



Integrated Knowledge Translation for Non-Communicable Diseases: Stories from Sub-Saharan Africa

COLLECTION:
CUGH- STELLENBOSCH
UNIVERSITY

VIEWPOINT

NASREEN S. JESSANI

PETER DELOBELLE

BONNY ENOCK BALUGABA

TALITHA LOUISA MPANDO

FIRAOL MESFIN AYELE

SELEMAN NTAWUYIRUSHINTEGE

ANKE ROHWER

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*Author affiliations can be found in the back matter of this article

ABSTRACT

Integrated Knowledge Translation (IKT) is a key strategy for contextualising, tailoring, and communicating research for policy and practice. In this viewpoint, we provide examples of how partners from five countries in sub-Saharan Africa used IKT to advance interventions for curbing non-communicable diseases in their contexts and how these strategies were magnified during the COVID-19 pandemic in some cases. The stories highlight the importance of deliberate and reinforced capacity building, authentic relationship enhancement, adaptable and user-informed stakeholder engagement, and agile multi-sectoral involvement.

CORRESPONDING AUTHOR:

Nasreen S. Jessani, BSc, MSPH, DrPH

Stellenbosch University and
the Institute of Development
Studies, UK

njessani@sun.ac.za

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Bringing evidence into policy and practice is complex. Structural, cultural, and political factors play a major role in the actual decision-making process. Furthermore, there is often a disconnect between the evidence and decision-maker needs. Integrated knowledge translation (IKT) is an integral cog in the wheel of evidence-informed decision-making (EIDM). It focuses on continuous engagement between researchers and decision-makers and aims to increase the uptake of evidence into policy and practice. Embedding an IKT approach was critical to the Collaboration for Evidence-Based Healthcare and Public Health in Africa (CEBHA+), which conducted primary research and evidence syntheses on preventing and treating non-communicable diseases (NCDs), particularly diabetes, hypertension, and road traffic injuries (RTIs).

The CEBHA+ IKT approach included strengthening capacity in IKT through training for all CEBHA+ partners in two short courses offered through Stellenbosch University’s Centre for Evidence-Based Health Care. These courses resulted in CEBHA+ teams from Malawi, Ethiopia, South Africa, Rwanda, and Uganda identifying key stakeholders and creating, revisiting and revising country-specific stakeholder engagement strategies. Using issue briefs to communicate with decision-makers was a key output from the training, which was complemented with support and mentorship throughout the life of the collaboration.

In this viewpoint, we aim to contribute to the discussions on stakeholder relationships and engagement as the cornerstone for advancing EIDM through illustrative stories. We draw on CEBHA+ IKT journeys from a spirited virtual storytelling panel discussion at the Consortium of Universities in Global Health conference held at Stellenbosch University in 2022. We report a short illustrative story from each country and present a summary of issue briefs in [Figure 1](#).

Figure 1 Summary of Issue briefs across the five African partners.

Country	Year	Issue Brief title	Intended audience	Key action items
South Africa	2022	Population level interventions targeting risk factors for diabetes and hypertension in SA: moving from policy to action	National Department of Health	<ul style="list-style-type: none"> Establish a multi-sectoral structure to coordinate, monitor & evaluate WHO Best buys interventions Allocate adequate funding to support effective implementation of Best buys Develop a comprehensive system to support Best buys intervention M&E
South Africa	2022	Integrated care for multimorbidity in South Africa	National Department of Health	<ul style="list-style-type: none"> Consult with experts and health managers to contextualize decisions on implementing integrated care Commission robust research around integrated care effectiveness, patient experiences and preferences and factors that influence implementation Address challenges experienced at primary care level to ensure sustainability of integrated care
South Africa	2019	Screening for hypertension: Still critical But what strategy is best?	NCD Director at the National Department of Health	<ul style="list-style-type: none"> Consult with experts and health care workers for feasible and appropriate screening recommendations Ensure that screening is offered to all individuals engaging with the health care system Refrain from implementing new population-level screening programs without evidence of its effectiveness
South Africa	2022	Training community health workers for CVD risk screening: A call to action	Non Communicable Disease Director: National Department of Health PDoH (Chair of the Chronic Disease Management Steering Committee)	<ul style="list-style-type: none"> Train CHWs on community-based and opportunistic CVD risk screening Support acceptance of CHW-based screening by improving referral pathways Assess effectiveness, cost and sustainability of scaling community-based CVD risk screening by CHWs
South Africa	2022	Implementing new approaches to patient education and counselling for NCDs	District and facility managers	<ul style="list-style-type: none"> Prioritize empowerment of patients with NCDs in district plans and goals Scale up group empowerment and training for people with diabetes and other NCDs in primary care facilities Support the implementation of novel digital solutions for patient education and counselling
South Africa	2022	The prevalence of multimorbidity in people living with HIV and on ART attending Gogofem community health clinic	Non Communicable Disease Director: National Department of Health	<ul style="list-style-type: none"> Support integration of infectious and NCD health services Strengthen screening programs for NCDs in persons living with HIV Improve control of NCDs, especially diabetes and hypertension
South Africa	2022	Preventing Non-Communicable Diseases in South Africa: Time to evaluate what works!	National and Provincial programme managers	<ul style="list-style-type: none"> Ensure appropriate evaluation of public health programs addressing physical activity Partner with researchers and funders to ensure adequate program evaluation
Malawi	2022	Dis circumstances! The Need for Effective Cardiovascular Disease Education in Malawi	Director: Health Education Unit, Ministry of Health	<ul style="list-style-type: none"> Educate communities about cardiovascular health and how to avoid CVDs Leverage partnerships with relevant government agencies (such as MBC and MIS) to make healthy food more known, appealing, accessible, and affordable to all Partner with health education stakeholders to improve coverage of cardiovascular health education and make it more understandable to laymen
Malawi	2022	Tackle NCDs in Malawi by Boring into the Best Buys	Director: NCD and Mental Health Unit, Ministry of Health	<ul style="list-style-type: none"> Develop a monitoring and evaluation plan to track and assess the performance of priority interventions for NCDs. Advocate for The Ministry of Finance, Economic Planning & Development to allocate funds into programs. Policies such as the alcohol policy need to be translated into supportive programs and enabling environments Develop policies for the following NCD Risk factors, diet (salt and trans fatty acid reduction and sugar sweetening taxation), physical activity and tobacco.
Malawi	2022	A call to roll out a comprehensive physical activities program in Malawi's civil service	Director, Department of Nutrition and HIV/AIDS, Ministry of Gender, Community Development & Social Welfare	<ul style="list-style-type: none"> Ensure that each government ministry includes physical activity in its mandate and coordinates a schedule of physical activities. Advocate for the introduction of incentives to encourage the participation of all civil servants in planned physical activities Provide staff with dedicated time within the work day to engage in physical activity that does not impinge on their personal time Work with the Ministry of Lands, Housing and Urban Development to develop sports facilities and infrastructure that allow mass participation
Malawi	2022	Fight depression and anxiety disorders through Multisectoral Action	NCD and Mental Health Unit Director at The Ministry of Health	<ul style="list-style-type: none"> Collaborate with the Gender, Children, Disability and Social Welfare Ministry to ensure vulnerable populations are protected by social safety net programmes Collaborate with the Ministry of Education to improve educational attainment for students within public schools by ensuring adequately staffing, infrastructure and teaching materials. Incorporate mental health screening and care into chronic disease management through the integrated care model for NCDs.
Ethiopia	2022	Cardiovascular disease risk perception: A need for community level education	NCD Division Head at the Ethiopian Ministry of Health	<ul style="list-style-type: none"> Build the capacity of health extension workers on NCDs prevention strategies and educational interventions Enforce effective school-level working on non-communicable disease to integrate educational intervention initiatives in their program area. Develop simple, effective and context specific educational materials in particular visual aids for CVD and other non-communicable diseases
Ethiopia	2022	CVD Burden in Ethiopia: A need for Community-Driven Risk Screening	NCD Division Head at the Ethiopian Ministry of Health	<ul style="list-style-type: none"> Facilitate the Screening and early detection of CVD risk in Ethiopian rural and urban communities Guide the Development and incorporation of CVD screening app with the existing mobile app and training CHEWs to conduct screening, referral and follow-up at community level Create a referral linkage with local health centres and communities
Rwanda	2022	Pandemic in a Pandemic: Urgent Call to permit physical activities during the pandemic period in Rwanda	Director General at the Rwanda Biomedical Centre	<ul style="list-style-type: none"> Monitor and report the implementation Mitigate and bridge the research and implementation gaps due to pandemics (COVID-19) Provide Community-level coaching of physical activities
Rwanda	2020	NCDs risk and benefits of physical activity: A need for community awareness in Rwanda	NCDs Division Manager at the Rwanda Biomedical Centre	<ul style="list-style-type: none"> Evaluate public health programs targeting NCDs risks mitigation Partner with researchers and funders to avail primary data & evidence Collaborate with local governance committees
Rwanda	2021	Targeting NCD risk factors: Call for barrier removal	NCDs Division Manager at the Rwanda Biomedical Centre	<ul style="list-style-type: none"> Evaluate the population-level interventions targeting mitigation of NCDs Enable an integrated approach for joint implementation Ensure continuous evaluation and engagement
Uganda	2021	Improving the quality of road crash data in Uganda	Commissioner Transport Regulation and Safety, ministry of works and transport	<ul style="list-style-type: none"> Invest in road crash data systems Digitalize road crash data collection and management systems Laize with the director of the Uganda Police traffic and road safety to train traffic police personnel in digital data management
Uganda	2021	Improving and promoting EMS for road traffic injuries victims	Commissioner department of emergency medical services	<ul style="list-style-type: none"> Provide basic (EMS) training for lay providers like boda boda riders and police personnel Train and deploy specialised emergency response personnel (paramedics) Set up a functional ambulance response system with an active emergency response number
Uganda	2021	Improving pedestrian safety in Uganda: A call for action	Commissioner Transport Regulation and Safety, Ministry of Works and Transport	<ul style="list-style-type: none"> Advocate for the inclusion of pedestrian road safety needs into road planning, design and construction. Develop a multisectoral road safety strategy to coordinate all road safety stakeholders. Involve communities in the design and implementation of pedestrian interventions
Uganda	2022	Unsafe roads in Kampala: Need to cater for pedestrians with physical disabilities	Director of Engineering Kampala Capital City Authority (KCCA)	<ul style="list-style-type: none"> Ensure that all roads in Kampala have ramps to allow access to walkways for wheelchair users Provide audio indicators at pedestrian controlled signals for visually impaired Sensitize the public to keep walkways clear from obstacles, and penalize illegal use of pedestrian space

In South Africa, Stellenbosch University, Cochrane South Africa, and the Chronic Disease Initiative for Africa coordinated primary research around cardiovascular disease (CVD) risk perception in CEBHA+ partner countries [1, 2]; population-level interventions targeting risk factors of hypertension and diabetes; prevalence of diabetes among HIV-positive people; and comprehensive patient education and counselling in South Africa [3, 4, 5, 6]; and evidence syntheses on screening [7, 8], integrated models of care [9], and policy and regulatory interventions to prevent CVD and diabetes [10]. Evidence was shared with policy-makers using structured and ad hoc stakeholder engagement, capitalising on opportunities for personal feedback and discussion. Results were disseminated using different media and message formats and an NCD symposium convened in collaboration with the National Department of Health, where the Minister of Health stressed the importance of the role of EIDM. Seven issue briefs were produced and discussed with national and provincial NCD representatives at a policy dialogue in November 2022.

In Uganda, where RTIs exert a heavy toll on pedestrians and people living with disabilities (PLWD) in particular, CEBHA+ researchers at the Makerere University Trauma, Injuries and Disabilities Unit undertook a desk review [11] and engaged road safety auditors to conduct a pedestrian road safety review and disseminated the findings among stakeholders. Using data on road crashes and pedestrian accidents from police and hospital records [12], stakeholder meetings were held with the Ministry of Works and Transport, Kampala Capital City Authority, members of Parliament, civil society, and the Uganda Ministry of Gender, Labour and Social Development. Issue briefs were developed and shared, and a symposium was hosted to address the daily mobility challenges faced by PLWDs. One of the panellists was a visually impaired person, which humanised the statistics and created momentum amongst decision-makers. Recognition of the challenges faced by vulnerable citizens resulted in media interest, thereby accelerating discussions with authorities on the budget allocation for interventions designed for PLWDs.

The prevalence of CVD risk factors continues to rise in Ethiopia despite the inclusion of NCD prevention activities in health extension programmes. Urban and rural communities exhibit low levels of CVD risk perception, and interventions targeting CVD risk factors are inadequate, particularly in rural areas with limited healthcare access [13]. A study by researchers at the Armauer Hansen Research Institute (AHRI) confirmed the perception of CVD as untreatable due to limited access to care, a lack of skilled healthcare workers, and religious beliefs [14]. AHRI actively engaged stakeholders, including policy-makers, community members, and healthcare providers, through community advocacy meetings and consultations. Extensive deliberations led to the formulation of recommendations, documented in two issue briefs shared with the Director of NCDs in the Ministry of Health (MOH) in 2022. The incorporation of citizen science in the process strengthened the evidence base for EIDM and paved the way for targeted interventions to address CVD challenges in the local context. One example is the design of a visual aid in the local language for health education by health extension workers. Training sessions were also held to help workers improve their ability to detect and refer high-risk CVD patients, which aided in the identification of previously undiscovered new cases as well as CVD patient flows to nearby health clinics.

The MOH in Malawi hosts a dedicated Knowledge Translation Platform (KTP), which engages policy-makers, researchers, and implementers to facilitate a coordinated approach for evidence generation and use. The ongoing relationship between researchers at the Kamuzu University of Health Sciences (KUHEs) and the KTP served as a platform for engagement during the COVID-19 pandemic when there was a growing need for EIDM. The demand for EIDM capacity enhancement across research institutions in Malawi resulted in a COVID-19 policy workshop led by the KTP and co-facilitated by CEBHA+ consortium researchers from KUHEs. The KTP and KUHEs CEBHA+ teams in collaboration with a multitude of national and international stakeholders, also planned a 'Building Back Better' conference in late 2021, which attracted public health professionals, policy-makers, and researchers from different sectors.

CEBHA+ researchers at the University of Rwanda engaged with the MOH, Ministries of Education, Local Governance, Public Services, Rwanda Biomedical Centre, traffic police, and public and private

health facilities to mitigate NCD risk factors. COVID-19 mitigation measures, however, negatively affected government interventions such as ‘Friday Physical Activities’ for civil servants and a car-free day for community members. Reduced physical activity and increased risk of NCDs were compounded by low community knowledge of NCDs, leading to concerns about a pandemic within a pandemic [15]. As a result of IKT, the MOH and other stakeholders discussed interventions to be implemented during the pandemic, including animated television sessions, mobile phone applications, and physical attendance at neighbourhood gatherings. Local authorities and community health workers monitored and reported on the implementation. CEBHA+ researchers subsequently prepared four issue briefs on physical activity and joined ministries and private and public institutions to mobilise communities to participate in physical activity and NCD risk screening after pandemic restrictions were reduced.

DISCUSSION

Developing adequate IKT strategies is key to supporting EIDM, as the case studies in this viewpoint illustrate. By actively involving researchers, policy-makers, practitioners, and community members, IKT fosters collaboration, improves understanding, and facilitates the translation of research findings into evidence-based interventions. This was facilitated in the various contexts by packaging and tailoring research results and their dissemination through trusted platforms such as media, places of worship, and community meetings. CEBHA+ teams also demonstrated that public health interventions should be supported by institutional policies, regulations, and various forms of engagement. Embracing stakeholders who were partners, collaborators, intermediaries, or champions was found to advance advocacy efforts in unique ways, as one partner noted: ‘They sort of have a way of adding a face to the stories and numbers that we (academia) produce.’

The stories in this viewpoint demonstrate that regardless of context, grounding IKT in a deliberate and structured process of stakeholder mapping and engagement is important for value and co-ownership to be nurtured. This was magnified during the COVID-19 pandemic, where the demand from governments in Malawi, Uganda and Rwanda was key to sustainability. Ad hoc engagement through personal networks and opportunities was equally indispensable in the different contexts, but especially in South Africa and Ethiopia, as reported in a previous paper [16]. What is particularly important in these stories is the engagement of stakeholders beyond the health sector where multi-sectoral engagement was key to addressing NCDs.

The participatory approach resulted in robust research outcomes that were contextually relevant, culturally sensitive, and actionable. Implementing an IKT approach, however, also presented challenges. Balancing power dynamics and ensuring equitable participation among stakeholders required ongoing dialogue and capacity building, while sustaining long-term collaboration and securing adequate resources for effective IKT required continuous attention. The embedded knowledge translation platforms in Malawi and at AHRI are excellent examples of planned sustainability that will continue to facilitate the utilisation of research and evidence for use in policy-making.

IKT was also found to be a process and a learning curve that operates at different pace and times for different stakeholders, including the need for tailored training formats adapted to the needs of both knowledge users and producers. Training workshops for policy-makers, for example, need to be flexible and reduce opportunity costs, while workshops for researchers need to cater to and serve immediate project goals.

The ultimate impact of IKT will be assessed in a mixed-methods evaluation across CEBHA+ partners [18]. While this aims to assess how the IKT approach contributed to increased uptake of contextualised research in NCD policy and practice, the process evaluation conducted in tandem aims to shed light on the dose, fidelity, and quality of IKT strategies at each site [17]. Given the complex and politicised nature of policy-making, it will be difficult to assess impact, but the stories certainly illustrate how the call for EIDM and the need to advance progress on the SDGs can be addressed in ways that are both locally relevant and effective.

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COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

All authors were actively involved in designing and implementing the CEBHA+ IKT approach. NSJ drafted and finalised the manuscript. NSJ, BEB, TLM, FMA, and SN participated in the storytelling session and subsequent narration in this manuscript. PD and AR provided the South African story. All authors critically revised the draft. All authors read and approved the final manuscript.

AUTHOR AFFILIATIONS

Nasreen S. Jessani, BSc, MSPH, DrPH  orcid.org/0000-0002-1160-3099


Stellenbosch University and the Institute of Development Studies, UK

Peter Delobelle, MD, PhD  orcid.org/0000-0002-9016-7458

Chronic Disease Initiative for Africa, University of Cape Town, South Africa; Department of Public Health, Vrije Universiteit Brussel, Belgium

Bonny Enock Balugaba, BEHS, MSc  orcid.org/0000-0002-1291-5561

Department of Disease control and Environmental Health, Makerere University School of Public Health, Uganda

Talitha Louisa Mpando, BSc, BSc (Hons), MPH  orcid.org/0009-0003-9996-2153

School of Global and Public Health. Kamuzu University of Health Sciences, Malawi

Firaal Mesfin Ayele, MSc  orcid.org/0000-0002-9618-198X

Non-communicable Disease Research Directorate, Armauer Hansen Research Institute, Addis Ababa, Ethiopia

Seleman Ntawuyirushintege, MBA, MPH, PhD Fellow  orcid.org/0009-0006-2670-6097

School of Global and Public Health. Kamuzu University of Health Sciences, Malawi; School of Public Health of the University of Rwanda

Anke Rohwer, BCur, MSc, PhD  orcid.org/0000-0002-1092-5942

Centre for Evidence-Based Health Care, Stellenbosch University, South Africa

REFERENCES

1. **Okop K, Delobelle P, Lambert EV**, et al. Implementing and evaluating community health worker-led cardiovascular disease risk screening intervention in sub-Saharan Africa communities: A participatory implementation research protocol. *Int J Environ Res Public Health*. 2022; 20(1): 298. DOI: <https://doi.org/10.3390/ijerph20010298>
2. **Okop KJ, Murphy K, Lambert EV**, et al. Community-driven citizen science approach to explore cardiovascular disease risk perception, and develop prevention advocacy strategies in sub-Saharan Africa: A programme protocol. *Res Involv Engagem*. 2021; 7(1): 11. DOI: <https://doi.org/10.1186/s40900-020-00246-x>
3. **Mash RJ, Cairncross J**. Comprehensive patient education and counselling for non-communicable diseases in primary care, Western Cape. *S Afr Fam Pract*. 2023; 65(1): 11. DOI: <https://doi.org/10.4102/safp.v65i1.5634>

4. **Mash RJ, Cairncross J.** Piloting of virtual group education for diabetes in Cape Town: An exploratory qualitative study. *S Afr Fam Pract.* 2023; 65(1). DOI: <https://doi.org/10.4102/safp.v65i1.5635>
5. **Uwimana-Nicol J, Hendricks L, Young T.** Population-level interventions targeting risk factors of diabetes and hypertension in South Africa: A document review. *BMC Public Health.* 2021; 21(1): 2283. DOI: <https://doi.org/10.1186/s12889-021-11910-6>
6. **Hendricks L, Uwimana-Nicol J, Young T.** Decision makers perceptions and experiences of developing population-level interventions targeting risk factors for hypertension and diabetes in South Africa: A qualitative study. *BMC Health Serv Res.* 2023; 23(1): 146. DOI: <https://doi.org/10.1186/s12913-023-09135-x>
7. **Schmidt BM, Duroo S, Toews I,** et al. Screening strategies for hypertension. *Cochrane Database Syst Rev.* 2020; 5(5): CD013212. DOI: <https://doi.org/10.1002/14651858.CD013212.pub2>
8. **Peer N, Balakrishna Y, Duroo S.** Screening for type 2 diabetes mellitus. *Cochrane Database Syst Rev.* 2020; 5(5): CD005266. DOI: <https://doi.org/10.1002/14651858.CD005266.pub2>
9. **Yiu KC, Rohwer A, Young T.** Integration of care for hypertension and diabetes: A scoping review assessing the evidence from systematic reviews and evaluating reporting. *BMC Health Serv Res.* 2018; 18(1): 481. DOI: <https://doi.org/10.1186/s12913-018-3290-8>
10. **Durão S, Burns J, Schmidt B-M,** et al. Infrastructure, policy and regulatory interventions to increase physical activity to prevent cardiovascular diseases and diabetes: a systematic review. *BMC Public Health.* 2023; 23(1): 112. DOI: <https://doi.org/10.1186/s12889-022-14841-y>
11. **Osuret J, Namatovu S, Bribawa C,** et al. State of pedestrian road safety in Uganda: A qualitative study of existing interventions. *Afr Health Sci.* 2021; 21(3): 1498–1506. DOI: <https://doi.org/10.4314/ahs.v21i3.62>
12. **Muni KM, Ningwa A, Osuret J,** et al. Estimating the burden of road traffic crashes in Uganda using police and health sector data sources. *Inj Prev.* 2021; 27(3): 208–214. DOI: <https://doi.org/10.1136/injuryprev-2020-043654>
13. **Bekele DM, Goshu DY, Yalew AW, Higgins MK, Gary RA.** Low subjective cardiovascular disease risk perceptions among hypertensive patients in Addis Ababa, Ethiopia. *Integr Blood Press Control.* 2022; 15: 81–96. DOI: <https://doi.org/10.2147/IBPC.S370838>
14. **Getachew H, Girma E, Tamerat W,** et al. Cardiovascular diseases risk perception and communication among urban and rural residents in Ethiopia: A qualitative study. Published online 2022. DOI: <https://doi.org/10.21203/rs.3.rs-1395952/v1>
15. **Office of the Prime Minister.** Republic of Rwanda. Statement on Cabinet Decisions of 2 June 2020. Accessed June 22, 2023 https://covidlawlab.org/wp-content/uploads/2020/07/Republic-of-Rwanda-Prime-Minister-Office_-STATEMENT-ON-CABINET-DECISIONS-OF-2nd-JUNE-2020.pdf.
16. **Mpando TL, Sell K, Delobelle P,** et al. Integrated knowledge translation in non-communicable disease research in sub-Saharan Africa: A comparison of systematic and ad hoc stakeholder engagement. *Front Trop Dis.* 2021; 2(53). DOI: <https://doi.org/10.3389/fitd.2021.753192>
17. **Sell K, Jessani NS, Mesfin F,** et al. Developing, implementing, and monitoring tailored strategies for integrated knowledge translation in five sub-Saharan African countries. *Health Res Policy Syst.* 2023; 21: 91. DOI: <https://doi.org/10.1186/s12961-023-01038-x>
18. **Pfadenhauer LM, Grath T, Delobelle P,** et al. Mixed method evaluation of the CEBHA+ integrated knowledge translation approach: a protocol. *Health Res Policy Syst.* 2021; 19(1): 7. DOI: <https://doi.org/10.1186/s12961-020-00675-w>

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