



Qualitative Meta-Synthesis of Quality Improvement in HIV/AIDS Care: Clinical, Community, and System-Level Insights

Marziyeh Najafi¹, Roya Rajaei², Samin Shokravi³, Sima Morgan⁴, Tejas Wakde¹

¹TDR Grantee, SD Gupta Public Health School, IIHMR University, Jaipur, India

²Department of Healthcare Management, Faculty of Management and Medical Information Sciences, Kerman University of Medical Sciences, Kerman, Iran

³Clinical Research Scholar, University of Florida, USA

⁴Florida Gulf Coast University, Department of Health Sciences, Marieb College of Health and Human Services, Florida, USA

*Corresponding Author: Tejas Wakde, Email: wdejas@gmail.com

Abstract

Introduction: Acquired Immunodeficiency Syndrome (AIDS) continues to impose a substantial burden on individuals and health systems worldwide. This meta-synthesis investigated the influence of Quality Improvement (QI) interventions across the HIV care continuum, synthesizing qualitative evidence from diverse global contexts. The review explored how clinical strategies, patient and community engagement, and health system strengthening collectively contribute to improved care processes and outcomes.

Methods: A qualitative meta-synthesis was conducted using peer-reviewed studies retrieved from PubMed, Scopus, and Web of Science up to May 2023. The review process was guided by the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research type), ensuring that study selection remained focused on the experiential and contextual dimensions of QI interventions. From an initial pool of 857 records, 11 studies met the predefined inclusion criteria. Through thematic synthesis, key patterns and analytical themes were identified to elucidate how quality improvement approaches were experienced, operationalized, and sustained across varied healthcare settings.

Results: Three interrelated domains emerged from the synthesis. First, improving the quality of clinical HIV care encompassed integrated TB–HIV services, strengthened viral load monitoring systems, and task-shifting strategies, resulting in enhanced diagnostic efficiency and improved treatment adherence. Second, empowering patients and communities involved stigma reduction initiatives, culturally tailored interventions, and adolescent-specific strategies, which contributed to stronger retention in care and improved quality of life. Third, strengthening system capacity and sustainability included workforce development, institutionalization of QI processes, and enhancements in service delivery infrastructure. These domains operated synergistically, with relational dynamics and system-level capacities reinforcing sustained clinical gains across diverse contexts.

Conclusion: QI initiatives in HIV/AIDS care demonstrate the greatest effectiveness when clinical innovations are integrated with robust community engagement and supported by resilient health systems. Addressing relational and systemic dimensions alongside biomedical outcomes has the potential to enhance continuity of care, reduce inequities, and improve the overall quality and sustainability of HIV services globally.

Keywords: Quality improvement, HIV infections/therapy, Continuity of patient care, Patient participation, Community-based participatory research, Health services accessibility, Behavioral change

Citation: Najafi M, Rajaei R, Shokravi S, Morgan S, Wakde T. Qualitative meta-synthesis of quality improvement in HIV/AIDS care: clinical, community, and system-level insights. J Qual Res Health Sci 2026;15:1628. doi:10.34172/jqr.1628

Received: June 25, 2025, **Accepted:** February 24, 2026, **ePublished:** May 24, 2026

Introduction

Interprofessional models of care are increasingly recognized as fundamental to the effective management of chronic conditions such as HIV/AIDS, which necessitate comprehensive, sustained, and coordinated responses across multiple levels of service delivery (1). With the widespread expansion of antiretroviral therapy (ART), HIV infection has evolved from an acute, life-threatening disease into a chronic condition requiring lifelong clinical management, psychosocial support, and system-level continuity of care (2,3). Client-centered case management approaches have

demonstrated benefits extending beyond biomedical outcomes, contributing to improvements in quality of life, patient satisfaction, and utilization of community-based services, while simultaneously reducing unmet needs and engagement in high-risk behaviors (4,5). Furthermore, differentiated care models, designed to address the specific needs of distinct population groups, have enhanced both the efficiency of resource allocation and the overall patient experience (6,7).

In recent years, HIV/AIDS programs have increasingly integrated Quality Improvement (QI) strategies to



strengthen service delivery, align care processes with patient and community priorities, and promote collaborative engagement between clinical teams and service users (8,9). QI methodologies have demonstrated considerable potential to enhance retention and engagement in care, reduce structural and procedural barriers, and optimize treatment adherence, including within initiatives focused on viral load suppression and expanded access to antiretroviral therapy (10,11).

Despite a growing body of quantitative evidence documenting the measurable effects of QI interventions, comparatively limited attention has been devoted to understanding how these strategies are experienced by patients, healthcare providers, and health systems, and how such experiential dimensions shape the sustainability, scalability, and contextual adaptation of improvement efforts. Addressing this gap is essential to advancing global HIV targets, which require not only demonstrable clinical effectiveness but also equity, inclusivity, and responsiveness to the needs of marginalized and underserved populations (12).

Accordingly, this meta-synthesis examines qualitative evidence on QI interventions in HIV/AIDS care with the aim of developing a conceptual framework that links clinical strategies, patient and community engagement, and health system transformation. By synthesizing perspectives across diverse settings, the study seeks to elucidate the contextual and relational conditions under which QI approaches can most effectively strengthen the HIV care continuum.

Methods

Study Design

This study adopted a qualitative meta-synthesis approach, applying the thematic analysis framework proposed by Braun and Clarke (13) to systematically integrate and reinterpret qualitative findings from multiple studies addressing Quality Improvement (QI) interventions in HIV/AIDS care. The synthesis aimed to generate higher-order conceptual insights regarding the influence of such interventions on clinical practice, patient and community engagement, and health system performance across diverse sociocultural and healthcare settings.

Inquiry Focus

The research question was formulated using the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research type), which is particularly appropriate for synthesizing qualitative evidence.

- **Sample (S):** Individuals living with HIV/AIDS, healthcare providers, program managers, and community stakeholders participating in HIV care and quality improvement initiatives.
- **Phenomenon of Interest (PI):** Experiences, perceptions, and contextual determinants shaping the implementation and impact of quality improvement strategies along the HIV care continuum.
- **Design (D):** Qualitative studies and qualitative components embedded within mixed-methods

research, including interviews, focus group discussions, ethnographic investigations, and participatory action research.

- **Evaluation (E):** Narrative accounts and interpretative findings describing perceived barriers, facilitators, and outcomes of QI interventions as reported by study participants and authors.
- **Research Type (R):** Qualitative and mixed-methods studies containing substantive qualitative data relevant to quality improvement in HIV care.

The framework ensured that the review maintained a clear focus on understanding how QI strategies are operationalized, experienced, and adapted within heterogeneous service delivery environments.

Inquiry Questions

- How are QI strategies in HIV/AIDS care experienced and perceived by patients, healthcare providers, and community members?
- In what ways do contextual and relational factors influence the implementation and sustainability of QI interventions in HIV/AIDS care?
- How do QI initiatives affect patient engagement, treatment adherence, and perceptions of care quality?
- What cross-setting themes emerge regarding facilitators and barriers to successful QI implementation in HIV/AIDS care?

Search Strategy

A comprehensive literature search was conducted using the electronic databases PubMed, Scopus, and Web of Science for studies published between 2013 and May 2023. Search terms were constructed by combining Medical Subject Headings (MeSH) terms and free-text keywords to achieve an optimal balance between sensitivity and specificity. The final search string was (“HIV” OR “AIDS”) AND (“Quality Improvement” OR “QI” OR “Continuous Quality Improvement”) AND (“Retention” OR “Adherence” OR “Viral Load” OR “Stigma”). Broader terminologies such as “program improvement” or “service enhancement” were initially considered during pilot searches but were subsequently excluded due to the retrieval of a large number of irrelevant records, including studies focusing on general health system reform or non-HIV service redesign. Priority was given to search terms directly associated with established QI frameworks in HIV/AIDS care to ensure conceptual consistency across included studies. Additionally, reference lists of eligible articles were manually screened to minimize the possibility of omitting pertinent studies.

Eligibility Criteria

Studies were included if they reported substantive qualitative findings derived from methods such as interviews, focus group discussions, open-ended surveys, or ethnographic observations and focused on quality improvement interventions in HIV/AIDS care at clinical, patient, or health system levels. Only English-language publications

between 2013 and 2023 were considered. Mixed-methods studies were eligible provided that qualitative results were explicitly reported. Quantitative-only studies, conference abstracts, editorials, and commentaries were excluded from the synthesis.

Study Selection Process

The study selection process is illustrated in [Figure 1](#). Initially, 857 records were identified across the three selected databases. Following title and abstract screening, 89 articles were subjected to full-text review, of which 11 studies satisfied all predefined inclusion criteria for qualitative meta-synthesis.

Title and Abstract Screening

Two reviewers (M.N. and A.B.) independently screened article titles and abstracts against the predefined eligibility criteria. Studies considered potentially relevant were retrieved for full-text evaluation. Any disagreements between the reviewers were resolved through consultation with a third independent reviewer (S.M.). Studies meeting all inclusion criteria were subsequently selected for data extraction and synthesis.

Data Extraction and Synthesis

For each eligible study, qualitative data, including participant quotations, author interpretations, and descriptive narrative findings, were extracted verbatim and recorded in a standardized data extraction form. The following information was systematically documented:

- Study characteristics (author, publication year, study setting, and research design)
- Participant demographic and professional characteristics
- Description of the quality improvement intervention
- Contextual determinants influencing intervention implementation
- Reported barriers and facilitating factors
- Outcomes as interpreted by both participants and study authors

Data Analysis

Data were analyzed using the six-step thematic analysis

framework proposed by Braun and Clarke, which includes: (1) familiarization with the data, (2) generation of initial codes, (3) searching for potential themes, (4) theme review and refinement, (5) definition and naming of themes, and (6) production of the final analytic report (13). The primary objective of thematic analysis was to identify meaningful patterns and recurrent thematic structures within the dataset (14).

Quality Assessment

Methodological quality was evaluated using the Critical Appraisal Skills Programme (CASP) checklist, and studies were categorized as high, medium, or low quality (see [Appendix 1](#)). During the synthesis process, greater analytical weight was assigned to higher-quality studies in shaping core thematic constructs. Specifically, patterns consistently observed across multiple high-quality studies were considered central findings. Evidence derived from medium- and low-quality studies was also incorporated to enrich interpretative depth; however, such findings were interpreted with greater methodological caution and used primarily to provide contextual nuance or illustrate variability across settings. Consequently, the synthesized themes reflect both evidentiary richness and methodological confidence.

Although the study synthesized previously published literature rather than primary empirical data, the analysis considered the conceptual notion of saturation within meta-synthesis research. During iterative coding and cross-study comparison, the emergence of redundant information, where subsequent studies primarily reinforced existing patterns rather than introducing novel insights, was monitored. When thematic redundancy was consistently observed across different contexts, it was inferred that the synthesis had achieved adequate conceptual coverage of the available literature.

Results

The selected studies reported interventions and outcomes concerning the impact of quality improvement strategies on HIV/AIDS care, which were synthesized into three principal domains: enhancement of clinical HIV care quality, empowerment of patients and communities, and strengthening of health system capacity and sustainability ([Table 1](#)).

Improving Quality of Clinical HIV Care

Across settings, participants and healthcare providers reported that structured Quality Improvement (QI) processes, particularly iterative methodologies such as the Plan–Do–Study–Act (PDSA) cycle, contributed to the restructuring of HIV diagnostic and treatment pathways. In a study by Saha et al. targeted interventions were implemented to address system bottlenecks related to the timely utilization of viral load results, especially among pediatric and adolescent patients. One participant stated, “We no longer wait months to act on results—the change is immediate now” (19).

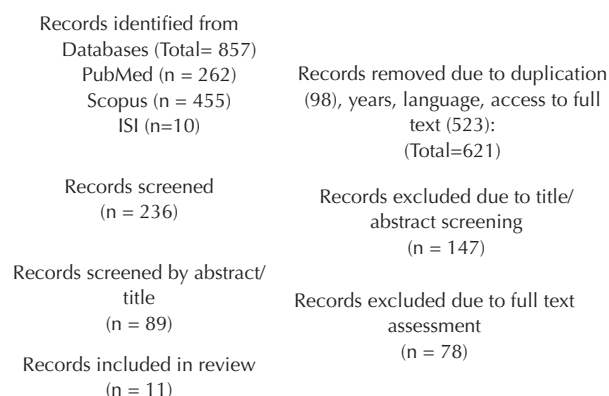


Figure 1. Article selection process

Table 1. HIV/AIDS care QI interventions and outcomes

Theme	Subtheme	Author, Year (Reference)	Key Findings
Improving Quality of Clinical HIV Care	Addressing Systemic Barriers & Inequities	Mitchell BD et al., 2023 (15)	Quality care influenced by systemic racism and social determinants; facilitators include nutrition, social support, compassionate care; barriers include comorbidities, economic insecurity, structural racism; recommendation to strengthen patient voice and reduce barriers.
	Integrated & Multidisciplinary Care Models	Basenero A,2022 (16)	Integration of hypertension and HIV services improved patient outcomes and service efficiency; multi-disciplinary collaboration and quality improvement methods led to better management of comorbidities; recommended for similar high-burden contexts.
	Reducing Stigma in Healthcare Settings	Horvath S,2018 (17)	Quality assurance and workplace policies reduced stigma experienced by patients and healthcare workers; emphasized the need for ongoing training, supportive institutional culture, and policy enforcement in high-prevalence regions.
	Treatment Innovation & Service Delivery	Jespersen S,2020 (18)	Current HIV treatment faces challenges such as drug resistance and limited access; need for novel treatment options and improved service delivery to enhance patient outcomes.
	Adherence Support & Hospital-Based Interventions	Saha R,2014 (19)	Barriers to adherence include side effects, stigma, and socioeconomic factors; facilitating factors involve counseling, family support, and education; hospital-based interventions improved adherence rates.
Empowering Patients and Communities	Community-Based Support & Peer Models	Isabirye R., 2023 (20)	Social support, motivation, and counseling promote adherence; barriers are stigma, lack of food, forgetfulness, stress, and healthcare discrimination; CCLADs improve access and support; recommendations include continued education and funding.
	Psychosocial Well-being & Stigma Reduction	Arias-Colmenero T, 2020 (21)	Patients experience stigma, social isolation, and psychological distress; attitudes toward health services impact engagement; need for empathetic care, stigma reduction, and social support integration into treatment plans.
	Stakeholder & Community Partnerships	Mwita S.K.,2019 (22)	Involvement of national stakeholders and communities helped improve the quality of HIV services; the partnership model emphasized collaboration, capacity building, and community participation; positive impact on mother-to-child transmission prevention efforts.
	Culturally Informed Risk Reduction Strategies	Wilson P.A.2016 (23)	Qualitative research provided deep insights into social, cultural, and structural factors affecting HIV risk and prevention; highlighted the importance of community-informed strategies targeting Black MSM to enhance the effectiveness of interventions.
	Youth Engagement & Gender-Sensitive Approaches	Karamagi E,2018 (24)	Quality improvement framework supported sustained behavior change in adolescent girls and young women; interventions tailored to the local context improved HIV risk reduction behaviors and community engagement.
Strengthening System Capacity and Sustainability	Quality of Life & Wellbeing	Arias-Colmenero T, 2020 (21)	ART improved the quality of life and hope, but poverty and stigma persisted as structural barriers.
	Service Integration & Primary Care Strengthening	Haskins L,2020 (25)	Quality improvement interventions facilitated integration of maternal, child, and HIV services; resulted in enhanced service delivery, improved health outcomes, and better patient satisfaction at the primary care level.
	Health System Barriers	Isabirye R, 2023 (20)	Shortages of staff, drugs, and infrastructure undermined QI efforts despite community innovations.
	Policy & Governance	Basenero A,2022 (16)	Policy adoption faced challenges in supply chains, workforce readiness, and patient tracking.

Context-specific adaptation of QI strategies was identified as particularly important in resource-constrained environments. According to Basenero et al. iterative improvement cycles enabled clinical teams to integrate tuberculosis screening with antiretroviral therapy (ART) initiation under nurse-led supervision, thereby reducing treatment delays and enhancing continuity of care (16).

The incorporation of behavioral science principles into QI initiatives was considered instrumental in bridging the gap between clinical guidelines and real-world practice. Jespersen et al. reported that behavior change models encouraged greater adherence to clinical protocols among healthcare providers. A clinician participant remarked, “*It’s not just about knowing what to do; it’s about building habits that stick*” (18).

Inter-facility collaborative learning also emerged as a significant facilitator of quality improvement. Mitchell et al. demonstrated that mentorship networks among healthcare facilities promoted dissemination of evidence-based practices. Participants reported that shared learning environments accelerated implementation by allowing teams to benefit from previous experiences: “*We learned from their mistakes and shared our wins; it saved us months*” (15).

Empowering Patients and Communities

Findings consistently indicated that effective QI implementation was associated with interventions that fostered trust, reduced stigma, and promoted active community participation in care processes. Isabirye et al. found that older African American patients emphasized cultural sensitivity, trust-building, and service flexibility as key determinants of perceived care quality: “*When they respect my culture and my time, I feel safe coming back*” (20).

Among adolescent populations, stigma and the absence of youth-friendly clinical environments were identified as major barriers to retention in care. The participants in Arias-Colmenero et al. study expressed feelings of social exclusion within adult-oriented clinical settings: “*It feels like the clinic is for adults. When we come, it’s like we don’t belong*” (21).

Community-based participatory strategies demonstrated considerable effectiveness in strengthening treatment adherence. Mwita et al. reported that peer support mechanisms within community client-led ART groups improved medication adherence while simultaneously reducing transportation-related burdens. Participants emphasized collective responsibility in care engagement:

"We check on each other... no one is left behind" (22).

Culturally adapted interventions targeting marginalized populations, including Black men who have sex with men (MSM), were associated with improved service engagement. Wilson et al. demonstrated that peer-facilitated communication strategies helped establish safe spaces for discussion and service utilization (23). A review by Karamagi et al. further highlighted the influence of stigma, discrimination, and coping behaviors on healthcare-seeking willingness (24).

Strengthening System Capacity and Sustainability

System-level improvements were predominantly achieved through multi-stakeholder collaboration and policy alignment. Haskins et al. demonstrated that involving national health authorities alongside community actors facilitated institutionalization of QI initiatives. Participants noted that policy-level engagement enhanced long-term sustainability: *"When the ministry is part of the process, the changes last"* (25).

Differentiated service delivery models were shown to enhance service efficiency and patient retention by aligning care intensity with clinical stability. Healthcare providers reported that adjusting visit frequency according to patient condition allowed reallocation of clinical resources toward patients requiring intensive follow-up: *"Now we can give more time to the ones who are struggling"* (25).

Workforce capacity development, including structured mentorship, reflective practice, and root cause analysis, was repeatedly identified as a core determinant of long-term improvement. Even in resource-limited healthcare environments, embedding QI cycles into routine service delivery was considered essential for sustaining performance gains and institutional learning.

Discussion

This review synthesized qualitative evidence regarding the role of quality improvement (QI) interventions in strengthening HIV service delivery, demonstrating their multidimensional impact across three interrelated domains: enhancement of clinical HIV care quality, empowerment of patients and communities, and strengthening of health system capacity and sustainability. The findings suggest that QI approaches achieve maximal effectiveness when systematic problem-solving mechanisms are combined with context-sensitive, patient-centered strategies and integrated system-level implementation.

Consistent evidence indicated that structured QI methodologies, particularly iterative improvement models such as the Plan–Do–Study–Act (PDSA) cycle, play a critical role in mitigating clinical service bottlenecks and promoting adherence to standardized treatment protocols (15, 16). Targeted process optimization, including improved utilization of viral load monitoring results for pediatric and adolescent populations, contributed to reduced treatment initiation delays and enhanced continuity of therapeutic management. Besides, integration of tuberculosis screening into antiretroviral therapy (ART) initiation pathways under

nurse-led clinical supervision exemplifies how adaptive clinical redesign can improve service efficiency in resource-constrained environments.

The incorporation of behavioral science principles into QI frameworks further strengthened provider adherence to clinical guidelines. Behaviorally informed interventions embedded within improvement cycles facilitated sustained compliance with evidence-based protocols by addressing cognitive, organizational, and motivational determinants of clinical practice (17). Moreover, collaborative inter-facility learning mechanisms promoted diffusion of innovation and accelerated adoption of effective practices, thereby reducing redundancy in intervention development and implementation (18,19). These findings are consistent with global health quality standards emphasizing continuous learning systems within healthcare delivery.

Patient-centered engagement emerged as a fundamental determinant of QI success, aligning with international priorities for equitable healthcare delivery. Evidence consistently demonstrated that interventions emphasizing trust-building, cultural competence, and service flexibility significantly improved patient retention and satisfaction (20, 21). In adolescent populations, the provision of youth-responsive services was particularly important for overcoming structural stigma and social exclusion associated with adult-oriented clinical environments. Community-based service delivery models demonstrated substantial effectiveness in overcoming logistical and behavioral barriers to treatment adherence. Peer-supported community client-led ART distribution groups enhanced medication continuity while reducing transportation burdens and healthcare access inequities (22). Similarly, culturally tailored interventions targeting marginalized populations, including sexual minority groups, promoted safer clinical environments and increased service utilization (23). Persistent psychosocial challenges, including stigma, discrimination, and maladaptive coping responses, underscore the necessity of culturally responsive and socially sensitive QI strategies (20, 24). These findings suggest that empowering communities through co-designed, culturally responsive models is integral to sustaining engagement in HIV care.

Sustainability of improvement outcomes depends on the alignment of QI initiatives with policy structures, governance mechanisms, and resource allocation systems. Engagement of national-level stakeholders alongside community actors enhanced institutional ownership and increased the probability of long-term programmatic continuity. Differentiated service delivery models, adjusted according to patient clinical stability, contributed to more efficient allocation of healthcare resources while maintaining acceptable retention outcomes (25).

Health workforce development emerged as a critical component of sustainable quality improvement. Mentorship systems, structured reflective practice, and root cause analysis were repeatedly identified as mechanisms for strengthening organizational learning and clinical resilience. Embedding QI processes within routine

service operations facilitated continuous performance monitoring and adaptive response to changing clinical and epidemiological conditions. Particularly in resource-limited settings, institutionalization of QI cycles within existing health system structures is essential for preserving improvement gains and supporting scalable service enhancement.

Overall, the evidence indicates that QI interventions in HIV care function most effectively when clinical optimization, patient and community empowerment, and system-level strengthening are implemented as integrated and mutually reinforcing components of service delivery reform.

Overall Implications

The synthesized evidence indicates that quality improvement (QI) interventions achieve the greatest impact when clinical process optimization is integrated with patient and community empowerment alongside health system capacity strengthening. Interventions that are contextually tailored, culturally sensitive, and embedded within broader policy and organizational structures demonstrate greater potential for generating sustainable improvements in HIV care outcomes. Future implementation strategies should emphasize cross-sector collaboration, participatory design approaches, and continuous capacity development to enhance both intervention effectiveness and long-term programmatic sustainability.

Conclusion

The findings of this review highlight that quality improvement in HIV care is most effective when it integrates technical optimization with human-centered service delivery. Structured methodologies, such as adaptive Plan–Do–Study–Act cycles, can improve clinical workflow efficiency, reduce diagnostic delays, and strengthen adherence to treatment protocols. However, the effectiveness of these technical improvements is substantially enhanced when interventions are grounded in the lived experiences and social realities of patients and communities. Interventions that promote cultural sensitivity, reduce stigma, and address structural and logistical barriers contribute to the development of trust-based healthcare environments that support sustained engagement in care. Simultaneously, long-term progress in HIV service delivery depends on the development of resilient health systems supported by multi-stakeholder collaboration, differentiated service delivery models, and continuous investment in workforce capacity. Collectively, these findings suggest that QI in HIV care extends beyond process optimization to encompass the construction of adaptive relationships and sustainable service delivery systems capable of responding to evolving patient and community needs.

Acknowledgments

The authors would like to express their sincere gratitude to all individuals who contributed to the successful completion of this project.

Authors' Contribution

Conceptualization: Sima Morgan
Data Curation: Tejas Wakde, Roya Rajaei
Formal Analysis: Sima Morgan
Investigation: Roya Rajaei
Methodology: Marziyeh Najafi
Project Administration: Marziyeh Najafi
Resources: Tejas Wakde
Supervision: Marziyeh Najafi
Validation: Marziyeh Najafi, Roya Rajaei
Writing – Original Draft: Marziyeh Najafi, Samin Shokravi, Tejas Wakde

Competing Interests

The authors declare that they have no conflicts of interest.

Ethical Approval

Not applicable.

Funding

None.

References

1. Beichler H, Grabovac I, Dörner TE. Integrated care as a model for interprofessional disease management and the benefits for people living with HIV/AIDS. *Int J Environ Res Public Health* 2023;20(4):3374. doi:10.3390/ijerph20043374
2. León A, Cáceres C, Fernández E, Chausa P, Martín M, Codina C, et al. A new multidisciplinary home care telemedicine system to monitor stable chronic human immunodeficiency virus-infected patients: a randomized study. *PLoS One* 2011;6(1): e14515. doi:10.1371/journal.pone.0014515
3. Gallant JE, Adimora AA, Carmichael JK, Horberg M, Kitahata M, Quinlivan EB, et al. Essential components of effective HIV care: a policy paper of the HIV Medicine Association of the Infectious Diseases Society of America and the Ryan White Medical Providers Coalition. *Clin Infect Dis* 2011;53(11):1043–50. doi:10.1093/cid/cir689
4. Chinyandura C, Jiyane A, Tsalong X, Struthers HE, McIntyre JA, Rees K. Supporting retention in HIV care through a holistic, patient-centred approach: a qualitative evaluation. *BMC Psychol* 2022;10(1):17. doi:10.1186/s40359-022-00722-x
5. Grimsrud A, Bygrave H, Doherty M, Ehrenkranz P, Ellman T, Ferris R, et al. Reimagining HIV service delivery: the role of differentiated care from prevention to suppression. *J Int AIDS Soc* 2016;19(1):21484. doi:10.7448/ias.19.1.21484
6. Barker C, Dutta A, Klein K. Can differentiated care models solve the crisis in HIV treatment financing? Analysis of prospects for 38 countries in sub-Saharan Africa. *J Int AIDS Soc* 2017;20(Suppl 4):21648. doi:10.7448/ias.20.5.21648
7. Grimsrud A, Bygrave H, Doherty M, Ehrenkranz P, Ellman T, Ferris R, et al. Reimagining HIV service delivery: the role of differentiated care from prevention to suppression. *J Int AIDS Soc* 2016;19(1):21484. doi:10.7448/ias.19.1.21484
8. Operations Manual for Delivery of HIV Prevention, Care and Treatment at Primary Health Centres in High-Prevalence, Resource-Constrained Settings: Edition 1 for Fieldtesting and Country Adaptation. Geneva: World Health Organization; 2008. 11, QUALITY IMPROVEMENT (QI). Available from: <https://www.ncbi.nlm.nih.gov/books/NBK310891/>.
9. Ikeda DJ, Nyblade L, Srithanaviboonchai K, Agins BD. A quality improvement approach to the reduction of HIV-related stigma and discrimination in healthcare settings. *BMJ Glob Health* 2019;4(3): e001587. doi:10.1136/bmjgh-2019-001587
10. Webster PD, Sibanyoni M, Malekutu D, Mate KS, Venter WD, Barker PM, et al. Using quality improvement to accelerate highly active antiretroviral treatment coverage in South Africa. *BMJ Qual Saf* 2012;21(4):315–24. doi:10.1136/bmjqs-2011-000381
11. McCarthy EA, Subramaniam HL, Prust ML, Prescott MR,

- Mpasela F, Mwango A, et al. Quality improvement intervention to increase adherence to ART prescription policy at HIV treatment clinics in Lusaka, Zambia: a cluster randomized trial. *PLoS One* 2017;12(4): e0175534. doi:[10.1371/journal.pone.0175534](https://doi.org/10.1371/journal.pone.0175534)
12. Lewis TJ, Boykin M. We the people: a black strategy to end the HIV epidemic in the United States of America. *J Healthc Sci Humanit* 2021;11(1):173-92.
 13. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3(2):77-101. doi:[10.1191/1478088706qp063oa](https://doi.org/10.1191/1478088706qp063oa)
 14. Maguire M, Delahunt B. Doing a thematic analysis: a practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education* 2017;9(3):3351. doi:[10.62707/aishej.v9i3.335](https://doi.org/10.62707/aishej.v9i3.335)
 15. Mitchell BD, Utterback L, Hibbeler P, Logsdon AR, Smith PF, Harris LM, et al. Patient-identified markers of quality care: improving HIV service delivery for older African Americans. *J Racial Ethn Health Disparities* 2023;10(1):475-86. doi:[10.1007/s40615-022-01237-2](https://doi.org/10.1007/s40615-022-01237-2)
 16. Basenero A, Neidel J, Ikeda DJ, Ashivudhi H, Mpariwa S, Kamangu JWN, et al. Integrating hypertension and HIV care in Namibia: a quality improvement collaborative approach. *PLoS One* 2022;17(8): e0272727. doi:[10.1371/journal.pone.0272727](https://doi.org/10.1371/journal.pone.0272727)
 17. Horvath S, Stein DJ, Phillips N, Heany SJ, Kobor MS, Lin DT, et al. Perinatally acquired HIV infection accelerates epigenetic aging in South African adolescents. *Aids* 2018;32(11):1465-74. doi:[10.1097/qad.0000000000001854](https://doi.org/10.1097/qad.0000000000001854)
 18. Jespersen S, Månsson F, Lindman J, Wejse C, Medina C, da Silva ZJ, et al. HIV treatment in Guinea-Bissau: room for improvement and time for new treatment options. *AIDS Res Ther* 2020;17(1):3. doi:[10.1186/s12981-020-0259-6](https://doi.org/10.1186/s12981-020-0259-6)
 19. Saha R, Saha I, Sarkar AP, Das DK, Misra R, Bhattacharya K, et al. Adherence to highly active antiretroviral therapy in a tertiary care hospital in West Bengal, India. *Singapore Med J* 2014;55(2):92-8. doi:[10.11622/smedj.2014021](https://doi.org/10.11622/smedj.2014021)
 20. Isabirye R, Opii DJ, Opio Ekit S, Kawomera A, Lokiru L, Isoke R, et al. Factors influencing ART adherence among persons living with HIV enrolled in community client-led art delivery groups in Lira district, Uganda: a qualitative study. *HIV AIDS (Auckl)* 2023;15:339-47. doi:[10.2147/hiv.S414971](https://doi.org/10.2147/hiv.S414971)
 21. Arias-Colmenero T, Pérez-Morente M, Ramos-Morcillo AJ, Capilla-Díaz C, Ruzaña-Martínez M, Hueso-Montoro C. Experiences and attitudes of people with HIV/AIDS: a systematic review of qualitative studies. *Int J Environ Res Public Health* 2020;17(2):639. doi:[10.3390/ijerph17020639](https://doi.org/10.3390/ijerph17020639)
 22. Mwita SK, Ngonyani MM, Mvungi J, de Ven R, Masenge TJ, Rumisha D, et al. Engagement of national stakeholders and communities on health-care quality improvement: experience from the implementation of the partnership for HIV-free survival in Tanzania. *J Int Assoc Provid AIDS Care* 2019;18:2325958219847454. doi:[10.1177/2325958219847454](https://doi.org/10.1177/2325958219847454)
 23. Wilson PA, Valera P, Martos AJ, Wittlin NM, Muñoz-Laboy MA, Parker RG. Contributions of qualitative research in informing HIV/AIDS interventions targeting Black MSM in the United States. *J Sex Res* 2016;53(6):642-54. doi:[10.1080/00224499.2015.1016139](https://doi.org/10.1080/00224499.2015.1016139)
 24. Karamagi E, Sensalire S, Nabwire J, Byabagambi J, Awio AO, Aluma G, et al. Quality improvement as a framework for behavior change interventions in HIV-predisposed communities: a case of adolescent girls and young women in northern Uganda. *AIDS Res Ther* 2018;15(1):4. doi:[10.1186/s12981-018-0190-2](https://doi.org/10.1186/s12981-018-0190-2)
 25. Haskins L, Chiliza J, Barker P, Connolly C, Phakathi S, Feeley A, et al. Evaluation of the effectiveness of a quality improvement intervention to support integration of maternal, child and HIV care in primary health care facilities in South Africa. *BMC Public Health* 2020;20(1):318. doi:[10.1186/s12889-020-8397-2](https://doi.org/10.1186/s12889-020-8397-2)

Appendix 1. CASP Assessment for Selected Studies

CASP Question	Article number (reference)										
	N 1 (21)	N 2 (16)	N 3 (22)	N 4 (23)	N 5 (20)	N 6 (25)	N 7 (17)	N 8 (15)	N 9 (24)	N 10 (18)	N 11 (19)
1. Clear aims?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Qualitative approach justified?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Research design appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4. Recruitment strategy appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5. Data collection clearly described?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Researcher-participant relationship considered?	Partially	Yes	Yes	Partially	Yes	Yes	Partially	Yes	Yes	Yes	Yes
7. Ethical issues addressed?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8. Data analysis rigorous?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9. Findings clearly stated?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10. Research valuable?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Overall quality	High	High	Medium	High	Medium	High	Medium	High	Medium	High	Medium