisational policies that define communication windows, eligible remote tasks, and supervisory expectations can therefore help convert flexibility into a usable resource. These perspectives suggest that digital work transformation should be evaluated as a resource configuration. Reliable technology without autonomy may still leave work rigid; autonomy without organisational support may create ambiguity; and policy support without functional technology may have little operational value. The study therefore tests the joint contribution of all three resources to motivation.

2.3 Empirical Review

The reviewed literature reveals a fragmented evidence base regarding digital transformation and health-workforce outcomes. On

one side, recent Nigerian digital-health scholarship has substantially improved understanding of the adoption, implementation and integration of digital health technologies. Egwudo et al. (2025) identified opportunities associated with improved healthcare access, data quality, healthcare-worker training and service delivery, while also highlighting persistent infrastructural, operational, financial, digital-literacy and scalability challenges. Similarly, Oke and Sibomana (2025) documented substantial growth in Nigerian digital-health research but observed that the translation of this expanding knowledge base into widespread practical implementation remains limited. Despite these contributions, this body of research predominantly approaches digitalisation as a technological and health-system implementation issue rather than as a feature of healthcare employees' work environment.

On the other side, Nigerian health-workforce scholarship has concentrated on working conditions, workforce shortages, burnout, organisational commitment, remuneration, migration and retention-related challenges. Ajayi et al. (2025) demonstrated the relevance of decent working conditions, burnout and affective commitment to nurses' intention to emigrate, while Yakubu et al. (2023) showed that migration intentions among skilled Nigerian health workers are embedded within broader governance, working-condition and policy environments. Chukwu and Essue (2024) further identified remuneration and welfare, professional autonomy, career progression, financing and policy commitment as important dimensions of Nigeria's health-workforce challenges. However, these studies did not investigate whether the digital resources increasingly embedded in healthcare work are associated with healthcare workers' motivation, job satisfaction or intention to remain.

A related conceptual gap concerns the treatment of employee outcomes. Existing studies show that motivation, job satisfaction and retention-related intentions are interconnected, but they should not be regarded as interchangeable constructs. Kitsios and Kamariotou (2021) examined the motivational importance of achievement and workplace relationships, while Olaniran et al. (2022) demonstrated that workload, remuneration, career opportunities, work-life balance, relationships and recognition influence community health workers' motivation and job satisfaction. De Vries et al. (2023) likewise identified job satisfaction, career development, work-life balance and wider working conditions as prominent determinants of healthcare-worker retention. Nevertheless, these outcomes have generally been investigated separately, in different populations and institutional contexts, rather than incorporated as distinct outcomes within a common digital-work framework.

There is also an important measurement gap between migration intention and retention intention. Nigerian studies such as Ajayi et al. (2025) and Yakubu et al. (2023) have understandably focused on intention to emigrate because of the country's continuing health-worker migration challenge. However, intention to emigrate does not fully capture an employee's intention to remain with a particular organisation or employment setting. Organisational retention, professional retention and international migration represent related but conceptually different employment decisions. Treating retention intention as a distinct construct would therefore provide a more precise assessment of employees' willingness to continue working within the relevant organisational context.

Methodologically, much of the available evidence consists of scoping and systematic reviews, policy analyses, qualitative investigations and cross-sectional surveys. Although these approaches have generated important descriptive and explanatory insights, relatively little Nigerian evidence directly tests the associations between digitally enabled workplace resources and multiple employee outcomes within the same analytical framework. Furthermore, the concentration of some empirical studies on individual professional groups, particular regions or individual institutions restricts the transferability of their conclusions to other categories of Nigerian healthcare workers.

The resulting gap is therefore not simply a lack of research on digital health or a lack of research on healthcare-worker motivation and retention. Rather, it is a lack of integrated worker-level evidence connecting the two domains. There remains insufficient empirical evidence on whether healthcare workers' experience of digitally enabled work resources is associated with their motivation, job satisfaction and retention intention in the Nigerian healthcare context, while treating these three outcomes as conceptually and empirically distinct constructs. This study addressed this gap by repositioning digital transformation from being viewed solely as an information-technology or service-delivery initiative to being examined as a work-design issue with potential implications for the sustainability of the healthcare workforce.

3. Methodology

The study adopted a quantitative cross-sectional survey design to examine relationships between digital work resources and healthcare-worker outcomes in Nigeria. The study focused on healthcare workers in Nigeria, a West African country with an estimated population of approximately 232.68 million in 2024 (Worldometer, n.d.). The nine states selected for the study; Kwara, Plateau, Kano, Kaduna, Lagos, Oyo, Delta, Rivers, and Enugu had a combined estimated population of 72,025,500 (Josiah et al., 2024). The sample size was determined with Yamane's (1967) formula

$$n = \frac{N}{(1 + \frac{N}{e^2})}$$

Where:

n = sample size

N = population size (72,025,500)

e = margin of error (0.05)

$$n = \frac{72,025,500}{(1 + 72,025,500 \times 0.05^2)}$$

(To calculate e^2 : $0.05^2 = 0.0025$)

$$= \frac{72,025,500}{(1 + 72,025,500 \times 0.0025)}$$

= (Multiply N by e^2 : $72,025,500 \times 0.0025 = 180,063.75$)

$$\frac{72,025,500}{(1 + 180,063.75)}$$

To get the sample size, divide N by the result:

$$\frac{72,025,500}{(115,241.8)}$$

$$= 625$$

Therefore, the sample size (n) is 625. The unit of analysis was the individual healthcare worker. Participation was voluntary, and only completed responses that satisfied the study's data-quality checks were included in the inferential models.

All constructs were measured using multi-item scales on a five-point Likert response format ranging from 1 (strongly disagree) to 5 (strongly agree). The measures were adapted to the context of digital and remote-work support in healthcare. Construct scores captured perceived access to resources and respondents' evaluations of their work outcomes.

Table 1: Operationalisation of Study Variables

Construct	Role	Indicative content	Conceptual focus
Digital Technology Support	Predictor	System access; network stability; security tools; technical helpdesk	Reliable technical enablement for digitally mediated work
Work Flexibility and Autonomy	Predictor	Schedule discretion; task-method control; location control for eligible duties	Discretion over how and when suitable tasks are performed
Organisational Remote-Work Support	Predictor	Management guidance; training; policy clarity; workload and communication boundaries	Institutional and supervisory support for digitally mediated work
Motivation	Outcome	Effort; task persistence; goal drive; professional enthusiasm	Energy and sustained goal-directed work effort
Job Satisfaction	Outcome	Contentment with work context; supervision; autonomy; overall role	Evaluative and affective appraisal of the job
Retention Intention	Outcome	Desire to stay; future career intention; low turnover intention	Stated intention to remain in current employment

Source: Field Survey, 2025

Internal consistency was assessed using Cronbach's alpha. All six constructs produced alpha coefficients above .80, indicating strong internal consistency within the present sample. The coefficients ranged from .819 for retention intention to .871 for organisational remote-work support.

Table 2: Reliability Table

Construct	Cronbach's α	Interpretation
Digital Technology Support	.857	Strong
Work Flexibility and Autonomy	.824	Strong
Organisational Remote-Work Support	.871	Strong
Motivation	.846	Strong
Job Satisfaction	.861	Strong
Retention Intention	.819	Strong

Source: Field Survey, 2025

Data analysis focused on internal consistency and multiple linear regression. Statistical significance was evaluated at the 5% level. For each outcome, the conceptual model treated digital technology support (DTS), work flexibility and autonomy (WFA), and organisational remote-work support (ORS) as predictor variables. The fully retained coefficient-level output available for reporting was the motivation model; the archived hypothesis summary for job satisfaction and retention intention retained significance decisions but not the complete coefficient tables. Accordingly, no coefficient magnitude is inferred for those two focal relationships. The principal fully reported model was specified as:

$$\text{Motivation} = \beta_0 + \beta_1(\text{DTS}) + \beta_2(\text{WFA}) + \beta_3(\text{ORS}) + \varepsilon.$$

Standardised beta coefficients were used to compare the relative contribution of the three predictors to motivation. Model fit was evaluated using R, R², adjusted R², and the omnibus F statistic.

The focal tests for H2 and H3 examined whether WFA was significantly associated with job satisfaction and whether ORS was significantly associated with retention intention, respectively. Because complete coefficient-level output for these two tests was not preserved in the supplied statistical summary, the results are reported only at the level supported by the available evidence.

4. Findings

4.1 Response Rate

Table 3. Response Rate

Category	N	%
Clinical healthcare workers (target allocation)	388	62.0
Non-clinical healthcare workers (target allocation)	237	38.0
Questionnaires distributed	625	100.0
Usable valid cases	552	88.0
Excluded/incomplete cases	73	12.0

Source: Field Survey, 2025

Of the 625 questionnaires distributed, 552 were retained for analysis, producing a 88.0% usable response rate. The reliability analysis showed consistently strong internal consistency across the six constructs, with Cronbach's alpha values ranging from .819 to .871 (Table 2). These results indicate that the items within each scale were sufficiently coherent for construct-level analysis.

4.2 Regression Model

The combined relationship of digital technology support, work flexibility and autonomy, and organisational remote-work support with healthcare worker motivation was examined using multiple linear regression. The model produced $R = .724$, indicating a strong multiple association between the predictor set and motivation. The model R^2 was .524, with an adjusted R^2 of .521. Thus, the three digital-work resources jointly accounted for 52.4% of the observed variance in motivation in the analysed sample. The small difference between R^2 and adjusted R^2 indicates that the explanatory estimate changed little after adjustment for the number of predictors.

Table 4 Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of Estimate
1	.724	.524	.521	.438

Source: SPSS Version 26

The regression test was statistically significant, $F = 201.847$, $p < .001$. The null hypothesis that the predictor set had no joint relationship with motivation was therefore rejected. This result supports the three hypotheses at the level of prediction rather than causation.

Table 5: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	115.68	3	38.56	201.85	<.001
Residual	105.08	548	0.19		
Total	220.76	551			

Source: SPSS Version 26

The ANOVA result indicates that the combined contribution of digital technology support, work flexibility and autonomy, and organisational remote-work support significantly predicted healthcare worker motivation, ($F(3,548)=201.85$, $p<.001$). Therefore, the null hypothesis that the predictor variables have no significant joint relationship with motivation is rejected. This supports the reported finding that the three digital work resources jointly explained 52.4% of the variation in healthcare worker motivation

Table 6: Coefficients

Predictor	Standardised β	T	P	Decision
Digital Technology Support	.412	8.421	< .001	Significant positive predictor
Work Flexibility and Autonomy	.221	4.673	< .001	Significant positive predictor
Organisational Remote-Work Support	.315	6.702	< .001	Significant positive predictor

Source: SPSS Version 26

All three predictors had statistically significant positive standardised coefficients. Digital technology support had the largest unique standardised contribution to motivation ($\beta = .412$, $t = 8.421$, $p < .001$). Organisational remote-work support had the second largest contribution ($\beta = .315$, $t = 6.702$, $p < .001$), followed by work flexibility and autonomy ($\beta = .221$, $t = 4.673$, $p < .001$). Accordingly, H_{01} was rejected because digital technology support was significantly and positively associated with motivation.

The retained inferential summary recorded a statistically significant relationship between work flexibility and autonomy and job satisfaction ($p < .05$). H_{02} was therefore rejected. However, the available summary did not retain the corresponding beta coefficient, t statistic, model R^2 , confidence interval, or other coefficient-level information for this focal test. The result therefore supports the existence of a statistically significant association but does not justify claims about the size of the relationship.

The retained inferential summary likewise recorded a statistically significant relationship between organisational remote-work support and retention intention ($p < .05$). H_{03} was therefore rejected. As with H_{02} , the complete coefficient-level output was not available in the retained analysis summary. The result is therefore interpreted cautiously as evidence of statistical association, without an unsupported estimate of magnitude.

4.3 Discussion

This study examined digital work transformation as a configuration of technical, work-design, and organisational resources rather than as a simple question of whether healthcare employees work remotely. The strongest quantitative evidence concerns motivation: digital technology support, work flexibility and autonomy, and organisational remote-work support jointly explained 52.4% of the variance in healthcare worker motivation. All three predictors contributed positively and significantly, but their relative contributions differed. Digital technology support was the strongest predictor, followed by organisational remote-work support and then work flexibility and autonomy. The prominence of digital technology support is substantively important in the Nigerian context. Digital work can only function as a resource when employees can access stable systems, reliable connectivity, appropriate hardware and software, secure platforms, and timely technical support. Nigerian digital-health reviews consistently identify infrastructure, power, connectivity, implementation capacity, and workforce readiness as constraints on digital-health scale-up (Egwudo et al., 2025; Oke & Sibomana,

2025). The present result extends that literature from implementation to workforce experience: technical support is not simply an operational input but is closely associated with employees' motivational state.

This finding also aligns with the broader argument that digital technologies produce value through work design. Jeilani and Hussein (2025) report that digital-health technology adoption can enhance healthcare-worker performance and reduce workload under supportive organisational and environmental conditions. Likewise, Wang et al. (2021) emphasise that effective remote work depends on work characteristics and resources. When technical friction is reduced, workers are less likely to spend effort on avoidable troubleshooting and more able to direct attention toward professional tasks. In JD–R terms, digital technology support can therefore be interpreted as a resource that facilitates goal attainment and protects energy.

4.4 Organisational Support as a Workforce Resource

Organisational remote-work support was the second-largest predictor of motivation in the fully reported model. This result reinforces the point that technology alone is insufficient. Digital systems require managerial arrangements that clarify who may perform which tasks remotely, how workloads are allocated, when employees are expected to respond, how data are protected, and where technical or supervisory assistance can be obtained. Without such structures, flexibility can become ambiguity and digital access can become permanent availability.

The result is consistent with evidence showing that perceived organisational support is consequential for employee wellbeing and retention-related outcomes. Buonomo et al. (2024) found that support from leaders and colleagues was associated with job satisfaction and work–life balance among remote workers, while Galanis et al. (2024) reported a moderate negative association between organisational support and turnover intention among nurses. De Vries et al. (2023) similarly identify work–environment and organisational factors as important determinants of healthcare-worker retention. The Nigerian setting adds urgency because workforce shortages and emigration create high replacement costs and continuity risks (Ajayi et al., 2025; Chukwu & Essue, 2024; Yakubu et al., 2023).

The present study's retained hypothesis summary also indicates that organisational remote-work support was significantly associated with retention intention. Because the full coefficient-level result was not available, the magnitude should not be overstated. Nevertheless, the direction of the evidence is theoretically consistent with the idea that employees are more willing to remain where digitally enabled work is accompanied by visible organisational support, realistic policies, and predictable expectations.

4.5 Flexibility, Autonomy, and Job Satisfaction

Work flexibility and autonomy had the smallest of the three standardised coefficients in the motivation model, but the association remained statistically significant. This pattern suggests that autonomy matters, although its motivational value may depend on the presence of adequate technology and organisational support. Autonomy without dependable systems may offer little practical control, and flexibility without clear boundaries may simply shift work into personal time.

The retained hypothesis summary also indicated a statistically significant relationship between work flexibility/autonomy and job satisfaction. This is consistent with research linking job resources and telecommuting conditions to satisfaction (Jamal et al., 2021) and with evidence that employees value continued access to telework where tasks permit it (Jones et al., 2023). However, the healthcare context requires a more nuanced interpretation than conventional office-based remote-work research. Flexibility is likely to be role- and task-dependent. A radiology review, virtual meeting, training session, administrative report, or clinical documentation task may permit spatial or temporal discretion, whereas bedside care or emergency procedures do not.

Boundary-management theory helps explain why structured flexibility is more defensible than unrestricted flexibility. Employees must transition between professional and personal roles, and remote work can make those boundaries more permeable (Ashforth et al., 2000; Allen et al., 2021). The practical implication is that autonomy should be accompanied by explicit rules about eligible tasks, expected response times, coverage arrangements, and periods of nonavailability. Such safeguards are particularly important in healthcare because professional obligations can otherwise legitimise constant connectivity.

4.6 Theoretical Contribution

The study contributes to digital-health and work-design scholarship in three ways. First, it treats digital work transformation as a multidimensional workforce phenomenon. Much digital-health research focuses on adoption, readiness, interoperability, or patient-facing outcomes. The present model instead identifies technical support, autonomy, and organisational support as distinct resources that shape how employees experience digital work.

Second, the findings extend JD–R reasoning to a resource-constrained healthcare setting. The motivation model shows that a technical resource, a work-design resource, and an organisational resource each make a unique contribution when entered together. This supports the JD–R proposition that multiple resources can jointly support motivational processes (Bakker & Demerouti, 2017). It also suggests that digitalisation should be evaluated as a bundle of interdependent resources rather than as a standalone technology intervention.

Third, the study clarifies the meaning of remote work in healthcare. Rather than assuming that remote work requires a worker to perform an entire occupation away from the healthcare facility, the study adopts a task-level interpretation. This framing is better aligned with evidence that healthcare telework is feasible for some functions but not others (Garavand et al., 2022; Jones et al., 2023). It therefore offers a more realistic basis for policy in systems where direct clinical care remains fundamentally place-dependent.

5. Conclusion and Recommendations

5.1 Conclusion

Digital work transformation in healthcare should be understood as an organisational and workforce redesign process rather than as a technology-acquisition exercise. In this Nigerian healthcare sample, digital technology support, work flexibility and autonomy, and organisational remote-work support jointly showed a strong relationship with healthcare worker motivation, accounting for 52.4% of its variance. Digital technology support made the largest unique contribution, indicating that reliable systems and technical assistance are central to whether digital work is experienced as enabling rather than obstructive.

The retained evidence also indicates significant relationships between flexibility/autonomy and job satisfaction and between organisational remote-work support and retention intention, although the magnitude of those two relationships cannot be assessed from the currently retained coefficient-level output. Taken together, the findings support a resource-based approach to digital work: technology, autonomy, and organisational support are most meaningful when they operate together and are matched to the task requirements of healthcare. For healthcare leaders and policymakers, the key implication is that remote or hybrid work should not be imported uncritically from office-based sectors. It should be implemented selectively for compatible tasks, supported by reliable digital infrastructure, governed by clear boundaries, and integrated into broader workforce-management and retention strategies.

5.2 Recommendations

- Healthcare organisations and health authorities should prioritise investment in reliable digital infrastructure, including stable internet connectivity, functional digital platforms, appropriate hardware, cybersecurity systems, and responsive technical support services.
- Healthcare institutions should introduce structured flexibility policies that allow eligible healthcare tasks to be performed with appropriate autonomy while maintaining patient safety and service requirements.
- Healthcare organisations should strengthen organisational support mechanisms through clear remote-work guidelines, leadership support, training opportunities, workload management systems, and effective communication structures.

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