What are the facilitators and barriers to successful routine or long-lasting collaboration between academic researchers, voluntary sector community organisations, and individuals from diverse ethnic communities?

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What are the factors that help (facilitators) and factors that hinder (barriers) successful and routine collaboration between researchers, voluntary sector community organisations and individuals from diverse ethnic communities?

The objective of this rapid review is to summarise current evidence on barriers and facilitators to successful collaborations between researchers and people from diverse ethnic communities or organisations that work with those communities. It will inform the next stage of the Better Collaboration for Better Health research project, which will include engagement with researchers and community members to understand more about the factors presented in this review.

We used an existing framework of success in Long-Standing Community-Based Participatory Research (CBPR) Partnerships to help us characterise barriers and facilitators extracted from the included studies.

Our review included 18 studies providing information on 17 collaboratives. Most collaboratives were from North America and represented the views and engagement between researchers and people identifying as Black, Hispanic, First Nations, Inuit, and Chinese American ethnicities.

Key Findings:
With respect to **characteristics of partners**, various interrelated elements were described as important to successful collaborations. Most salient of these was the inclusion of diverse, representative, and appropriate partners who represent the community being studied and reflect the skills and competence of the proposed research. The importance of sharing power and engaging with collaborators (particularly community-members) and building on and sustaining established relationships among partners was also described as a key component.

With respect to the **relationship among or between partners**, trust is perceived as a key foundational element on which to build successful collaborations. Positive relationships between partners are facilitated when academic and community partners acknowledge each other's experiences and power imbalances, adopt an open and transparent approach, recognise each other's priorities and pressures, and embrace cultural differences.

Who is this rapid review for?
This rapid review was undertaken as the first phase of research in a larger project: "Better collaboration for better health: building trustworthy and sustained collaboration with diverse ethnic communities to improve equity and health outcomes". The review used rapid review methods to identify, select, extract, and summarise information from diverse studies and reports published in the literature. Further details about the methods used in this review can be found in the Supplemental Material at the end of this report.

This summary includes:
✓Key findings from a broad collection of recent literature on long-standing collaborations relevant to the UK context.

This summary does not include:
✗Recommendations
✗Additional information not presented in the current literature
✗In-depth descriptions of the features of collaborations presented in the included studies.

Each section concludes with a **"Bottom line"** subsection that summarises the key factors that may drive collaboration success for that domain.

With respect to **partnership characteristics**, strong communication and flexibility appear to be important elements of long-term collaborations. While the exact nature of communication and flexibility is diverse, both appear rooted in the objective of fostering respectful and inclusive collaborative research, responsive to community needs and wishes.

With respect to **partnership processes**, structures appropriate to the needs of the partnership and clear guidelines and procedures to which all partners have agreed are suggested to be elements of successful long-term partnerships. Regular evaluations of the partnership processes are suggested to identify what works well and what does not, and to enhance the partnership.

Finally, long-term collaborations are supported and sustained through **sharing resources** throughout the partnership in a fair and honest manner as well as engaging in activities to **build research capacity** across the collaboration and the communities they represent.

Background

A key purpose of health research is to improve the health of people in society. However, health research often ignores or forgets diverse ethnic communities and these groups become under-served by research and service delivery that follows from that research (Isaacs et al., 2016; Khunti et al., 2016; Treweek et al., 2021; Witham et al., 2020). Engaging people from diverse ethnic communities or organisations in the research process helps ensure the needs, interests and unique perspectives of diverse ethnic communities[1] are included in health research and subsequent health-service delivery. Various factors, however, often prevent meaningful collaborations between researchers and people from diverse ethnic communities. Identifying and overcoming these factors is an important research and social equity priority.

The aim of this rapid review is to understand, from existing evidence published in scientific journals, what factors can help (facilitators) or hinder (barriers) successful collaborations between researchers and people from diverse ethnic communities or organisations, with a particular focus on long-term collaborations. The review is part of a broader project (a collaboration of health researchers and members of community organisations) that aims to generate knowledge about new ways that researchers and people from diverse ethnic communities can work together to design, deliver, and report research relevant to the needs of those communities.

Methods

Our aim raises the question of what 'success' in long-term collaborations between researchers and communities looks like. We define success as established practices supporting ongoing and long-lasting collaboration, ideally on multiple projects, initiatives, or processes (not one-off examples). We are also interested in the wider picture of routine and long-lasting collaborations; studies that focus on specific aspects of collaboration in isolation (e.g., communication style, quality of communication) were deemed to not be suitable for inclusion unless they provided information on what made collaboration successful or challenging.

We drew on the work of Brush and colleagues (2020), a research collaboration in Detroit (USA) including community organisations, local government and health researchers from the University of Michigan, to help us characterise indicators of success in this context. They reviewed the literature on the evaluation of partnerships between researchers and any type of community that had existed for 4 years or more and had used an approach to research called Community-based Participatory Research. From 26 relevant studies, they identified 3 main domains - the Partner domain, the Partnership domain, and the Partnership outcomes domain. The associated sub-domains and indicators of success are presented in Table 1. We drew on this model of success in community-academic partnerships because it was the only model we could identify that focused on long-term collaboration.

For our review, we chose to focus this report only on the elements of the framework that contributed to or hindered the success of partnerships as the outcomes of the partnerships were not specific to our research question and coding them did not provide rich insights regarding how these outcomes were produced.

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1 We asked our voluntary sector community partners about terminology we should use in this research. They suggested we refer to them as 'voluntary sector community partners' and use 'diverse ethnic communities' as a collective term for people with a range of ethnic backgrounds. We have shorted 'voluntary sector community partners' to 'partners' for this report.

We searched for studies reporting on long-term partnerships (i.e., partnerships that worked together more than once) between researchers and diverse ethnic communities that were published since 2013 (to reflect contemporary practices) and were done in high-income countries[2] which we, including our voluntary sector partners, believed was a useful proxy for settings similar to the UK context. After screening the search results, we selected the relevant studies for inclusion and extracted information on the characteristics of the collaborations and on factors associated with the success of the collaborations (as reported by the study authors) using the indicators identified by Brush and colleagues (2020). Although we allowed ourselves to capture new factors not considered by the framework, in the end we found this unnecessary as all extracted data were already captured by the framework's indicators. The main findings of our review are presented below. Further information about the methods supporting our findings is available in the supplemental materials.

Table 1. Domains, Subdomains, and Indicators of Success Identified in the Scoping Review of the Literature on Success in Long-Standing Community-Based Participatory Research (CBPR) Partnerships (Reprinted from Brush et al., 2020).

Domains	Indicators
Partner domain	
Characteristics of partners	• Diverse • Committed • Willing to share power, risk, responsibility, and accountability • Representative/appropriate • Able to make decisions • Actively engaged • Stable and established
Relationship among/between partners	• Trust • Mutual respect • Openness and transparency • Recognition of pressures, priorities, and worldviews • Embrace cultural differences • Awareness and attention to power imbalances • Conflict recognition, response, and resolution
Partnership domain	
Partnership characteristics	• Strong, shared, and trustworthy leadership • Flexibility/adaptability • Effective communication strategies
Partnership processes	• Clear and explicit guidelines • Structures to support processes • Mandatory evaluations
Partnership resources	• Shared and fair allocation of resources
Partnership capacity	• Increase capacity for research
Partnership outcomes domain	
Partnership outcomes	• Research moves to system and policy change • Pride and ownership in partnership work • Knowledge transfer from partnership to community • Clear, concrete, and sustainable community benefit • Increased power sharing • Continued willingness/ability to conduct CBPR

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[2] As defined by the World Economic Situation and Prospects 2023 report

Findings

Study characteristics

We included 18 studies reporting information on 17 collaboratives (see **Figure 1**). Most collaborations occurred in the United States (n=13); 2 in Canada, 1 in Australia, and 1 in the United Kingdom. The studies represented the views and engagement between researchers and people identifying as Black, Hispanic, First Nations, Inuit, Aboriginal and Torres Strait Islander, and Chinese American ethnicities. The ethnicity of the researchers was mostly not reported. Most studies reported narrative stories of partners' experiences of conducting community-based participatory research (CBPR) with only 3 studies using formal qualitative methods of data collection and analysis to understand the barriers and facilitators of the collaboration. Most reports appeared to be written from the perspective of researchers as opposed to their ethnically diverse community partners (although partners were sometimes listed as co-authors).
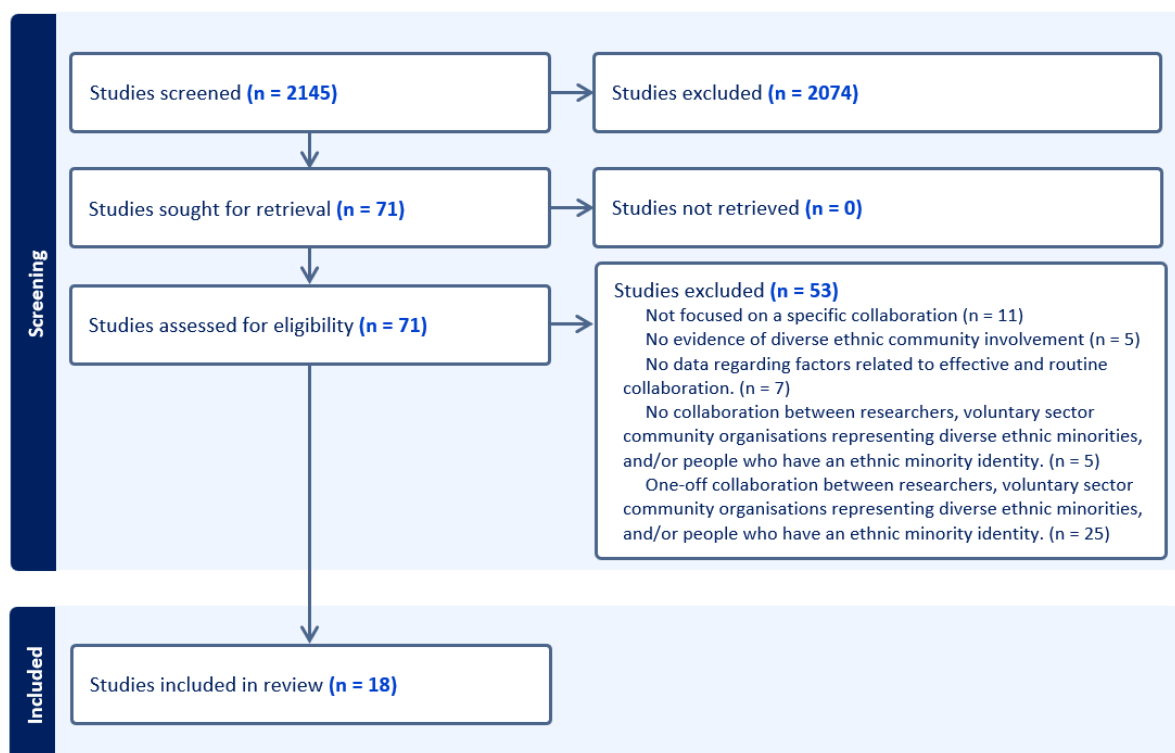

Figure 1. PRISMA flow diagram of the study selection process

Barriers and facilitators of successful collaborations

It is worth noting that the authors of the included studies did not always report factors explaining the success (or challenges) of their collaboration; rather they provided a description or narrative synthesis of what they did and the rationale for doing it. Some studies directly linked characteristics of partners or actions taken by the collaborative as contributing to their success, so we could infer that these were perceived by the authors to be indicators of success. Other times, this link was not explicit, and we could not establish to what extent these actions contributed to the overall success of the partnership.

Of the 21 indicators of success identified by the framework (not including outcome indicators), 9 were coded 10 times or more (see **Figure 2**; numbers inside brackets represent the number of studies and instances in which the domain was mentioned, respectively); these occurred evenly across the framework, suggesting the framework was relatively comprehensive in capturing the key

elements of a successful collaboration. For ease of reference, **Table 1** presents the most important factors associated with partnership success (based on frequency of occurrence in included studies).
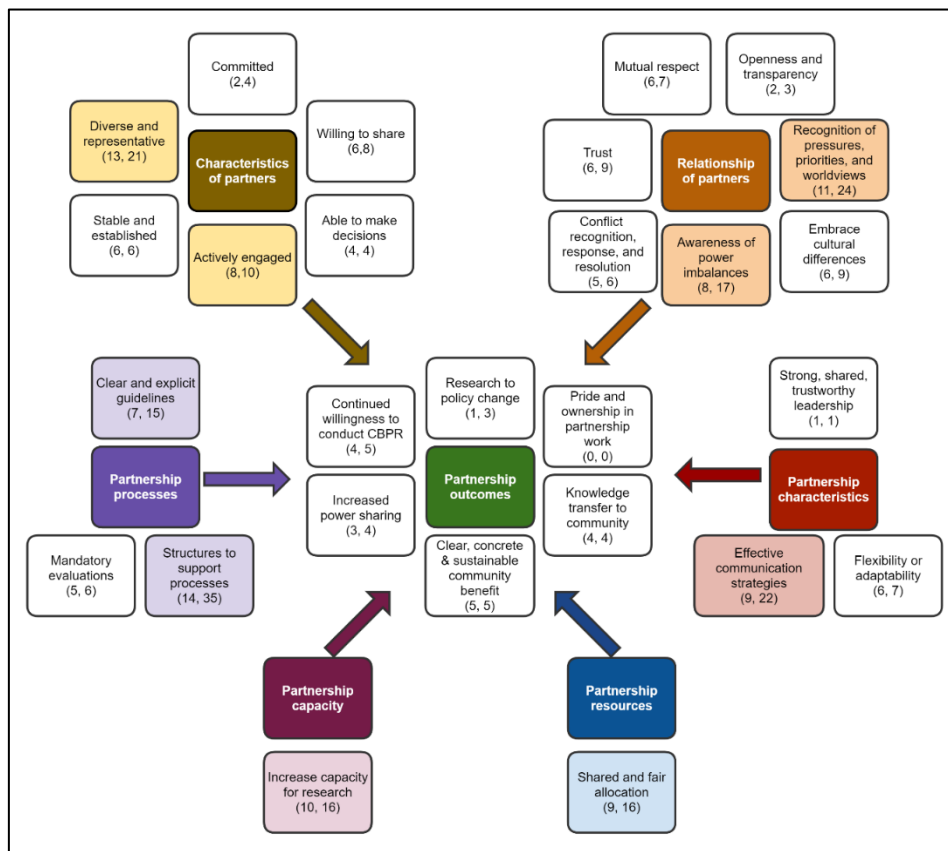

Figure 2. Frequency[a] of indicators of success identified in our review of long-standing community-based participatory research partnerships (adapted[b] from the framework developed by Brush et al.)

Abbreviations: CBPR=community based participatory research

[a]The number of codes for each domain appear under the domain heading in brackets. We first report the number of studies in which the domain was mentioned and then the number of instances (i.e., cold be coded twice or more in one studies) the domain was mentioned. Larger numbers mean the indicator is more important to success.; indicators coded 10 times or more are coloured in for emphasis.

[b]The original framework used by this review provided a list of 3 Domains (Partner, Partnership, and Partnership Outcome), 7 subdomains (characteristics of partners, relationship of partners, partnership characteristics, partnership resources, partnership capacity, partnership processes, and partnership outcomes) and 28 indicators within these domains and was presented as a hierarchical list. We collapsed two indicators into one (diverse and representative/appropriate) and envisioned the 6 subdomains (and their indicators) as a circle influencing the inner subdomain of partnership outcomes.

Table 1. Most important factors associated with partnership success (based on frequency of occurrence in included studies)

	Sub-domain	Indicator	Frequency of occurrence	
			No. of instances	No. of studies
PARTNER DOMAIN	**Characteristics of partners**	Diverse, representative or appropriate	21	13
		Actively engaged	10	8
	Relationship among or between partners	Recognition of pressures, priorities, & worldviews	24	11
		Awareness and attention to power imbalances	17	8
PARTNERSHIP DOMAIN	**Partnership characteristics**	Effective communication strategies	22	9
	Partnership processes	Structures to support processes	35	14
		Clear and explicit guidelines	15	7
	Partnership resources	Shared and fair allocation of resources	16	9
	Partnership capacity	Increased capacity for research	16	10

PARTNER LEVEL DOMAIN

Characteristics of partners subdomain

The indicators of success related to the Characteristics of partners within the Partner Level Domain are summarised below.

Diverse, representative and appropriate partners (21 instances across 13 studies)
The framework defined two partner characteristics – 'diverse' and 'representative and appropriate' – that we believed were conceptually related and thus combined. 'Diverse' was defined as the need for partners "from different cultures and backgrounds with varying skills, knowledge, and expertise...who mirror community variations in age, gender, race, and ethnicity", while 'representative and appropriate' referred to the engagement of partners with 'skills, expertise, and perspectives' relevant to the partnership'. We coded content related to the combined indicator of diversity and representativeness 21 times across 13 studies.

Studies tended to describe diversity and appropriateness on three different levels: individual, professional, and organisational. At an individual level, studies described seeking inclusion of a "diverse range of members" (Rahman et al., 2022), with appropriate breadth and depth of knowledge about a community (Elder et al., 2013), and balanced and proportionate representation of that community (Awaad et al., 2023; Dubé et al. 2023; Rahman et al., 2022; Simon et al. 2019). This included racial/ethnic characteristics, but also other sociodemographic and experiential aspects perceived to be relevant to the research collaboration. Professional diversity included various academic, service, and community-based professions within the collaboration (e.g., healthcare providers, faith leaders, social service staff, and mental health professionals; Alang et al., 2021; Awaad et al. 2023; Dubé et al. 2023; Elder et al., 2013). Organisational diversity included various institutions and organisations, comprising community partners. One quote by LeClair and colleagues (2018) describes how they expanded the type of partners involved in their collaboration, and broadened their definitions of health research over the course of their collaboration to be relevant to the needs of the collaborative research:

> *Over time, ADAPT has embraced and promoted a broad definition of community health. Five of the six core community partners in ADAPT do not focus explicitly on health. They are social service organizations focused on affordable housing, job training and employment, legal*

services, elder services, education, childcare, family programming, and more. On the academic side, ADAPT's members have degrees in medicine, dentistry, public health, and education, just to name a few".

Actively engaged (10 instances across 8 studies)
The framework highlights how partners should "actively engage at all levels of partnership work to ensure community needs and goals are prioritised". We coded this concept 10 times across 8 studies.

The studies provided various examples of engagement by community partners and academic researchers across the research process (e.g., question prioritisation, study design and conduct). Many articles pointed out community-member engagement in initiating community-relevant projects (e.g., "*The CAB* [Community Advisory Board] *initiated several projects focussed on Muslim mental health*"; Awad et al., 2023), tailoring research materials to community-needs ("[Community Engagement Committee] *members also provided critical feedback on culturally and locally sensitive issues, such as the inclusion of legal status questions in the ...community health survey*"; Elder et al., 2013), or organising data collection ("*All focus groups were facilitated by persons who experienced isolation and felt excluded from care*"; Alang et al., 2021). Dubé and colleagues (2023) stressed "*the need to have everyone be engaged and included as much as possible regardless of roles*" and describe various knowledge transfer and skill building activities they have built into their collaborative to support the leadership, public speaking, and writing skills of their community advisory board members. From the academic side, LeClair and colleagues (2018) indicate that for their program, ADAPT, "*commitment to Asian health equity is demonstrated by being physically present and involved. Funded or not, there is no substitute for showing up and doing the work, and the academic partners know this*".

Willing to share power, risk, responsibility, and accountability (6 instances across 8 studies)
The framework stresses the importance of sharing the power, risk and responsibilities of the work involved in long-term partnerships. We coded this indicator 8 times in 6 studies, often in reference to collaboratives describing the co-design and co-creation processes of their research processes (Corbie-Smith et al., 2015; Dubé et al., 2023; Rahman et al., 2022). Dubé and colleagues (2023) described their partnership as making "*leadership opportunities available to all*" and Alang and colleagues (2021) described their partnership as having members of marginalised communities not only sit in on focus groups but also facilitate them. Two collaboratives advocated training sessions (on topics related to inequities and cultural competence) led by community partners (Lebow-Skelley et al., 2023; Stewart et al., 2020). Notably, we did not code any examples of *risk* being shared among partners.

Stable and established community partners (6 instances across 6 studies)
According to the framework, "partnerships with stable and established community partners with prior CBPR experience in health-related projects and programs were deemed more likely to achieve long-standing success". We coded this indicator 6 times across 6 studies.

Several studies described stability among partners as a key element to successful collaborations:

> *"[NunatuKavut Community Council] staff, partners and collaborators have been working for many years to advance opportunities for community self-determination in research in NunatuKavut"* (Bull et al., 2019)

> *"The creation of the [Community Engagement Group] model...rested on a 25-year foundational partnership engaging clients, basic researchers and clinicians in HIV-related research"* (Dubé et al., 2023)

"An existing long-term community-academic partnership with [academic and community organizations] developed the grant proposal to build community infrastructure for engaging minorities in research" (Stewart et al., 2020)

Able to make decisions (4 instances across 4 studies)
The indicator that partners should "be able to make decisions on behalf of the organisations they represent" was coded 4 times across 4 studies.

The extent to which partners could make decisions on behalf of their organisations was not always clear. However, some papers described specific decisions that were clearly taken by partners on behalf of their organisations (Awad et al., 2023; Elder et al., 2013; LeClair et al., 2018; Rahman et al., 2022).

Committed to the partnership (4 instances across 2 studies)
An important characteristic of long-term partnerships is having "partners who are committed to the partnership and its work". We coded the indicator of commitment 4 times in 2 studies and referred to several types of partners (clinician, health care activist, academic and community partners) commitment that led to collaborative community-based health projects. One study described the commitment of academic partners at Tufts University in the USA to improving the health of Chinatown and the broader Asian American community (e.g., supporting community events, engaging in community-identified research projects) and how this was recognised and valued by the community (LeClair et al., 2018).

> **Key takeaways of characteristics of partners:** Various interrelated partner characteristics are described as being important to successful collaborations between researchers and people from community-based and diverse ethnic groups. In particular, successful collaborations are facilitated when everyone, academics and community members alike, are inclusive and diverse and bring their skills and experience to the proposed research. Additional elements of positive long-term collaborations include empowering and engaging partners at all levels (particularly community-members) and sustaining established relationships.

Relationship among or between partners
Within the Partner-Level Domain, indicators of success related to the characteristics of the Relationship among or between partners are summarised below.

Recognition of pressures, priorities, and worldviews (24 instances across 11 studies)
An indicator of success in long-term partnerships is the mutual recognition of pressures, priorities, and worldviews. Relationships characterised by mutual recognition were described 24 times in 11 studies reporting long-term collaborations.

Researchers stressed the importance of "*knowing what truly matters to the populations we work with*" (Alang et al., 2021) and explained that they wanted to benefit the community they were working with, understand the external demands on community partners, and find ways to conduct research on a timescale that was more consistent with the expectations of their community partners. Community partners described the need to manage expectations about how quickly research could be completed, the researchers' skills and knowledge to conduct the research, the availability of the researchers, and what was possible to achieve with the available resources.

Awareness and attention to power imbalances (17 instances across 8 studies)
The framework stresses the importance of partners attending "power imbalances that may occur between partners and the effect power asymmetry may have on the partnership itself".
We coded 17 examples of this indicator across 8 studies.

Various types of power imbalances were considered across the included studies. Some studies addressed the power imbalance between researchers and community members (Alang et al., 2021; Bull & Hudson, 2019; Dubé et al., 2023). This was achieved through reflexivity on the part of the researchers and through involving members of the community in decision-making.

Power imbalances related to ethnicity within communities and how they translate into inequalities in health outcomes and healthcare were also highlighted (Corbie-Smith et al., 2015; Dubé et al., 2023). The process of engaging in community-based research in itself was seen as an important way of addressing inequalities.

Some partnerships were formed as a direct response to historical power imbalances between academic institutions and marginalised communities, such as the Addressing Disparities in Asian Populations through Translational Research (ADAPT) collaboration between Tufts University and the local community in Chicago Chinatown in the USA (Rubin et al., 2022). Another study reported a specific partnership programme of work to integrate anti-racism into their work (LeClair et al., 2018).

Trust (9 instances across 6 studies)
The Brush and colleagues' framework defined building and maintaining trust "as foundational to partnership sustainability". Examples of trust-building were coded 9 times across 6 studies.

Some of the strategies described for building and maintaining trust included ensuring participation of community-based organisations in the partnerships (Dubé et al., 2023), active and consistent partnership engagement by academic partners (LeClair et al., 2018), creation of safe spaces where community members have "*control of how to share their individual and collective experiences*" (Alang et al., 2021), and promotion of team-building activities (Stewart et al., 2020). One study highlighted several barriers to gaining the trust of community members by researchers. These barriers include researchers' lack of appreciation and understanding of the lived experiences of community members, as well as community members' fear of being exploited (Safo et al., 2016).Elder and colleagues (2013) provide a good example of their efforts to build and maintain trust in their partnership with the local Latino community at the San Diego Prevention Research Center.

> "*The SDPRC [San Diego Prevention Research Center] employed numerous strategies to retain CEC [Community Engagement Committee] community partners and gain trust in the community, including (1) developing research projects and Center activities that were synergistic with partner agency missions; (2) responding to partner requests for technical assistance; (3) providing capacity-building opportunities; (4) sharing funding opportunities with community partners; (5) partnering on dissemination activities, including preparing abstracts for conference presentations (24 to date) and manuscripts for publication in peer-reviewed journals (15 to date); (6) advocating on behalf of community partners (e.g., recreation centers, which suffered severe budget cuts); and (7) participating regularly in community events, meetings, and coalitions. The latter was essential to establishing community trust, demonstrating a commitment to the community outside of the research context.*"

Embrace cultural differences (6 instances across 9 studies)

The framework states that "[e]mbracing cultural differences among and between academic and community partners was identified as leading to respect of different and unique values, practices, beliefs, and community contexts." We coded this indicator 9 times across 6 studies.

Examples include facilitating conversations that help researchers to consider experiences of community partners from their perspective (Alang, 2021) and relationships between different communities (e.g., Indigenous and non-Indigenous; Bull & Hudson, 2018). The recognition of differences between groups and how these might complicate the partnership (Corbie-Smith et al., 2015) and culturally specific and sensitive ways of communicating the work of the partnership in (e.g. to religion [Rahman et al., 2022] or language [Simon et al., 2019]) were also noted.

Mutual respect (6 instances across 7 studies)

Within the framework "'trust was often linked with mutual respect, not only in how partners engage with each other but also through valuing and acknowledging each other's experiential knowledge, skills, and participation in the partnership". We coded 7 references consistent with this definition of mutual respect across 6 studies.

Mutual respect was described in terms of building unity and shared understanding (Corbie-Smith et al., 2015; Dubé et al., 2023) and respecting the need for ongoing consent from the community being researched (Bull & Hudson, 2018). The importance of mutual respect in partnerships between academics and diverse communities is captured elegantly by Wall and colleagues (2022) when they explain that "*building genuine relationships of reciprocity through respectful consultation is the cornerstone of research*."

Conflict recognition, response, and resolution (5 instances across 6 studies)

We coded "partners' ability to recognize, respond to, and resolve conflict*"* 6 times across 5 studies. Issues highlighted in these studies relate to differences in priorities between academic researchers and community partners, (LeClair et al., 2018; Rubin et al., 2022), lack of clarity on the direction of the partnership (LeClair et al., 2018), power imbalances between academics and community partners that need to be managed (Samuel et al., 2104) and tension between researchers and community members on what to include in data collection items (Stewart et al., 2015). Across studies, clear and respectful communication (sometimes through a trained moderator; Corbie-Smith et al., 2015) was the most common strategy to address conflicts and tensions.

Openness and transparency (2 instances across 3 studies)

In the framework, openness and transparency are defined as qualities of the relationship between partners who are "able to share themselves, express true feelings, and improve the work of the partnership". We coded this indicator 3 times across 2 studies.

Wall and colleagues (2022) emphasised the importance of reflexivity and of sharing diverse points of view, including critique, within the partnership. Safo and colleagues (2016) conducted a study that involved interviewing members of a Community Advisory Board and found participants questioned whether they could maintain genuine openness and transparency in their relationship with researchers.

Key takeaways of relationship among and between partners: Positive relationships between partners are facilitated when everyone acknowledges each other's experiences and power imbalances, adopts an open and transparent approach, recognises each other's priorities and pressures, and embraces cultural differences. Trust is perceived as a key element on which to build and develop successful collaboration.

PARTNERSHIP LEVEL DOMAIN

Partnership characteristics

The indicators of success related to the characteristics of the partnership within the Partnership Level Domain are summarised below.

Effective communication strategies (22 instances across 9 studies)

The framework highlights how effective communication strategies influence partnership behaviour and the ability to respond appropriately to changing community needs. These strategies include sharing high-quality information, holding regular meetings to involve partners in all aspects of the research process, and ensuring bidirectional communication. The role of communication strategies was described 22 times in 9 studies.

Strategies related to two main aspects of the collaborative work: the basic foundations of respect and inclusivity within the partnership, and the goals and conduct of the research. Studies described various modalities (online, face-to-face, texting), timings (fortnightly, monthly, annual), and formats (retreat, monthly check-in) of communication to support the partnership and make communication (and the overall research process) democratic, non-hierarchical, and equity driven.

Flexibility or adaptability (6 instances across 7 studies)

The framework states that long-term partnerships "exhibit a high level of flexibility and adaptability in partnership goals, roles, programs, and research...flexible partnerships were identified as being better able to address community research needs, the needs of its partners, and the realities of the changing environments". We coded examples of flexibility in partnership 7 times across 6 studies.

Examples included retaining flexibility in how research was conducted (e.g., timing, location, compensation of focus groups) (Alang et al., 2021) to being flexible in how the collaboration itself evolved (allowing it to "*form organically*" (LeClair et al., 2018) and with "*patience, understanding, and flexibility*" (Simon et al., 2019). Dubé and colleagues (2021) noted the need to remain flexible in meeting agendas if members of the community advisory board had an item to discuss that was not addressed and the need to periodically evaluate the roles and responsibilities or partners and partnership working groups.

Strong, shared, and trustworthy leadership (1 instance from 1 study)

The framework identified "partnership's commitment to strong and shared leadership, along with an ongoing plan for potential leadership change" as an important indicator of successful collaborations. Leadership, as described by the framework, should be committed to community-based participatory research and be trusted to represent community interests. We coded only one reference to leadership from 1 study (Dubé et al., 2021). It is worth noting that elements related to strong leadership could have been coded in different related domains (e.g., trust, shared power).

> **Key takeaways of partnership characteristics:** Strong communication and high flexibility in partnership roles and the way research is conducted appear to be important indicators of long-term collaborations. Both these elements appear rooted in the aim of fostering respectful and inclusive collaborative research, which is responsive to community needs.

Partnership processes

Indicators of success related to partnership processes are summarised below.

Structures to support processes (35 instances across 14 studies)

Structures to support processes were the most coded indicator of success with 35 examples across 14 studies.

One of the most common structures described by studies was the Community Advisory Board. Community Advisory Board activities were organised through meetings that were held regularly according to collaborative policies. Some partnerships involved structures with multiple levels of committees with different foci and goals, although how these different levels contributed to benefit is unclear. Another common feature was the presence of dedicated staff funded to provide administrative support for the partnership.

Clear and explicit guidelines (15 instances across 7 studies)

The framework considers having "clear and explicit guidelines for dealing with issues such as conflict resolution, communication, and decision making" an indicator of success. This indicator was coded 15 times across 7 studies.

The guidelines and procedures that were described focused on establishing shared methods of structuring and managing various aspects of the partnership including meetings, communication, equitable decision-making, responsibilities, and budgets.

Mandatory evaluations (6 instances across 5 studies)

This indicator refers to the presence of processes that "… whether conducted annually or at other regularly determined intervals, provided the means to assess the participatory processes, continuously strengthen the partnership, and give voice and power to the individual partners". We coded this indicator 6 times across 5 studies.

While several studies described some form of evaluation of the partnership, only one study provided information on how this evaluation was conducted. Corbie-Smith and colleagues (2015) explain that "*consultants, matched to respondents by race/ethnicity and gender whenever possible, conduct in-depth individual interviews with all steering committee members and staff*" as part of an annual evaluation of the partnership. It was not clear what was covered in the interviews.

> **Key takeaways of partnership processes:** Structures appropriate to the needs of the partnership and clear guidelines and procedures to which all partners must adhere are elements of successful long-term partnerships. Regular evaluations of the partnership processes may be regarded as a way to enhance and strengthen the partnership and identify what works well and what does not.

Partnership resources

Indicators of success related to Partnership resources within the Partnership Level Domain are summarised below.

Shared and fair allocation of resources (16 instances across 9 studies)

The framework describes one indicator related to resources in successful long-term partnerships; that is that the management of personnel and physical resources among members of the partnership is distributed in a shared and fair manner. This is considered to foster empowerment, trust, and sustainability; acknowledge the needs, preferences, and values of all affected by allocation decisions, and increase power sharing throughout the partnership. We coded this indicator 16 times across 9 studies.

Dubé and colleagues (2023), describe their adoption of a community engagement model in which financial resources are shared with all members of the partnership. Bull and Hudson (2019) illustrate a model in which research funds were held by the community council representing the community being researched; and Simon and colleagues (2019) describe a catalyst grant model of research-funded collaboration, which focuses on the inclusion of community members as co-investigators. With respect to monetary resources, many collaborations provided compensation for community members, either as research subjects (Alang et al., 2021) or members of the partnership (Dubé et al., 2023; Kaiser et al. 2016; Lebow-Skelley et al. 2016; LeClair et al., 2018; Stewart et al., 2015). They also offered funds to cover attendance of community members to meetings and academic conferences (Alang et al., 2021; Dubé et al., 2023; Elder et al., 2013) and accepted *"…that not all community partners might be interested in this but advancing equity befits us to make these options available"* (Alang et al., 2021). Some partnerships were flexible in the way funds were distributed (e.g., gift cards, cheques) to accommodate the preferences and needs of community members. (Alang et al., 2021; Kaiser 2016) Two studies described sharing of non-monetary resources from academic partnerships including writing letters of reference or assistance with CV preparation (Kaiser et al. 2016) and co-authorship on research manuscripts. (Elder et al., 2013)

> **Key takeaways of partnership resources:** The success and sustainability of long-term partnerships are linked to the way resources are fairly managed and shared throughout the partnership.

Partnership capacity
Indicators of success related to Partnership capacity within the Partnership Level Domain are summarised below.

Increased capacity for research (16 instances across 10 studies)
Capacity building at individual, partnership, and community level was identified as an important indicator of success by the framework. The studies identified in our review reported various forms of trainings and supports to build capacity among community-partners and researchers (coded in 16 instances across 10 studies).

Often support for community-members involved training on how to engage in the research process effectively (e.g., hands-on practice with research materials and training on how to provide feedback and conduct interviews). Training for researchers focused on developing skills of cultural awareness and collaboration (e.g., 4-day workshop on understanding the role of structural racism in health disparities and skill building on how to defeat it).

> **Key takeaways of partnership capacity:** The success and sustainability of long-term partnerships are linked to activities aiming at building research capacity among partner members.

Summary
'Success' of long-lasting collaborations is a multifaceted concept which includes a combination of ingredients, which likely work in a synergistic way. These ingredients (indicators described above) cover various domains and sub-domains of the partnership. While it is difficult to provide a list of the most important indicators of success, some of the most salient indicators appear to be trust, mutual respect, consideration of cultural differences and power imbalances as well as taking partners' perspectives and needs into consideration when defining roles and processes. Underlying all of these elements and processes is the understanding that successful collaborations require time to build, operate and thrive, as well as resources to support people's time and activities.

Most studies in our review did not formally analyse the factors associated with their collaborations but rather expressed stories of their collaboration in a narrative case report format. This made it challenging to identify and characterise barriers and facilitators to their success which may have resulted in an undercounting of indicators or misclassification of indicators. Collaborations may consider more rigorous studies using more diverse methods of qualitative and quantitative data collection and analysis to triangulate factors associated with collaboration success. We would also advocate for methods and findings being reported transparently and thoroughly to maximise the opportunity to use these data for secondary research.

References of studies summarised in the rapid review

All papers summarised in this document are available by request to kristin.konnyu@abdn.ac.uk

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Supplemental material

Methods

We followed recommendations from the Cochrane Rapid Reviews Methods Group and Healthcare Improvement Scotland for rapid evidence synthesis (Garritty 2021, Health Care Improvement Scotland 2019). We included studies or reports that met our eligibility criteria using the SPICE framework (Booth 2006) in **Supplemental Table 1**. Specifically, we included studies or reports describing factors (barriers and facilitators) related to successful routine collaboration between researchers, voluntary sector community organisations and individuals from diverse ethnic communities. We define 'successful' as established practices supporting ongoing and long-lasting collaboration, ideally on multiple projects, initiatives, or processes (not one-off examples); studies or reports that focussed on single projects or specific aspects of collaboration in isolation (e.g., quality of communication) were excluded. Because stakeholders were interested in studies or reports of collaborations that broadly reflected UK healthcare setting, we only included studies conducted in high-income countries as defined by the World Economic Situation and Prospects 2023 report (United Nations 2023). Given the rapid review nature of the project, we chose to include only studies or reports written in English after 2013.

Supplemental Table 1. SPICE framework describing the elements of our rapid review question that informed the review eligibility criteria

Setting (Where?)	Perspective (Whom?)	Phenomenon of interest (What?)	Comparison (Compared with what?)	Evaluation (With what result?)
All settings	Adults from either diverse ethnic communities, voluntary sector community organisations that represent diverse ethnic minorities, or researchers	Successful and routine collaboration between researchers, voluntary sector community organisations representing diverse ethnic minorities, and/or people who have an ethnic minority identity	By implication only: not successful or routine collaboration	Factors related to successful and routine collaboration

An information specialist developed a sensitive literature search strategy to identify published, peer review studies from six major electronic clinical and social science databases (Medline, Embase, CINAHL, ASSIA, Social Sciences Citation Index) from 2013 to 2023. In a protocol deviation, we decided not to search the grey literature or conduct forward or backward citation searches as intended because screening and coding took more of our researcher capacity than anticipated. Search strategies were reviewed with community partners to ensure key concepts were not overlooked. The search did not include restrictions for language or study type. The complete search string for the Medline search is reported in Supplemental Box 1. Studies were selected for inclusion based on the

information (relevant factors) reported in the titles and abstracts of the citations identified by the search strategies.

Two independent researchers used Covidence (Veritas Health Innovation, 2023) to screen the titles and abstracts of a random 20% of search results to validate the process of applying the eligibility criteria and ensure consistency. Conflicts were resolved through discussion or referred to a third reviewer for arbitration. The remaining abstracts were screened by a single reviewer. Full-text reports of potentially relevant articles were retrieved and assessed for eligibility by the same two reviewers using the same process.

Supplemental Box 1. Medline search string for rapid review

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions

1   ((minorit* or ethnic* or Black or BAME or BME or Asian or African or Caribbean or non-white or under-represented or underrepresented or divers* or marginal* or excluded) adj5 (communit* or group? or population? or people? or persons or individuals)).tw.
2   minorit*.tw.
3   ((volunt* or community or charity or "third sector" or campaign*) adj3 (group? or organi?ation?)).tw.
4   ethnicity/ or exp Ethnic Groups/ or Minority Groups/ or Racial Groups/ or Minority Health/ or Cultural Competency/ or race factors/
5   1 or 2 or 3 or 4
6   ((involv* or engag* or participat* or partners* or collaborat* or co-design* or co-produc* or contribut* or alliance) adj6 research).tw.
7   Community Participation/ or Patient Participation/ or Community-Based Participatory Research/
8   ((action or participatory) adj3 research).tw.
9   6 or 7 or 8
10   Biomedical Research/ or Research/ or Health Services Research/
11   ((clinical or translational or population or health or medical or biomedical or social or life course) adj3 research).tw.
12   10 or 11
13   (barrier? or obstacle? difficult* or challenge? or hinder* or enable* or allow?? or permit* or empower* or facilitat* or success* or encourage* or effective).tw.
14   5 and 9 and 12 and 13
15   limit 14 to yr="2013 -Current"

Data extraction was performed by one reviewer (although two reviewers performed extraction of different data elements) and checked by a second reviewer for accuracy and completeness. We extracted study design and population characteristics, as well as our appraisal of methodological, in a SharePoint Excel spreadsheet. We had planned to tailor our assessment of the methodological quality to the types of designs included in our sample, but expected most would be qualitative studies and we would use the Quality of Reporting Tool (**Supplemental Table 2**). We extracted factors associated with the collaboration (i.e., barriers and facilitators) in NVivo using a 36-domain framework capturing 7 core domains of a collaborative relationship (characteristics of partners, relationship of partners, partnership processes, partnership characteristics, partnership capacity, partnership resources, and partnership outcome) (Brush 2020). Coded domains were exported into an Excel spreadsheet and reviewed by 2 reviewers to ensure agreement; where needed, coded text was moved to a more relevant domain (or deleted if the data provided was too thin or incomplete).

Once extracted text was fixed within domains, we conducted a thematic synthesis of themes within and across domains using a 'best-fit' framework approach (Booth 2015).

Supplemental Table 2. Four dimensions in the QuaRT tool

Criteria categorisation and definition	Tick a box	Enter the relevant text from the article
The question and study design **Yes,** if it states, e.g. "a case study approach was used because . . .", "interviews were used because . . ." **No**, if paper does not specify question and study design **Unclear**, if unsure	□ Yes □ No □ Unclear	
The selection of participants **Yes**, if paper describes selection explicitly as e.g. purposive, convenience, theoretical etc. **No**, if just details of participants are given **Unclear** if unsure	□ Yes □ No □ Unclear	
Methods of data collection **Yes**, if details of data collection method are given e.g. piloting; topic guides for interviews; number of items in a survey; use of open or closed items; validation; etc. **No,** if just states "focus group" or "questionnaire" **Unclear**, if unsure	□ Yes □ No □ Unclear	
Methods of analysis **Yes**, if details of analysis are given, e.g., transcription, form of analysis (with reference), etc. **No,** if just states "content analysis" or data were "analysed" **Unclear**, if unsure	□ Yes □ No □ Unclear	

Source: Carroll C, Booth A, Cooper K. A worked example of "best fit" framework synthesis: a systematic review of views concerning the taking of some potential chemopreventive agents. BMC medical research methodology. 2011; 11:29.

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