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CareRoute: A Platform-Cooperative Model for NCD Health Delivery Through Formally Employed Community Workers

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Abstract

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Team Members and Short Biographies

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Problem

Two crises are accelerating in low- and middle-income countries, and few proposals have treated one as the answer to the other. The first is an NCD epidemic: hypertension and diabetes are now among the fastest-growing causes of premature death in LMICs, yet remain catastrophically unmanaged. 1.4 billion people have hypertension globally, with only 21% of cases under control, and 537 million adults live with diabetes, three in four of them in LMICs. The second is a structural employment crisis: the ILO and WEF project that 1.2 billion young people will enter the workforce this decade while only 420 million jobs will be created, a gap of 780 million that falls disproportionately on women and climate-displaced agricultural workers left without formal work. The connection neither crisis has fully exploited is this: managing hypertension and diabetes does not require a physician. It requires blood pressure checks, glucose monitoring, medication delivery, and follow-up, tasks that trained, protocol-guided workers can safely perform. The demand for that work is enormous and growing. The workforce to do it is unemployed and ready. Rwanda's nationally celebrated community health worker program, the most cited model in global health, employs more than 100,000 workers and covers none of these services.

Proposed Solution

CareRoute is a platform cooperative that formally employs unemployed youth, women, and climate-displaced agricultural workers as NCD-specialized health delivery professionals, dispatched through a mobile application to deliver hypertension screening, diabetes monitoring, medication delivery, specimen transport, and care coordination. It is not a community health worker program but a new employment category, built on a two-level career ladder, formal employment contracts with a guaranteed minimum income, and worker ownership of the platform through a cooperative structure. A bank-partnered device financing arrangement gives workers smartphone access through payroll-deducted loans, without transferring device-financing risk onto the cooperative. Piloting begins in Rwanda, formalizing an existing workforce of more than 100,000 community health workers, and in Nigeria, testing transposability and a climate-displacement recruitment pathway.

Expected Impact

CareRoute is designed to improve hypertension and diabetes control at the community level while creating stable, career-track income for populations most exposed to labor market and climate disruption. Cooperative ownership lets workers share in platform surplus rather than absorb the value-extraction dynamics documented on commercial gig platforms, with particular benefit to the female-majority workforce the model targets. The approach advances SDG 1, SDG 3, SDG 5, SDG 8, and SDG 10, and offers a transposable model for other low- and middle-income countries facing the same convergence of health and employment gaps.

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Project

1. Introduction

Background

The world of work is undergoing a profound and accelerating transformation [1]. Technological change, demographic pressure, climate disruption, and the expansion of platform-mediated labor are simultaneously reshaping employment relationships, displacing livelihoods, and concentrating economic risk on those least positioned to absorb it [2]. In low- and middle-income countries, where most of the world's future workforce will live [3] and where health systems are least equipped to respond to shifting disease burdens, these forces intersect with particular urgency.

Future of Work

Two crises define this moment. The first is an employment crisis: labor markets in low- and middle-income countries cannot absorb the youth entering them, and much of the work that does exist is informal, low-productivity, or mediated by platforms that reproduce the pay and security problems documented in the gig economy [4, 5]. The second is a health delivery crisis: non-communicable diseases (NCDs) are displacing infectious disease as the dominant cause of premature death and disability in Sub-Saharan Africa [6], yet the community-level health workforce has not adapted to meet this shift [7, 8]. Both crises disproportionately affect the same populations: young people, women, and communities in climate-vulnerable rural regions.

Why Now

CareRoute is designed to resolve both crises through one institutional mechanism. It creates a new category of formal employment, the NCD-specialized, app-dispatched health delivery professional, by formally employing the populations displaced by the future of work's disruptions to deliver the health services most urgently needed in their own communities. The Geneva Challenge's own framing is instructive here [9]: public policy, labor-market institutions, and mechanisms of collective representation play a decisive role in shaping how technological and structural change translates into labor-market outcomes. CareRoute is a demonstration of that principle, an institutional alternative to the gig economy that uses dispatch-platform efficiency while building cooperative ownership, formal employment, and career progression into its structural design.

2. Problem Statement

The NCD Crisis

NCDs have ceased to be a future concern for health systems in low- and middle-income countries. Global Burden of Disease 2021 projections confirm that Sub-Saharan Africa's disease burden is shifting toward NCDs, forecast to overtake communicable, maternal, neonatal, and nutritional diseases as the leading cause of death by 2030 [6]. An estimated 22% of adults in Sub-Saharan Africa have hypertension, reaching 38% among adults in Nigeria [10], and the World Health Organization (WHO) reports 1.4 billion people with hypertension worldwide, of whom only 21% achieve adequate control [11]. The International Diabetes Federation (IDF) places the global adult diabetes population at 537 million, three quarters of them in low- and middle-income countries [12].

The failure is not a lack of effective interventions: blood pressure measurement, glucose monitoring, and medication adherence support are inexpensive and effective when delivered consistently, as CHW-led pilots in rural Lesotho and Uganda have demonstrated [13, 14]. The failure is delivery. Community health worker programs across Sub-Saharan Africa, including Rwanda's national program of more than 100,000 workers, were designed for the infectious disease and maternal health burden of the 1990s and have not been systematically updated to address NCDs [7, 8].

The Workforce Crisis

The International Labor Organization (ILO) and World Economic Forum (WEF) project that 1.2 billion young people will enter the global workforce over the next decade while only 420 million new jobs will be created, a structural mismatch of 780 million potential workers [2, 3]. In Sub-Saharan Africa and South Asia, which will account for close to 60% of the global working-age population by 2050, this is not cyclical unemployment but structural labor market failure. Young people in these regions are concentrated in low-quality, low-productivity, informal employment with limited social protection and no career trajectory.

Climate Displacement

Climate change compounds the employment crisis. The ILO estimates that heat stress alone could eliminate 80 million full-time equivalent jobs globally by 2030, with the largest effects in agriculture, construction, and informal urban services, the sectors that employ the populations CareRoute targets [15]. In Sub-Saharan Africa, agriculture is the primary livelihood for rural women, and climate-related crop failures are accelerating the displacement of these workers into urban and peri-urban areas with no formal employment pathway waiting for them.

Informality

Informality is the backdrop against which both crises play out. The ILO estimates that around 2 billion workers globally, close to 60% of total employment, work informally, a share that exceeds 85% in low-income countries [4]. These are precisely the arrangements CareRoute is designed to move workers out of: informal employment typically falls outside labor regulation, taxation, and social insurance, leaving households without the income security or social protection that formal work provides.

The Digital Divide

Digital access is unevenly distributed along the same lines. The International Telecommunication Union (ITU) estimates that 189 million fewer women than men were online globally in 2024 [16], a gap that is wider still in the low-income and rural contexts where CareRoute recruits. Any platform-based employment model that assumes smartphone ownership risks excluding the very workers it intends to serve, which is why device access is treated in this proposal as a structural design problem rather than an assumption.

3. Why Current Systems Fail

The CHW Limitation

Existing community health worker programs were not designed for NCD care and have not been restructured to provide it. Rwanda's CHWs, the model most frequently cited in global health, contribute an estimated four hours of unpaid labor per day and earn USD 5 to 10 per quarter from performance-based cooperative incentives, with no formal employment status, no guaranteed income, and no NCD mandate [7]. Living Goods and Last Mile Health strengthen maternal and child health delivery but operate through contractor or informal-pay arrangements, again without an NCD mandate or worker ownership. The structural gap is consistent across the region: community-based service delivery models largely overlook non-communicable diseases, leaving this among the most significant unaddressed gaps in primary health care in low- and middle-income countries [8].

The Gig Economy Limitation

Platform-mediated gig work offers a superficially appealing response to the employment deficit but tends to reproduce and deepen existing inequalities. ILO survey evidence on major digital labor platforms found average pay of USD 4.43 per hour for paid work time, falling to USD 3.31 per hour once unpaid time is included [5]. Workers on these platforms typically lack employment contracts, social protection, income guarantees, or career progression. Emerging

gig nursing platforms in the United States, which match nurses to hospital shifts through algorithmic dispatch, have been documented facilitating a race to the bottom in pay and care quality [17], a pattern CareRoute is structurally designed not to replicate.

The Existing Digital Health Limitation

Digital health dispatch platforms exist, but none combine an NCD mandate with formal employment. HealthBridge, a Kenyan platform offering SMS-based symptom reporting, AI triage, and offline-capable CHW dispatch, is the closest technical comparator to CareRoute [18], yet its dispatch architecture carries no NCD-specific mandate, no formal employment status for its workers, and no cooperative ownership structure. The technology needed to dispatch health workers efficiently already exists elsewhere; what does not yet exist is a model that pairs that technology with formal employment, a career ladder, and worker ownership.

4. The CareRoute Solution

CareRoute is a platform cooperative for last-mile NCD health delivery that formally employs unemployed youth, women, and climate-displaced agricultural workers as NCD-specialized health delivery professionals, dispatched through a mobile application. The platform connects patients, facilities, and clinicians with nearby CareRoute workers for NCD screening, monitoring, medication delivery, specimen transport, and care coordination. Workers hold employment contracts, access social protection, earn a guaranteed minimum income, progress through a defined career ladder, and hold shares in the platform's governance structure.

CareRoute is explicitly not a community health worker program. Community health worker programs are typically volunteers or minimally compensated lay workers providing generalist health education and referral, with no formal employment status and no systematic NCD mandate. CareRoute workers are NCD-specialized, formally employed, and dispatched by an app-based system to deliver specific, protocol-guided clinical services, a different employment category built on three structural choices: an NCD-first service mandate covering the five services described in Section 2; formal employment with cooperative ownership, including minimum income guarantees, a two-level certification career ladder, and worker governance rights; and bank-partnered device access that removes the digital access barrier without transferring device-financing risk onto the cooperative.

5. Theory of Change

CareRoute's theory of change proceeds from structural unemployment and NCD care neglect, through platform-mediated formalization, to improved health outcomes and economic resilience.

Inputs	Activities	Outputs	Outcomes	Impact
Platform infrastructure	Worker recruitment	Formal NCD jobs created	NCD detection improved	SDG 1, Poverty
MoH and facility MoUs	NCD certification	NCD services delivered	BP and glucose controlled	SDG 3, Health
WHO NCD protocols	Bank device lending	Workers certified	NEET rates reduced	SDG 5, Gender
Bank device MoU	App-mediated dispatch	Devices issued and repaid	Worker income stabilized	SDG 8, Decent Work
Development funding	QA monitoring	Facility subscriptions	Digital inclusion gains	SDG 10, Reduced Inequalities

MoH = Ministry of Health; MoU = Memorandum of Understanding; QA = quality assurance. SDG alignment follows the United Nations Sustainable Development Goals framework [19]; the WHO NCD protocols referenced above are per [11].

In parallel, formal employment with a career ladder is expected to produce income stability for workers, contributing to household poverty reduction and community economic resilience, while the cooperative ownership layer allows worker surplus-sharing to support wealth accumulation beyond wages, a mechanism of particular relevance to the female-majority workforce the model targets.

6. How CareRoute Works

CareRoute operates through a dual-channel request system. Patients and community members can request services directly through the app, Unstructured Supplementary Service Data (USSD), SMS, or WhatsApp (Channel A), while health facilities and clinicians can enter follow-up orders directly into the platform (Channel B), generating automatic dispatch assignments.

1. Service Request Patient or facility submits a request via app, USSD, or portal.	2. Matching Urgency is scored and the nearest qualified worker is matched to the patient's catchment zone.	3. Dispatch The worker receives the assignment and patient history on an offline-capable app.	4. NCD Service The worker delivers the BP check, glucose test, medication delivery, or sample transport.	5. Record and Follow-up The outcome is logged, the facility is notified, and the worker earns a guaranteed monthly wage.
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In practice, a nurse discharging a hypertensive patient enters into the CareRoute portal an instruction such as weekly blood pressure checks for eight weeks. The platform auto-generates eight dispatch assignments, allocates them to the CareRoute worker covering the patient's catchment zone, and sends an SMS confirmation to the patient. The nurse's administrative burden is about two minutes of data entry, replacing repeated phone-based follow-up that carries a documented risk of loss to follow-up; retention in primary care-based diabetes management across Sub-Saharan Africa has been measured at just 40 to 53% at one year, meaning up to three in five patients disengage from care within their first year of diagnosis [20].

7. Workforce Model

Employment and Recruitment

CareRoute's recruitment strategy targets three populations directly: Not in Education, Employment, or Training (NEET) youth aged 15 to 29, recruited through partnerships with youth employment agencies and vocational training institutions; women, reached through savings groups and community cooperatives, with specific service roles such as maternal and postnatal NCD screening prioritized for female workers based on evidence that they are more effective in contexts with gendered healthcare norms [21]; and climate-displaced agricultural workers, reached through a formal displacement-verification pathway in which workers who demonstrate loss of agricultural livelihood through a local-government-verified self-declaration receive priority enrollment, a subsidized CareRoute Kit, and supplementary income support during the three-month training period.

Career Ladder and Certification

The career ladder is the most significant structural distinction between CareRoute and existing CHW models. Level 1, NCD Screener, is the entry certification, requiring a three-month training program aligned with WHO protocols

and covering blood pressure measurement, capillary glucose testing, medication delivery, specimen collection, patient registration, and artificial intelligence (AI)-guided referral support. Workers at this level are assigned fixed catchment zones and earn a guaranteed minimum wage. Level 2, Care Coordinator, is available after twelve months of employment and a structured performance review, requiring a further two-month training program covering advanced NCD monitoring, cardiovascular risk counselling, facility liaison, supervision of Level 1 workers, mental health screening using validated tools such as the Patient Health Questionnaire-2 (PHQ-2) [22] and the Self-Reporting Questionnaire-20 (SRQ-20) [23], and data quality assurance. Level 2 workers earn a higher guaranteed minimum and gain priority access to further training pathways in nursing, clinical officer programmed, or Ministry of Health employment. Ethiopia's Health Extension Worker program, which uses a comparable two-level cadre structure at national scale, demonstrates that stratified community health worker models are feasible within government health system architecture [24].

Social Protection and Cooperative Governance

Six structural choices are intended to prevent CareRoute from drifting toward the gig dynamics that characterize ride-sharing, on-demand nursing, and most platform-mediated labor: employment contracts with defined terms and benefits; a minimum monthly income guarantee independent of transaction volume; health insurance and paid leave; the two-level career ladder described above; cooperative ownership, with worker shares distributed upon completion of the probationary period; and a worker council with governance rights over platform policy affecting working conditions and wage floors. If the platform generates surplus revenue above the minimum income guarantees and operating costs, that surplus is distributed to workers as cooperative dividends, proportional to hours worked and seniority.

8. AI Integration

Platform Architecture

CareRoute's technology is designed around the infrastructure realities of Sub-Saharan Africa rather than high-income-country assumptions. The core design principle is offline-first: patient registration, clinical assessment checklists, dispatch assignments, and record logging are stored locally on the device and synchronize with the server when connectivity allows. Where even intermittent connectivity is unavailable, a USSD layer allows patients and facilities to submit requests by dialing a code on any basic feature phone, an approach already in use for disease surveillance reporting by 400 community health workers in Tanzania's Songwe Region [25].

Decision Support, Dispatch, and Quality Assurance

AI is used in three specific, bounded applications, each intended to support rather than substitute for the judgment of trained workers and supervisors. The first is on-device clinical decision support: structured, WHO-protocol-guided screening checklists that flag readings outside protocol thresholds and generate referral documentation, running fully offline so that connectivity gaps do not interrupt clinical workflow. This tool is intended to compensate for the limits of a three-month certification by embedding protocol guidance in the workflow itself; it does not replace clinical judgment, and abnormal or ambiguous cases are routed to supervision and referral rather than resolved by the tool. The second is dispatch optimization: urgency scoring and route assignment that allocate workers to requests, operating as real-time matching in urban areas and as weekly scheduling within fixed catchment zones in rural areas. The third is quality assurance analytics: supervisor dashboards that track visit completion, monitor outcome trends, and flag anomalies that may indicate a data error, an equipment problem, or a cluster of abnormal readings worth investigating.

Because these dashboards also generate performance data on individual workers, they are governed by the same worker council that oversees other platform policy, so that quality monitoring does not become a mechanism of

unaccountable surveillance. The AI components described here are decision-support and logistics tools, not autonomous diagnostic or dispatch systems, and their design is deliberately narrow: offline-capable, protocol-bound, and reviewable by supervisors and the worker council rather than opaque to them.

9. Financing Model

Health Facility Subscriptions

Health facilities and individual clinicians pay a monthly subscription fee to access the CareRoute worker pool and the dual-channel request system, tiered by facility size and service volume. This is the primary revenue stream, and it aligns incentives directly: facilities pay because CareRoute reduces their own administrative workload, particularly the follow-up coordination burden described in Section 6, and worker pay is drawn from subscription revenue, linking service quality to financial sustainability.

Ministry of Health Contracts

National Ministry of Health contracts, structured as population-level coverage agreements for defined geographic populations, are the secondary revenue stream. These align CareRoute with Universal Health Coverage targets and NCD prevention budgets. In Rwanda, where the Ministry of Health has explicit NCD service expansion commitments in its Vision 2050 plan, and where CareRoute can integrate with the national District Health Information System 2 (DHIS2), this channel is comparatively accessible.

Insurance and Development Finance

As national health insurance coverage expands in the target countries, insurance reimbursement per NCD service visit is expected to supplement subscription and Ministry revenue, reducing dependence on grant funding. Catalytic development finance, including the Global Fund's committed USD 900 million-plus for community health worker programmes between 2024 and 2026 [26], is treated as a funding target for the early phase rather than committed capital, given that this pool is shared across many competing programmes.

Sustainability Pathway

The financing transition is planned in three phases. In Years 1 to 3, facility subscriptions, catalytic development finance, and Ministry pilot contracts carry the model; bank device loans are managed through the MoU structure described in Section 8 of the concept materials and do not appear on the cooperative's balance sheet. In Years 3 to 6, insurance reimbursement supplements subscription and Ministry revenue as national coverage expands. From Year 6 onward, subscription and insurance revenue are intended to sustain operations, with development finance shifting toward geographic expansion rather than core operational support. This trajectory is a target rather than a guarantee: cost-effectiveness research on comparable community health worker programmes consistently finds that most remain donor- or government-dependent over the long run [27, 28, 29, 30], and CareRoute's transition to subscription- and insurance-funded sustainability should be read against that evidence base rather than assumed.

10. Implementation Strategy

Rwanda

Rwanda offers the strongest implementation foundation available. The presence of more than 100,000 existing community health workers across all 416 sectors [7] means CareRoute formalizes and modernizes an existing workforce, building on Rwanda's own community health infrastructure and existing Ministry of Health relationships, rather than building one from scratch. Mobile money already reaches an estimated 66% of Rwanda's adult population, with 96% of Rwandan adults classified as financially included [31], enabling digitization of payroll and loan

repayments, and the national DHIS2 health information system provides the technical backbone for facility-channel integration. The pilot design involves a twelve-month proof-of-concept deployment in two districts, urban Kigali and rural Musanze, with 50 Level 1 workers and 10 Level 2 workers per district, covering approximately 15,000 households.

Nigeria

Nigeria demonstrates CareRoute's transposability beyond Rwanda's specific health system architecture. It has Africa's largest population, more than 220 million people, with 63% under the age of 25 [32], and hypertension affects approximately 38% of adults [10]. Climate displacement from Nigeria's Middle Belt and northern regions, where smallholder agriculture faces both drought and flood pressure, creates the population of climate-displaced agricultural workers the recruitment pathway is designed for. GTBank, Access Bank, and MTN Nigeria provide potential MoU partners for device lending. The pilot design involves a twelve-month proof-of-concept deployment in Benue State, structured specifically to test the climate-recruitment pathway.

Timeline

Period	Milestone
Year 1	Rwanda pilot launch in Kigali and Musanze; recruitment, training, and certification of the first Level 1 and Level 2 cohorts; facility and Ministry of Health MoUs established; bank device MoU signed with an initial partner bank.
Year 1 to 2	Nigeria pilot launch in Benue State, testing the climate-displacement recruitment pathway and the transposability of the model outside Rwanda's health system architecture.
Year 2 to 3	Proof-of-concept results from both pilots reviewed; facility subscription base expanded; Ministry of Health contract discussions advanced in both countries.
Year 3 to 6	Insurance reimbursement introduced as national coverage expands; geographic expansion within Rwanda and Nigeria considered on the basis of pilot performance.
Year 6 onward	Expansion into additional countries considered, subject to the sustainability evidence generated in Years 1 to 6.

11. Risk Assessment

Political

Task-shifting clinical services onto a cadre with three months of initial training can draw opposition from nursing and medical councils protective of scope-of-practice boundaries, a pattern documented elsewhere in task-shifting literature [33]. CareRoute's certification pathway is designed to align with existing task-shifting evidence and to build toward, rather than compete with, formal nursing and clinical officer training, but formal engagement with professional regulatory bodies in Rwanda and Nigeria will be a necessary and non-trivial part of implementation.

Financial

The financing model depends on facility subscription revenue in health systems where facility budgets are often constrained, and on a share of catalytic development finance that is shared across many competing programmes rather than reserved for CareRoute. The pilot phase is designed to generate the willingness-to-pay and unit-cost evidence needed to test these assumptions directly, rather than assuming them in advance.

Technology

Offline-first design mitigates but does not eliminate connectivity risk, and on-device clinical decision support depends on the accuracy of the underlying protocol logic and on workers following its guidance appropriately rather than over-relying on it. Data protection for patient health information, particularly where the platform integrates with national systems such as DHIS2, will require explicit compliance planning under the relevant data protection frameworks in each pilot country.

Workforce

A three-month training period, while operationally necessary to reach scale quickly, limits the clinical scope that can responsibly be delegated to Level 1 workers, which is why the model restricts Level 1 tasks to protocol-guided screening and monitoring rather than diagnosis or treatment decisions. Worker attrition is a documented challenge across CHW and gig platforms alike; the minimum income guarantee and career ladder are the model's primary retention mechanisms, and their effectiveness will be a specific outcome tracked during the pilot phase rather than assumed.

12. Expected Impact

Health

Systematic, protocol-guided NCD screening and follow-up are expected to improve hypertension and diabetes detection and control rates in pilot catchments, and to reduce the loss to follow-up that currently undermines NCD management in low- and middle-income countries.

Employment

Formal wages, social protection, and a defined career ladder are expected to create stable, career-track income for workers previously in informal or no employment, contributing to household poverty reduction and to the decent-work outcomes central to the Geneva Challenge's Future of Work theme.

Women

A recruitment strategy that prioritizes women, together with cooperative wealth-sharing and equal pay, is expected to narrow the gender wealth gap for the female-majority workforce the model targets, addressing both the income and the unpaid-care dimensions of women's labor market exclusion.

Youth

Direct recruitment of NEET youth is expected to reduce the long-term labor-market scarring associated with prolonged unemployment or informal work at the start of a career, an outcome of particular relevance given that close to 60% of the global working-age population will be concentrated in Sub-Saharan Africa and South Asia by 2050 [3].

Climate

The climate-displacement recruitment pathway is designed to convert livelihoods made unviable by climate change into a formal, climate-resilient health career, offering a concrete, auditable mechanism for the just-transition principle rather than a rhetorical one.

13. Scalability

CareRoute's design choices are intended to travel beyond Rwanda and Nigeria rather than depend on features unique to either country. The offline-first technology architecture assumes intermittent connectivity rather than reliable

broadband, and the USSD fallback assumes only basic feature phone access, design choices suited to most low- and middle-income settings rather than to Rwanda or Nigeria specifically. The NCD service mandate is modular: the five core services can be sequenced or adapted to local disease priorities and existing CHW infrastructure without requiring a different platform architecture. The three-phase financing model is similarly structured around revenue sources, facility subscriptions, Ministry contracts, and insurance reimbursement, that exist in some form across most health systems working toward Universal Health Coverage, rather than around a financing instrument specific to one country.

The clearest evidence for transposability is the Rwanda-to-Nigeria comparison built into the pilot design itself: two health systems with different governance structures, different levels of existing CHW infrastructure, and different linguistic and administrative environments, tested under the same core model. A comparable case can be made for other countries with a sizeable existing CHW workforce, a documented NCD service gap, and mobile money or basic mobile phone penetration sufficient to support USSD-based dispatch, conditions present across much of Sub-Saharan Africa and South Asia. Scalability in this proposal is therefore treated as a testable design property rather than an assumption: transposability is one of the explicit outcomes the two-country pilot design is built to demonstrate, not a claim asserted in advance of the evidence.

14. Conclusion

CareRoute is not a marginal improvement on existing community health worker models. It is an institutional design intended to resolve two structural failures at once: the exclusion of NCD services from community health delivery in low- and middle-income countries, and the absence of formal, career-tracked employment for the populations most displaced by the future of work's disruptions. By formally employing unemployed youth, women, and climate-displaced agricultural workers as NCD-specialized health delivery professionals within a platform cooperative that distributes ownership, income security, and governance rights to workers, CareRoute is built on the premise that the efficiency of digital platforms and the protections of formal employment are not inherently in tension, and that with deliberate institutional design, the two can reinforce each other. The pilot design in Rwanda and Nigeria is intended to test that premise directly, generating the evidence on cost, retention, and health outcomes needed to determine whether the model can extend further.

Statement on the Use of Artificial Intelligence

In accordance with Section 3.7 of the Geneva Challenge 2026 Rules and Regulations, the authors disclose the following use of artificial intelligence (AI) tools in the preparation of this submission.

AI tools were used during the early, conceptual stages of the project to brainstorm and refine ideas underlying the problem definition and the CareRoute model. AI was also used, in the sections addressing the problem, the solution, and its alignment with the Future of Work theme, to improve organization and structure, and, throughout the manuscript, to improve grammar, clarity, and academic writing. AI tools were also used to identify candidate external sources for factual claims, all of which were independently retrieved and verified by the authors before citation. In addition, AI was used to obtain critical feedback on the feasibility, innovation, and logical consistency of the proposal, and to suggest alternative wording that improved readability.

AI was not used to generate original research findings, fabricate evidence, create references, or substitute for the authors' intellectual contributions. All facts, statistics, and references cited in this submission were independently verified by the authors against their original sources. All final decisions regarding content, analysis, arguments, citations, and conclusions rest with the authors, who take full responsibility for the accuracy and integrity of this submission.

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