Volunteering during the pandemic: Which mechanisms enabled groups, communities and agencies to mobilise and why? A rapid realist review of the evidence

APPENDICES

Appendices

Appendix 1 - candidate theories and their contribution to our conceptual framework

Theory and key references	Nature of the theory	How the theory is informing CMO configurations/Research Focus
Volunteer process model (VPM) (Omoto and Snyder 2002, Snyder and Omoto 2008)	Volunteering is a process that unfolds over time having three broad sequential stages (antecedents, experiences and consequences) that reflect different processes among and within layers comprised of (i) individuals, (ii) agencies, and (iii) social structures.	Individuals engage in volunteering behaviours with different levels of cultural, economic and social capital, which shapes their choices around voluntary work and their resulting impacts.
	agencies, and (in) social structures.	The way in which agencies identify, recruit and train volunteers shapes their capacity and experiences, and in turn results in different impacts from volunteering.
		Social structures can serve to foster a sense of belonging which can moderate the available resources and networks and the broader impact of volunteers.
Altruism theory(ies) (see, for example, Piliavin and Charng (1990).	Volunteering can be viewed a form of 'reflexive altruism' whereby the choice to volunteer is dependent on a complex array of dispositional factors as well as	The way in which communities organise can increase levels of social pressure and requests to volunteer, which in turn could increase levels of volunteering.

Table 1: Candidate theories and their contribution to our conceptual framework

	more situational requests and social pressures.	
Intrinsic motivation (see, for example, Bidee et al. (2017)).	Volunteers are more likely to commit to volunteering when there is inherent interest in and enjoyment associated with the task.	Volunteering is sustained when there is a match between the skills and interest of the volunteers and the required task (or when the value of the task is made apparent).
Self-determination theory (see, for example (Bidee et al. 2017, Deci and Ryan 2000))	Volunteers are motivated to engage in volunteering for a number of different reasons, although autonomy, competence and relatedness are recurring sources of positive functioning and engagement in volunteer tasks.	Positive outcomes from volunteering follow where the volunteers are offered autonomy in choosing and carrying out volunteer tasks, and where their duties match their skills and experiences. Volunteering opportunities targeted at particular professional groups may be more likely to fulfil these conditions.
Social exchange theory (Cook et al. 2013)	Social exchange refers to voluntary actions of individuals that are motivated by the returns they are expected to bring, even if the exact nature of the returns is not stipulated in advance (reciprocity). In a social exchange lens, volunteers will face competing pressures of satisfying their own interests and participating for collective good/collective action.	Volunteering may be sustained and effective where the benefits to volunteers as well as beneficiaries are understood and communicated.

Process model of volunteer motivation	Structured around three stages: (1)	Communities and agencies that
(Neely et al. 2021)	initiation, (2) choice, and (3)	understand the motivations of their
	continuance. The initiation stage	volunteers may be more likely to sustain
	describes the process that moves an	volunteering behaviours.
	individual from a steady state of not	
	volunteering to one of considering	
	volunteering as a course of action. The	
	choice stage describes the process that	
	explains how individuals decide whether	
	to volunteer or not and which volunteer	
	option to choose. The continuance stage	
	describes the process that explains how	
	individuals decide whether to persist in	
	volunteering. The model also draws on	
	image theory and describes how	
	variation in value image (individuals'	
	principles), trajectory image	
	(individuals' goals) and strategic image	
	(individuals' plans and tactics)	
	determine if/how volunteers move from	
	initiation to choosing to volunteer.	
The three-stage model of volunteers	A model that seeks to understand the	Volunteers tend to (attempt to) honour
duration of service (Chacón et al. 2007)	factors that have a positive or negative	the commitments they make to
	influences of the length of services and	agencies/communities. Increasing the
	level of commitment of a volunteer.	satisfaction of volunteers will help to
		create a role identity among volunteers
		and sustain commitment.
	The model specifies five	
The volunteer stages and transitions	different phases in volunteers'	Volunteers' emotional identification with
model (Haski-Leventhal and Bargal 2008)	socialization (nominee, newcomer,	the values of agencies/communities is
		crucial

	and the set in the set of the bit is the set of the bit is the bit	
	emotional involvement, established	
	volunteering and retiring).	
Social exclusion theory (Burchardt et al.	The process of detachment from	Volunteering can become a practice
2002)	communities and societies through the	conducted by and for the socially
	practices of the socially included as the	included without safeguards by agencies
	socially included attempt to gain a more	and communities
	privileged position.	
Social ecological model of health	The social ecological model explicitly	To augment the VPM, we incorporate a
(Dahlgren and Whitehead 1991)	recognises multiple levels of influence	community-level to explicitly capture
	on health behaviours and	this level of influence on volunteering
	interrelationships between these	behaviours, as well as to explicitly
		consider interactions between different
		levels of the volunteer process model
Community engagement models (Brunton	Stimulating community engagement to	Involving volunteers, communities and
et al. 2015, Brunton et al. 2017, Kneale	improve health outcomes is likely to	beneficiaries in the decisions being made
et al. 2020, O'Mara-Eves et al. 2013)	require a 'fit for purpose' rather than a	will lead to greater improvements in
	'one size fits all' approach. However,	outcomes. Intervention processes that
	evidence is suggestive that where	enable the development of community
	communities have greater involvement in	capacity include: the co-design of an
	the actions being generated, that there	intervention theory that clearly defines
	are greater improvements in health.	target groups, objectives, interventions
	Communities can become engaged at	and intervention components; a focus on
	different points including in the way in	developing communication and
	which communities are recognised as the	relationships within the community and
	focus, in the way in which needs are	beyond; the development of skills among
	identified, in the ways in which	community members to ensure
	communities are involved and in terms	sustainability; high(er) degrees of
	of key processes.	collective decision-making;
		and the provision of administrative and
		financial support through the lifetime of
		the intervention.

Ladder of involvement (Arnstein 1969)	Citizen participation in decision-making	Community involvement in designing the
	can vary from low and harmful levels of	types of volunteering taking place within
	involvement (e.g. manipulation) through	communities is likely to vary across a
	to greater levels of involvement and full	spectrum of approaches. However,
	citizen control where groups	communities where citizens have a
	traditionally shut out of decision-making	longer history of active participation may
	have full control.	be more prepared to engage within the
		context of a health emergency.

Appendix 2 - examples of search strategies for social capital map

SCOPUS

(TITLE ("coronavirus" OR "coronavirus infections" OR "coronavirus" OR "covid 2019" OR "SARS2" OR "SARS-CoV-2" OR "SARS-CoV-19" OR "severe acute respiratory syndrome coronavirus 2" OR "coronavirus infection" OR "severe acute respiratory pneumonia outbreak" OR "novel cov" OR "2019ncov" OR "sars cov2" OR "cov2020" OR "ncov" OR "covid-19" OR "covid19" OR "coronaviridae" OR "corona virus") AND ABS (("social capital") OR ("social cohesion") OR ("social network") OR ("collective efficacy") OR ("community cohesion") OR ("neighbour* cohesion") OR ("social support") OR ("civic engagement") OR ("civic participation") OR ("civic society") OR ("community cohesion") OR ("community participation") OR ("community network") OR ("social engagement") OR ("institutional trust") OR ("interpersonal trust") OR ("community engagement") OR ("community involvement") OR ("social engagement"))) AND PUBYEAR > 2019 AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (DOCTYPE, "ar")) OR LIMIT-TO (DOCTYPE, "re")) AND (LIMIT-TO (LANGUAGE, "English"))

EMBASE

S4	S1 AND S2
S3	S1 AND S2
S2	TI ("coronavirus" or "coronavirus infections" or "coronavirus" or "covid 2019" or "SARS2" or "SARS CoV 2" or "SARS CoV 19" or "severe acute respiratory syndrome coronavirus 2" or "coronavirus infection" or "severe acute respiratory pneumonia outbreak" or "novel cov" or "2019ncov" or "sars cov2" or
	"cov2020" or "ncov" or "covid-19" or "covid19" or "coronaviridae" or "corona virus")
S1	AB ("social capital") OR ("social cohesion") OR ("social network") OR ("collective efficacy") OR ("community cohesion") OR ("neighbour* cohesion") OR ("social support") OR ("civic engagement") OR ("civic participation") OR ("civic society") OR ("community cohesion") OR ("community participation") OR ("community network") OR ("social engagement") OR ("institutional trust") OR ("interpersonal trust")

OR ("community engagement")
OR ("community involvement")
OR ("social engagement")

Appendix 3 - Context-mechanism-outcome data extraction template

Level	Context	Mechanism	Outcome
Individual: This level is	Here consider the	Consider experience of	Consider: Changes in
looking at the experiences	characteristics of the	individuals: Volunteers' choice	knowledge, attitudes,
of individual volunteers	volunteers (Demographics,	of role and how they choose;	behaviours, motivation;
	Prior experiences, Personality	Volunteers' performance; the	Identity development;
	differences, Resources and	relationships they build with	Commitment to volunteering;
	skills, Motivations,	beneficiaries; Support from	Evaluation of volunteerism
	Identity concerns,	agency staff and other	(self); Commitment to
	Expectations, Existing social	volunteers; how they are	organization; If/how they
	support)	integrated into	recruit other volunteers;
		organisations/communities as	Length of service
		they volunteer; Volunteer	
		Satisfaction; Stigmatization;	
		Incentives they receive; how	
		they establish their identity in	
		the role/as volunteers	
Beneficiary: This refers to	Consider beneficiary needs and	Consider how beneficiaries opt	Consider beneficiary outcomes
the beneficiary perspective	capacity	in to receive volunteer-	and the extent to which
(those receiving support		delivered support; consider	volunteer relationships are
from or through		whether beneficiaries are	sustained
volunteering)		involved in volunteer	
		selection/recruitment (co-	
		production); consider how the	

Level	Context	Mechanism	Outcome
		expectations from volunteers are set and managed	
Agency level - this refers to an organisation that pre- existed before COVID and that would have local or national reach and would have dependable and regular funding to support activities (e.g. Local Authority, established	Consider the nature of the agency (as well as how agencies identify volunteers, recruit volunteers, train volunteers); consider measures the agency takes to understand its volunteers and their profile	Consider how volunteers are assigned tasks and are supported in delivering these tasks/services by communities/agencies; consider also any measures put into place by agencies to support equity in delivery or receipt of support (volunteer and	Consider quantity and quality of services; retention of volunteers and fulfilment of mission/objectives; and consider broad beneficiary outcomes
chairty that may repurpose its work during COVID - new/unfunded/unstructured organisations should go under community)		beneficiary perspective); consider how the benefits/outcomes of volunteering are communicated to volunteers; consider measures to reduce the social distance between volunteers and beneficiaries/communities	
Community : This level is looking at communities (geographical or of need) where there is no formal organisation in place at the start of the pandemic; or where it involves different agencies working together	Consider: the depth/strength of community networks; the level of social cohesion and social capital	Consider how the community identifies and requests help from volunteers; consider the level of recognition and appreciation for the work of volunteers; consider the level of community involvement in decision-making	Consider: Levels of volunteering; Reach across community members; Community/population level changes in outcomes

Level	Context	Mechanism	Outcome
but not under one 'unifying' agency			
Social system : This level refers to national policy and broad cultural values	Consider the social climate, the level of community resources, the cultural context	Consider community and agency level networks and their relationship and support received from national and regional structures	Consider: Social diffusion; Public education; changes to systems of service delivery; changes to community-agency organisation
Cross-level: This level describes explicit connections and configurations across the levels above (no CMO pre- specified)			

Appendix 4 - PROGRESS Plus framework

ROGRESS-Plus is an acronym used to identify characteristics that stratify health opportunities and outcomes.

PROGRESS refers to:

- Place of residence
- Race/ethnicity/culture/language
- Occupation
- Gender/sex
- Religion
- Education

- Socioeconomic status
- Social capital

Plus refers to:

1) personal characteristics associated with discrimination (e.g. age, disability)

2) features of relationships (e.g. smoking parents, excluded from school

3) time-dependent relationships (e.g. leaving the hospital, respite care, other instances where a person may be temporarily at a disadvantage)

Source: https://methods.cochrane.org/equity/projects/evidence-equity/progress-plus

Appendix 5 - Key characteristics of 59 included studies

Table 1: Key characteristics of 59 included studies

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
Abrams D., 2020	UK (England)	Observation	Healthcare workers, Health professionals, Volunteers	Connectedness, Political support. Key workers were found to have lesser family connection, greater perception of local area deprivation, lower political trust, and lower optimism for the future. Volunteers were found to have greater family connection, lesser perception of local area deprivation, higher political trust, and higher optimism for the future.
Addario G., 2022	UK (England)	Observation	Volunteers, All population	High levels of informal volunteering during UK lockdowns became more targeted towards vulnerable groups in second lockdown. Transfer from formal to informal volunteering as formal volunteering opportunities became restricted. The likelihood of volunteering increased with age and higher levels of formal volunteering were reported by people from a BAME community.
Alalouf-Hall D., 2021	Canada (Québec)	Observation	Adults, Volunteers	Community organisations and volunteers frequently have a more fine-grained perspective on solutions shaped by community-specific knowledge and established social ties

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				and relationships. It is urgent to keep moving ahead on the recognition of volunteer work as an essential service and an indispensable factor in community resilience. Possible strategies: employers and universities could be incentivized to create conditions favourable to volunteering; government could create more honours and awards for volunteer service; governments and philanthropic funders (such as grantmaking foundations) should rethink strategies for allocating funds to maximize liquidity for frontline organizations.
Ali A., 2021	Ireland	Observation	Healthcare workers, medical student volunteers	Major areas of development for student volunteers included communication, teamwork, compassion and altruism, which are not easily developed through the formal curriculum. Support for volunteers was central to development of resilience.
Avdoulos E., 2021	UK	Observation	Volunteers, All population	 Key factors enabling a successful local response were: Level of existing volunteer structures in place Level of trust in the local community and across sectors Previous cross-sector collaborations including the engagement and previous working relationships with the local authority Access to digital tools and technologies (volunteer project management platforms, digital communication tools etc.) and the skills to use them Local council or organisational access to financial capital Physical assets like civic/public buildings The presence of strong faith-based communities
Badger K., 2022	UK	Intervention	Medical students, structured volunteers	Suggests the features of a successful service-learning programme include: a learner-centred induction, regular contact with engaged and appreciative supervisors, and roles where students feel valued.
Bertogg A., 2021	Germany	Observation	Adults, volunteers	Half of respondents engaged in some sort of local solidarity. Depending on the recipient and the way of helping - up to

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				half of these helping arrangements had newly emerged and
				did not build on already existing (pre-crisis) help
				arrangements. Differences between income and educational
				groups were mostly explained by attitudes and social
				networks. Embeddedness in formal networks was important
				for extending help to previously unknown recipients in the
				community.
Bertogg A., 2022	Germany	Observation	Adults, volunteers	One in six respondents received social support, while only 3%
				report unmet need. Practical and emotional support were
				most widespread. Social support in general and the type of
				support received were explained by life course and pandemic
				risks, while unmet need was mainly a consequence of social
				network structure.
Boelman V., 2021	UK (Wales)	Rapid evidence review	Volunteers	Many new (often younger) volunteers have emerged through
				the pandemic. Positive impacts were noted on the
				mechanisms for change, which lead to improved individual
				wellbeing, and outcomes including an increased sense of
				belonging and personal growth. However, some roles have
				exposed people to challenging, stressful, and potentially
				traumatic experiences. Findings highlight the importance of
				social connection and creating a meaningful experience to
				sustain longer-term engagement in volunteering post-
				pandemic.
Bradley T., 2021	UK	Observation	Civic activists, environmental	The presence of radical environmentalist activists was a
			activists, mutual aid groups	stronger predictor of resilient community responsiveness
				than either the activity of the local state or the activity of
				more moderate community-based environmental civil society
				organizations.
Bruce P., 2021	Canada	Observation	Older people, volunteers	Experiences of hospice organizations and their volunteers
				and clients highlight the importance of acknowledging both
				older persons' vulnerability and their resilience, of building in

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				compassionate community approaches to care, and of finding
				innovative ways to foster volunteer-client relationships
				during times when physical visiting is not possible.
Burchell J., 2020	UK (England, Scotland, Wales)	Observation	Volunteers	General transformation in cross-sectoral engagement which emphasised a sharing of decision-making, greater collaboration, and more subsidiarity that devolved action to the most appropriate localised level. The availability (or absence) of strong infrastructure organisations was key to influencing the types of models adopted. Where utilised, infrastructure organisations enabled a fast and coordinated response, often providing a vital bridge between LA staff and services and community organisations and volunteers. The LA response to the role of mutual aid groups was varied, and ranged from integration into strategies, to an arm's length relationship.
Bynner C., 2022	UK (Scotland)	Observation	Volunteers	Findings indicate that the relational skills of the voluntary sector were needed to supplement the local state and provide a sustainable response to the needs of vulnerable populations. Argues a need for a new strategic and complementary relationship, one that fully engages locally embedded voluntary organisations at all stages of emergency response and resilience planning.
Carlsen H.B., 2021	Denmark	Observation	All population, volunteers	Highlights potential of social media to mitigate the impact of social networks on the distribution of support, also pointing to some of the potential barriers to social media groups' successful facilitation of support to those without a social network.
Chawlowska E., 2020	Poland	Observation	Medical students, volunteers	Concludes that student volunteering could become a viable solution for health professions education. However, to maximise its educational potential, volunteers' needs must

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				be explored, psychological support ensured, and
				opportunities for mentoring and reflection provided.
Chevée A., 2022	UK	Observation	Mutual aid groups	Between March and June 2020, residents in north London
	(England)			faced the Covid-19 pandemic by creating neighbourhood
				Mutual Aid groups on WhatsApp and Facebook. These groups
				addressed basic survival for vulnerable groups and offered
				opportunities for social interactions between strangers living
				in the same neighbourhood during lock-down. Their success
				was linked to their rapid mobilization, adaptability and local
				knowledge. Their bottom-up organization, based on the
				principle 'Solidarity not Charity', showed a singular way to
				express dissent with policy response to the pandemic, and
				brought them closer to earlier horizontal social movements.
Chow C., 2021	Singapore	Observation	Healthcare workers	The main motivational factors for healthcare workers
				volunteering were volunteer functions of values,
				understanding and enhancement. Participants were
				positively impacted on personal and professional levels,
				including self-growth, societal awareness, as well as skills
				development in leadership and team management.
				Conclusions: Healthcare organizations should consider
				volunteer functions in matching individual motivations to
				volunteer opportunities.
Colibaba, A., 2021	Canada	Observation	Elderly	Findings demonstrate the vulnerability and resiliency of older
				volunteers and the adaptability and uncertainty of programs
				that rely on older voluntarism, as the community and its
				older residents navigate pandemic-related changes.
				Advances a framework for understanding the pandemic's
				impacts on older voluntarism in relation to personal,
				program, and community dimensions of sustainable rural
				aging. Explores ways that older volunteers, organizations that

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				depend on them, and communities experiencing population
				aging can persevere post-pandemic.
Cooney, A., 2022	Ireland	Observation	Volunteers	Findings highlight important insights into the experiences of
				Samaritans volunteers in Ireland. Samaritans organisational
				structure appeared to serve as a buffer for the volunteers in
				terms of coping and support, but volunteer uncertainty over
				answering Covid-related calls suggested need for
				supplementary training.
Diz C., 2021	Spain	Observation	All population, mutual aid groups	Neighborhood support networks created by the Mutual Aid
				Groups (GAM) in A Coruña, Spain, driven by an ethics of care
				and an interest in experimental social movements, were an
				effective means of supporting vulnerable communities.
Dolan P., 2021	UK	Observation	Volunteers, adults	Active volunteers reported significantly higher
	(England)			life satisfaction, feelings of worthwhileness, social
				connectedness, and belonging to their local communities.
				A social welfare analysis showed that the benefits of the
				programme were at least 140 times greater than its
				costs.
Elboj-Saso C., 2021	Spain	Intervention	Families, volunteers	Study presents a project of educational and emotional
				support through books. Results show that families found that
				accompaniment improved the quality of life of their children.
				In addition, the family atmosphere was improved, as did the
				children's interest in reading.
Fearn M., 2021	Australia	Intervention	Older people, volunteers	Most volunteers and residents in nursing homes accepted the
				switch to remote befriending as better than no contact.
				Clinical implications: Volunteers can provide valuable support
				for residents living with social isolation during COVID-19. The
				format for social support needs to be decided collaboratively
				between volunteer and resident.
Fernandez-Jesus M.,	UK	Observation	Mutual aid groups, volunteers	Meeting community needs over time with localized action
2021				and resources and building trust and community-based

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				alliances were foundational elements in the COVID-19 mutual
				aid groups. Group processes strategies, such as a culture of
				care and support and regular group meetings, were used to
				help to sustain involvement. Some experiences resulting from
				participation in COVID-19 mutual aid groups were also
				related to sustained participation, including positive
				emotions (e.g., joy, pride), well-being and sense of efficacy,
				and an increasing sense of local community belonging and
				cohesion.
Fish, R., 2022	UK	Observation	Volunteers	Working closely with local authorities, the voluntary sector
	(England)			was able to respond rapidly to pandemic pressures in the UK
				because of a strong and well-established voluntary service
				infrastructure. Community groups provided a vital source of
				local knowledge and community understanding. Concerns for
				the future were related to inability to access services due to
				isolation or digital exclusion, and organisational sustainability
				due to short-term funding.
Forsyth E., 2021	UK	Observation	Volunteers	Demand for volunteers was driven by three key factors:
	(England)			Individual support needs; Wider community needs; and
				organisational views of the value of volunteers. Supply of
				volunteers was driven by: Volunteer availability relative to
				other commitments; The visibility or public awareness of
				volunteering and types of volunteer roles; Personal interests,
				experiences and motivations; and Seasonality and the time of
				year. The pandemic impacted the availability, visibility and
				personal motivations of volunteers.
Gardner M., 2021	UK	Observation	Organisational group – community	During the COVID-19 pandemic, Community Businesses
	(England)		businesses	provided an important source of community support but not
				all were able to respond as restrictions halted their activities.
				Financial support and government provision for knowledge
				and training services in support of businesses to enable

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				continued value creation with current resources could be
				beneficial in future crises.
Gresh A., 2021	USA	Intervention	Student volunteers	During the pandemic Johns Hopkins School of Nursing's
				(JHUSON) public health nursing clinical faculty and students
				partnered with BNN to support a community-driven crisis
				response effort while creatively meeting student learning
				objectives. Partnership presents a model of a service-learning
				strategy for public health nursing education during a crisis.
Grey C., 2022	UK (Wales)	Observation	Volunteers	Development of framework for enabling and sustaining
				community-led involvement across pandemic response and
				beyond, into post-pandemic
Hauck K.D., 2021	USA	Observation	Health professionals, volunteers	Analyses revealed the need to (1) provide orientations, (2)
				clarify roles/workflow, (3) balance team workload, (4) keep
				teams updated on evolving policies, (5) make team members
				feel valued, and (6) ensure they have necessary tools
				available.
Jenner C., 2020	UK	Intervention (not	Organisational group (GP	The infrastructure of the Practice was used to recruit
	(England)	evaluated)	Practice), Volunteers	volunteers and identify vulnerable patients. Volunteer
				involvement was managed, supported and recognised. Key
				messages: Volunteering offers significant benefits across the
				community; everyone can be invited and included; A crisis
				can motivate people to go above and beyond; and involving
				medical students taps a "hidden army" of resources.
Jopling K., 2021	UK	Observation	Organisational group (business),	Recommendation for organisations involved in befriending:
			volunteers	- Carefully plan and manage the transition to a blended
				model (phone and face to face)
				- Put appropriate mental health support in place for
				volunteers and staff
				- Build on inclusion efforts and lessons of pandemic period
				Organisations which fund befriending should:

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				 Resource sufficient levels of staffing and support for volunteers Recognise that organisations will be 'double running' for an
				 extended period, and fund the transition process accordingly Support the organisations they fund to address common challenges such as transition, mental health and inclusion
Knearem T., 2021	USA	Observation	Mutual aid group, volunteers	Social media was an essential medium for reaching out to people in need and coordinating volunteers. Mutual aid groups developed long-term and self-sufficient community- based means of food security. Making food aid efforts visible both online and offline can strengthen community-based relief so that the pandemic does not create further suffering and inequality regarding food security.
Kulik, 2021	Israel	Observation	Adults, volunteers	 Hybrid volunteers were motivated more by social solidarity, felt that they made a greater contribution to the community, and exhibited greater commitment to volunteer. The virtual volunteers exhibited relatively low commitment to volunteering and were less satisfied with the feedback they received from the clients. Recommendation: hold explanatory activities for clients that will encourage the expression of thankfulness to the volunteers. Communication channels should be developed in order to provide constant feedback to the virtual volunteers via the digital means by which it takes place, to ensure commitment to volunteer over time for the benefit of the volunteers and their clients.
Lee H., 2022	Korea	Observation	Healthcare professionals (nurses)	Implications for Nursing Management: to recruit and manage nurses during a pandemic effectively, a safe work environment with proper resources should be established. Additionally, adequate education, training and compensation are needed.

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
Lyon Z.M., 2021	USA	Intervention	Healthcare workers, medical students, volunteers	The volunteer-based video visit service is easily replicable, even in resource-constrained institutions. Establishing the use of hospital-managed tablets for video visits sets an important precedent for connecting hospitalized patients with their outside communities.
Mak H.W., 2021	UK	Observation	Adults, volunteers	Three types of volunteering during the pandemic were identified: formal volunteering, social action volunteering, and neighbourhood volunteering. The pattern of voluntary work was structured by demographic backgrounds, socio- economic factors, personality, and psychosocial factors. Conclusion: The predictors of volunteering during the pandemic may be slightly different from non-emergency situations.
Mao G., 2021 (What have we learned about COVID-19 volunteering in the UK? A rapid review of the literature)	UK	Rapid review	Volunteers	Findings suggest that food shopping and emotional support were the most common activities. Volunteers were mostly women, middle-class, highly educated, and working-age people. Social networks and connections, local knowledge, and social trust were key dimensions associated with community organising and volunteering. Despite the efforts of a few official public institutions and councils, there had been limited community engagement and collaboration with volunteering groups and other community-based organisations.
Mao G., 2021 (How participation in Covid-19 mutual aid groups affects subjective well- being and how political identity moderates these effects)	UK (England)	Observation	Volunteers (mutual aid group - ACORN)	Participation provided well-being in different ways: positive emotional experiences, increased engagement in life, improved social relationships, and greater sense of control. Participants also reported some negative emotional experiences. While all interviewees experienced benefits from participation, those who viewed their participation through a political lens were able to experience additional benefits such as feelings of empowerment.

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
McGarvey A., 2021	UK	Observation	Volunteers	Improved outcomes for beneficiaries. These experiences
	(England)			highlight the need to address inequalities and put sufficient
				investment, resources and coordination in place in
				preparation for emergencies and other challenges.
				This could be through investment in community building and
				development, and by establishing and maintaining
				relationships, partnerships and more collaborative funding
				processes outside of an emergency context. The important
				role of collaboration and relationships, and the conducive or
				adverse conditions which can impact on its success. The role
				of national infrastructure was discussed in the context of
				leadership; including the important role of the voluntary
				sector in helping to set a strategic direction for volunteering
				in England.
Nikendei C., 2021	Germany	Observation	Medical students, volunteers	The participants felt that volunteering during the COVID-19
				crisis had benefited their professional development. A
				designated liaison person, psychosocial support, and
				introductory and accompanying courses could help alleviate
				initial concerns and interim difficulties in future crisis-related
				assignments.
Ntontis E., 2022	UK	Observation	Mutual aid groups, volunteers	Online mutual aid group established on Facebook to examine
				the trajectory of social support-related activity over the first
				and second waves of the pandemic in the United Kingdom,
				the patterns of offers and requests for support at the peak of
				the first and second wave, and the types of social support
				that were offered or requested through the groups.
O'Dwyer E., 2022	UK	Observation	Mutual aid groups, volunteers	Correlational analyses showed that identification with the
(The amplifying effect of				mutual aid group was linked to more positive group
perceived group politicization: Effects of				perceptions and better self-reported psychological outcomes.
group perceptions and				Perceived group politicization showed the reverse pattern.
O top per ceptions and				Mixed support for the "social cure" model was evident; the

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
identification on anxiety and coping self-efficacy among members of UK COVID-19 mutual aid				effect of group identification on coping self-efficacy (but not anxiety) was serially mediated by perceived support and collective efficacy. Perceived group politicization was a significant moderator, seeming to amplify the indirect effect
Groups)				of group identification on coping self-efficacy via perceived support.
O'Dwyer E., 2022 (Rehearsing post-Covid- 19 citizenship: Social representations of UK Covid-19 mutual aid)	UK	Observation	Mutual aid groups, Volunteers	Mutual aid groups were characterized as complex, efficient, and non-hierarchical units, operating on the principles of solidarity, kindness, and trust. Two tensions were evident in the data, specifically between (1) collaboration with existing organizations and structures (e.g., local government and the police), and resistance to it and (2) maximizing group inclusivity and sustaining political critique.
Parravicini S., 2021	Italy	Observation	Health professionals, medical students, volunteers	Findings suggest that the experience of young residents in child neuropsychiatry volunteering in general hospitals during the COVID-19 pandemic may be highly beneficial for both the residents and the hospital quality of care.
Pichan C.M., 2021	USA	Intervention	Elderly, medical students, volunteers	Over a 10-week evaluation period, providers whose patients worked with our geriatric education on telehealth access volunteers had a video visit rate of 43% compared to 19.2% prior to participation in the program (adjusted odds ratio = 3.38, 95% confidence interval = 2.49, 4.59), ultimately providing a platform for geriatric patients to foster stronger connections with their providers, while increasing the overall proportion of video telehealth visits.
Rees S., 2021	UK (Wales)	Observation	Civil society, volunteers	Highlights dependence on voluntary activity to provide many services in Wales. Acknowledgement and support are important. Lessons from pandemic response that bring benefit and should continue: befriending services; blended online and community-based activities; more flexible approaches to volunteering help to maintain services;

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				cooperation and coordination are vital to maximise
				effectiveness.
Rendall, J., 2022	UK	Observation	Mutual aid groups, volunteers	Findings highlight the role that mutual aid can play in
	(Scotland)			response to crises and offer areas of consideration for
				policymakers to better tap into a spirit of mutuality in times
				of crisis. Acknowledgement from national and local
				government of the role that mutual aid and the third sector
				more widely can play in their strategic and on-going
				responses to crises in the future will allow mutual aid groups
				and more formal service providers alike to help fill gaps in
				public service provision and best serve community needs.
Research Works Limited,	UK /	Intervention / Review	All population	Evidence base for understanding:
2021	International			1. The present landscape of volunteer passports and
				passporting;
				2. Areas of demand and opportunities for volunteer
				passports and passporting to support volunteering, as well as
				the perceived challenges involved
Rutherford A., 2021	UK	Observation	Adults, Volunteers	There were large peaks in volunteering immediately
				following lockdowns. The number of new opportunities
				posted fell during lockdown at the same time as volunteer
				registrations were spiking. Volunteers were more likely to
				become active, and were active faster, in the second
				lockdown than the first. The average age of volunteers
				increased dramatically with older age groups increasing
				participation, while the level of volunteering amongst
				younger age groups was steady. Across all four nations
				women were more likely to volunteer than men. In the final
				easing phase registration of disabled volunteers recovered to
				pre-pandemic levels, but activity appears not to have, and
				opening up seems to be having a negative effect on
				participation almost as big as the two lockdowns. In England

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				and Scotland, the middle 60% by deprivation became more
				likely to volunteer. In Wales, the biggest increase in
				participation was amongst those living in the most affluent
				areas. England saw a surge in urban volunteers, while
				Scotland saw an increase in rural volunteers. There was no
				change rurality in Wales and Northern Ireland.
Satterfield C.A., 2021	USA	Observation	Medical students, volunteers	Pandemic response provided an educational opportunity for
				health professions students to gain experience in community
				and public health outside their typical curriculum. The
				projects available for student involvement varied widely in
				terms of time commitment, and because all projects were
				conducted remotely, much of the work could be completed
				according to the students' schedules and location needs. The
				flexibility of remote volunteer opportunities allowed for
				involvement from students who may otherwise have been
				excluded because of personal / financial constraints.
Shukra K., 2021	UK	Observational report	Volunteers	The effectiveness of London Borough of Lewisham's COVID-
	(England)			19 emergency response was rooted in a partnership
				based on pre-existing relationships between a group of
				Lewisham Council funded voluntary sector organisations
				and the Food Bank. Strong leadership and initiative was
				demonstrated by all the lead partners. Success of the Hub
				relied on cooperation, partnership and active citizenship.
Soden R., 2021	USA	Observation	Mutual aid groups	Mutual aid organizers utilized their technological capabilities
				and their community networks to book appointments for
				elderly neighbors and others who lacked technological
				expertise or time to look for slots. In other parts of the
				United States, mutual aid groups organized during the
				pandemic responded to the massive power outages caused
				by severe winter storms. Organizers continue to mold their

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				capabilities and infrastructures to the new demands that the
				pandemic presents.
Taylor-Collins E., 2021	UK (Wales)	Case study synthesis	Volunteers	Most volunteering aimed to meet basic needs (providing
				food/medicine) with many examples of how volunteering
				infrastructures enabled that activity. Social connection was
				the main individual wellbeing outcome and enabled
				community wellbeing in helping sustain cohesion thanks to
				the infrastructures facilitating volunteering. Enablers related
				to the volunteer experience were the direct nature of the
				activity, a 'relaxation' of volunteering participation, and
				work-life circumstances of volunteers. Enablers related to the
				role of volunteering infrastructures included capacity
				building, partnership working, technology use, and
				organisations' ability to adapt.
Tekin S., 2021	International	Observation	All population, volunteers	The study identified that (a) older individuals, (b) people with
				sensitive health conditions, and disabilities, (c) frontline
				workers, and (d) working class and marginalized communities
				received the primary support. Types of support: (a) material,
				(b) social/emotional, and (c) psychological. Source of support:
				(a) different organizations, (b) advantaged groups, and (c)
				volunteers. Last, (a) sharing a community/humanity identity,
				(b) allyship, and (c) showing gratitude were the reasons
				behind altruistic and prosocial behavior.
Tong W., 2022	USA	Observation	Health professionals, volunteers	The study examined the experiences of remote volunteer
				palliative care consultant physicians during the first COVID-19
				surge. The results highlight the benefits and drawbacks
				of a volunteer telehealth model when implemented as
				an emergency response and provide guidance for future
				implementations of similar programs.
Volunteer Scotland,	UK/Scotland	Observation	All population	The report highlights how remarkable the community
2022				and volunteering response in Scotland has been. There

Lead Author, Publication Year(s)	Country	Study Type	Population category	Main Study Finding(s)
				are five key domains that were reported: policy and
				planning, leadership, expected responses, unexpected
				responses, and Formal volunteering priorities and
				needs. The report aimed to highlight learnings of how
				volunteer organizations, key actors, can improve and
				sustain the contribution of volunteering in a society.
Wakefield J.R., 2022	UK	Observation	Adults, Volunteers	A two-wave longitudinal online survey study (N = 214)
				revealed that volunteer role identity among existing
				volunteers at T1 (pre-pandemic) was positively associated
				with volunteer-beneficiary between-group closeness at T1,
				which in turn was positively associated with community
				identification at T1. This in turn positively predicted
				coordinated COVID-19 aid-giving at T2 (3 months later).
Walsche C., 2021	UK /	Observation	People with long term health	Volunteers were mostly prevented from supporting many
	International		conditions, volunteers	forms of palliative care which may have quality and safety
				implications given their previously central roles. Volunteer re-
				deployment plans are needed that take a more considered
				approach, using volunteers more flexibly to enhance care
				while ensuring safe working practices. Consideration needs to
				be given to widening the volunteer base away from those
				who may be most vulnerable to COVID-19.

Appendix 6 -	context-mechanism-outcome	configurations identified	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Developing ro	ole identity through gaining e	xperience -> Great	er confidence among volun	teers		
Badger	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students; students also expressed that their junior status impeded on their volunteering experience	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	Transformational perceptual shifts following volunteering among medical students	Volunteer Confidence	"Reframing self as competent and effective: My confidence in my own abilities has increased greatly"	Qualitative statements and author interpretation
Boelman	Individual level Equity Issue: Potential equity issue around occupation/ education - evidence is drawn from a study of experienced volunteers (i.e. volunteers who were continuing support during the pandemic)	Gaining experience - Drawing on previous skills and experiences	Volunteers in an online initiative to support breastfeeding women were drawing on their (pre-existing) skills	Volunteer Confidence	"The most common themes reflected volunteers feeling that they were doing something purposeful and/or were using their skills, feeling confident in their ability to help."	Evidence review: Interpretation of findings described in single study
Chow	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group -	Gaining experience - Drawing on previous skills and experiences and gaining	"Experienced individuals felt that their work experiences, personal skills, and previous training either in the armed forces or in prior outbreak responses would	Volunteer Confidence	"concerns eventually diminished as they gained work experience and confidence"	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	HCWs volunteering in a	from new	provide an advantage in			
	migrant centre	experiences	the field"			
Grey	Individual level	Drawing on previous skills and experiences	Respondents who were continued volunteers, were more likely to report that they felt they had skills and experience	Volunteer Confidence	Respondents who were continued volunteers, were more likely to report that they felt they had skills and experience they could offer (52.4% compared to 37.1% of new volunteers)	Author interpretation based on quantitative data
Kulik	Individual level Equity Issues: Broad sample of volunteers; However, volunteers who participated in online volunteering tended to report lower levels of satisfaction suggesting mechanisms more difficult to activate	Gaining experience - gaining from new experiences	"The volunteering experience in the first waveThis profile included a special moment with the volunteer at the focus, which stem from success- ful completion of an activity with an essential and utilitarian task that empowered the volunteer."	Volunteer Empowermen t	"empowered the volunteer"	Author interpretation based on mixed methods data *Note - participants were asked to reflect on 'special moments' in the volunteering process
Developing ro	ole identity through gaining e	xperience -> Profe	ssional Growth, Knowledge	and Skills		
Ali	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group -	Gaining experience - Drawing on previous skills and experiences and gaining	Experience of being deployed to a variety of roles 'ranging from diagnostic COVID-19 testing in laboratories to telephone support for	Volunteer Professional Growth	"I learned the importance of evidence- based practice and the role it plays in guiding the treatment of patients.	Qualitative statements and author interpretation
	Medical Students	from new experiences	elderly patients to assess their medical and social needs'		Due to the novelty of the virus, there was a lack of solid evidence which appeared to be an obstacle faced when	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					treating the COVID-19 patients."	
Badger	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students; students also expressed that their junior status impeded on their volunteering experience	Gaining experience - gaining from new experiences	As volunteers, participants described a higher level of entrustment than as a student.	Volunteer Professional Growth	"There were fewer restrictions when learning as a volunteer. This allowed us to get involved more and become increasingly comfortable in our roles As a student there's more focus on teaching and testing your understanding and less taking initiative in	Qualitative statements and author interpretation
Badger	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students; students also expressed that their junior status impeded on their volunteering experience	Gaining experience - gaining from new experiences	Reframing their approach to effective clinical learning; learning through volunteering	Volunteer Skill Development	patient care." "It is just better on every level - by actively doing, you learn more, and by being a help to the team they value you and have more interest in supporting and teaching you."	Qualitative statements and author interpretation

Study	Level and Context/Equity issues	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	reported					
Boleman	Individual level Equity Issue: Potential equity issue more broadly highlighted in the review around occupation/ education - some evidence suggested that key workers were more	Gaining experience - Gaining from new experiences	Findings from volunteers participating in the NHS Volunteer Responder (NHSVR) Programme during Covid-19	Volunteer Skills	"It gives me new skills and experience" (41% of unspecified number of volunteers)	Evidence review: Report of quantitative findings described in single study
l	likely to engage in					
Boleman	volunteering Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students;	Gaining experience - Drawing on previous skills and experiences	Findings from three papers on student experiences of volunteering during the pandemic	Professional development	"the experience afforded them a unique opportunity for their personal and professional development, and that they valued being able to contribute at such a	Evidence review: Report of findings described in studies using mixed methods
					critical time."	
Chow	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - HCWs volunteering in a migrant centre	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	"The experience also brought broader perspectives"	Professional development	"participants understanding more about ministerial level policy-making decisions, medical service administration and seeing beyond their immediate goals"	Author interpretation of qualitative statements
Fernandes-Jesus	Individual level	Gaining experience - gaining from new experiences (in	Most participants expressed positive emotions associated with their and others' participation in mutual aid groups during the	Volunteer Skill Development	"Among other things, some felt to have gained practical knowledge on community organizing, on how to deal with people in group settings,	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
		mutual aid groups)	pandemic		and how to assume leadership roles. They also improved their communication skills and learned how to listen to people's needs."	
Kulik	Individual level Equity Issues: Broad sample of volunteers; However, volunteers who participated in online volunteering tended to report lower levels of satisfaction suggesting mechanisms more difficult to activate	Gaining experience - gaining from new experiences	"Personal growth and learning was expressed in special moments that included activities in which there is purpose for the volunteer, such as personal growth through volunteering, acquisition of skills, or new learning"	Volunteer Empowermen t	"I improved my knowledge on online communication through the volunteering. This gave me a good feeling of new learning and updated development."	Author interpretation based on mixed methods data *Note - participants were asked to reflect on 'special moments' in the volunteering process
Parravicini	Individual level Equity Issues: Mechanism expressed for particular occupation group - Child neuropsychiatrists	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences; experience of putting oneself in challenging situations	This experience provided support to the residents' growth as persons and professionals	Personal development and Life Skills	"Implications on professional growth were also reported, including better understanding of the need to provide clear messages and engage in empathic communications with the patients and their relatives: "If you avoid giving the bad news because you are afraid, then you are doing your job badly" (ID04)	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Ali Developing rol	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students	Gaining experience - Gaining from new experiences	Experience of being deployed to a variety of roles 'ranging from diagnostic COVID-19 testing in laboratories to telephone support for elderly patients to assess their medical and social needs'	Life course changes - career prospects	"Some students reported wanting to work in critical care after the proning experience. One student was deterred from critical care work after the experience. Other specialities considered by students as a result of their experience were public health, anaesthesiology, respiratory medicine and emergency medicine."	Author interpretation of qualitative data
Ali	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	Experiencing stressful working environments and patients dying.	Volunteer Personal Growth	"Regarding resilience, this showed me that I can adapt to a new challenge, even if it is frightening, and make myself useful and productive."	Qualitative statements and author interpretation
Chawlowska	Individual Equity Issues: Mechanism Expressed in Particular Occupation group - Medical Students	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	Students who had undertaken a variety of duties from 'Taking patients' temperature' to 'Operating diagnostic equipment'	Personal development and Life Skills	65.82% (n = 104) of the respondents agreed or strongly agreed with the statement Volunteering allows me to learn new interesting things. A majority noticed learning primarily soft skills: social (86.08%; n = 136), organisational (78.48%; n = 124) and	Quantitative survey data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					stress management ones (68.99%; n = 109). Also 3 in 4 of our SIs (SI.1, SI.2, SI.4) said that volunteering honed their skills of communicating under stress.	
Chow	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - HCWs volunteering in a migrant centre	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	"The experience also brought broader perspectives. The volunteer experience also provided an opportunity for self- reflection."	Personal development and Life Skills	"The experience of working with migrant workers enabled participants to interact with them on a much more personal level, allowing them to empathize with their collective worries and challenges. They were reminded about the importance of being mindful of societal in- equalities, to acknowledge and respect cultural differences, and to ensure health equity. Participants were aware of their personal bias against the migrant worker community: "There was some intrinsic bias, I do view them differently I had to struggle with how to reconcile this" (P8)."	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Cooney	Individual level Equity Issues: Age limited the ability of older volunteers [and beneficiaries?] to use new technology which could undermine gaining experience and role identity	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	"The skills learned through the Samaritans training and the experience with callers were considered by many to be transferable and advantageous in their own lives"	Personal development and Life Skills	"Positive experiences were reported in relation to personal growth through the volunteer role. The skills learned through the Samaritans training and the experience with callers were considered by many to be transferable and advantageous in their own lives" "Additionally, volunteers noticed how their role facilitated a change in their perspective, led them to be 'more aware', 'more open-minded' and have 'a broader outlook on life'."	Qualitative statements and author interpretation
Fernandes-Jesus	Individual level	Gaining experience - gaining from new experiences (in mutual aid groups)	Most participants expressed positive emotions associated with their and others' participation in mutual aid groups during the pandemic	Personal development and Life Skills	"Among other things, some felt to have gained practical knowledge on community organizing, on how to deal with people in group settings, and how to assume leadership roles. They also improved their communication skills and learned how to listen to people's needs."	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Forsyth	Individual level Equity issues : Unclear for this mechanism; although mechanism is facilitated by previous connection to the beneficiary group or activitiy	Gaining experience - Gaining from new experiences	Consequently, intrinsic and extrinsic motivations were not necessarily exclusive, and also supports the idea of reframing volunteering to emphasise mutual benefits of participants voluntary activities, rather than benefits	Personal development and Life Skills	"Helping people is a big part of it. I think there's a double benefit that I kind of get something out of it as well." by one party in the relationship."	Qualitative statements and author interpretation
Parravicini	Individual level Equity Issues: Mechanism expressed for particular occupation group - Child neuropsychiatrists	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences; experience of putting oneself in challenging situations	This experience provided support to the residents' growth as persons and professionals	Personal development and Life Skills	"I wanted to get involved, to put myself on the frontline, to find the best way to make my own contribution" (ID05); "Maybe in the future I will be better able to handle emergency situations - which are not the rule in my field, but sometimes they may happen" (ID01) "I have always tended to be bashful in my personal relationship, also with the patients' parents () now I can feel that I am less concerned about this () this unlocked something emotional in me" (ID01)	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Developing ro	le identity through gaining e	xperience -> Impro	oved wellbeing and life sati	sfaction		
Boleman	Individual level Equity Issues: Mechanism in some cases expressed for particular occupation group - Medics/medical students	Gaining experience - Gaining from new experiences	Findings from three papers on student experiences of volunteering during the pandemic	Improved wellbeing	"Many of the benefits measured relate to the mechanisms of change and intermediate wellbeing outcomes. There are relatively high levels of agreement (over two-thirds) with various outcomes including learning new skills (social, organisational, and stress management skills), as well as increasing social connections and feeling appreciated."	Evidence review: Report of findings described in studies using mixed methods
Boleman	Equity Issue: Potential equity issue more broadly highlighted in the review around occupation/ education - some evidence suggested that key workers were more likely to engage in volunteering	Gaining experience - Drawing on previous skills and experiences	Findings from volunteers participating in the NHS Volunteer Responder (NHSVR) Programme during Covid-19	Improved wellbeing	"It improves my mental health and wellbeing" (38% agreed after one task; 63% agreed after 10 tasks [of unspecified number of volunteers])	Evidence review: Report of quantitative findings described in single study
Cooney	Individual level Equity Issues: Age limited the ability of older volunteers [and beneficiaries?] to use new technology which	Gaining experience - Drawing on previous skills and experiences and gaining	"Indeed, providing the support to those callers feeling affected by the pandemic, often with respect to loneliness and isolation as mentioned, also provided the	Protective impact on mental health and wellbeing	"It's this isolation and loneliness. But from the point of view of even going in to see it and be there, it actually took that away	Qualitative statements and author interpretation
Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
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	could undermine gaining experience and role identity	from new experiences	volunteers themselves with a means of preventing potentially similar effects"		from you, because you were actually doing something, the isolation and loneliness. So whereas you'd have possibly been impacted by it, it actually took it away, because you were actually going in there	
Dolan	Individual level Equity Issues: Potential differences in the benefits of volunteering by activity type - check in and chat had greatest impact;	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	Gains to volunteering were observed to increase with greater exposure; however theresholds were reached where "Overexposure to negative experiences of Covid-19 risk groups, or a growing time commitment that could become emotionally straining, whereby highly active volunteers fail to draw the boundary between their own wellbeing and that of others."	Mental wellbeing (inverse u- shaped pattern)	and being there. We find that the wellbeing returns to volunteering in the NHSVR programme show, in some cases, an inverse U-shape pattern over the overall task frequency distribution. For volunteers' life satisfaction and their feelings of belonging to their immediate neighbourhood, the strongest effects can be found for volunteers who are located in the middle of the frequency distribution	Quantitative data and author's interpretation
Fernandes-Jesus	Individual level	Gaining experience - developing a role identity through experience (in	Participating in mutual aid groups.	Mental wellbeing	Participating in mutual aid groups was perceived as contributing to volunteers' own sense of coping as it helped to give purpose and routine	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
		mutual aid groups)			during the pandemic "But when the volunteers were getting involved you could see that it's given them that daily routine and something they could look forward to"	
Grey	Individual Equity issues: Mechanism may be stronger among volunteers from more deprived communities	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	Implied; "looking at benefits of volunteering"	Mental wellbeing	The survey found that looking at benefits of volunteering across deprivation quintiles that volunteers in the more deprived quintiles tended to be more likely to report that volunteering helped to improve their mental health and wellbeing and confidence (43.0%, 80/186); physical health (14.2%, 37/261); and helped them meet new people and feel less isolated (38.2%, 71/186) compared to the less deprived quintiles	Mixed method study - quantitative data and author interpretation
Nikendei	Individual Context of response in chaotic situation Equity Issues: Mechanism Expressed in Particular	Gaining experience - Additional time spent as a volunteer reinforces role identity	"The participants reported that the first few shifts were unorganized and stressful because general routines and the individual workflows had not been established	Reduced stress with more volunteering; a balance of stress and reward	Many participants felt that, over time, the volunteer assignment felt like a regular clinical internship and did not	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	Occupation group - Medical students		yet. As teams had been thrown together quickly, it took time for everyone to find their respective roles. However, the participants reported that routines were soon established."		cause extraordinary levels of stress or concern. In sum, however, the participants generally reported little mental burden related to their volunteer assignment. Nevertheless, the participants were very concerned about possibly infecting family and friends. Most students experienced a great sense of purpose in their COVID-19 volunteer work: While they felt active in tackling the crisis, their work was also highly appreciated.	
O'Dwyer (2022a)	Individual level	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	Ingroup identification was positively and significantly related to perceived collective efficacy, coping self- efficacy, and perceived support.	Psychological outcomes	Ingroup identification was positively and significantly related to perceived collective efficacy, coping self- efficacy, and perceived support.	Author interpretations of quantitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Taylor-Collins	Individual level Equity Issues: This mechanism may be amplified among those who share similar challenges to beneficiaries	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	"When case studies did discuss these impacts, testimonials focused on increased life satisfaction among volunteers, along with a sense of purpose and personal growth, and relational benefits manifesting in feelings of social connection and inclusion."	Mental wellbeing and reduced social anxiety	"He was subsequently asked to volunteer himself and began making kindness calls and shopping for people, as well as learning how to run the local foodbank. He said: My confidence is endless now. I am no longer afraid to go outside. I love meeting new people. [The volunteer centre] gave me my life back. They gave me a purpose."	Qualitative statements from case studies and author interpretation *Note the authors suggest that this was not a predominant theme across studies as benefits for volunteers were not widely discussed
Developing role i	dentity through gaining e	xperience -> Beco	ning a volunteer			
Chow	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - HCWs volunteering in a migrant centre	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	"Having had personal experiences with Severe Acute Respiratory Syndrome (SARS), the H1N1 influenza pandemic, and local disasters with significant mortality, some participants felt inspired by these events and the healthcare workers who contributed to them."	Becoming a volunteer	"A nurse shared: "I used to work through SARS I've seen it, I know what it looks like (N7).""	Qualitative statements and author interpretation
Fernandes-Jesus	Individual level	Gaining experience - developing a role identity through experience (in	According to the organizers participating in our study, group process strategies employed by mutual aid groups, which revolved	Sustaining contributions	Helped to sustain involvement within their groups.	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
		mutual aid groups)	around promoting a shared identity, effective communication between groups members, a culture of care and support within the group, group meetings and events, and an informal but organized leadership structure, helped to sustain involvement within their groups.			
Forsyth	Individual level Equity Issues: Mechanism Expressed for particular age group in particular (younger people)	Gaining experience - Prospect of gaining from new experiences	Across the board, volunteers said that decisions about what level of volunteering they could offer, and/ or the type of volunteer role they undertook, had to strike a balance with their other responsibilities and commitments. [The prospect of gaining experience appeared to shape this]	Becoming a volunteer	"Stakeholders across all sectors reported that in their experience volunteers tended to be in the following two demographic groups: People aged 60 and above, usually retired, who tended to have more free time and fewer competing responsibilities; Young adults, usually students, who sought out volunteering opportunities to gain skills relevant to their academic or vocational interests.	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Lee	Individual level Equity Issues: Mechanism Expressed in Particular Occupation group - Frontline nurses	Gaining experience - Prospect of gaining from new experiences	Most participants volunteered to work in the COVID-19 medical support sites for an opportunity to refine or gain new practical knowledge and skills, desiring to achieve new professional experiences.	Willingness to become a volunteer	"If infectious disease outbreaks again, and if I get dispatched again, I think I will be able to adapt to the environment faster than this time thanks to my experience. I think I would be able to provide more skilled nursing care than now."	Qualitative statements and author interpretation
Research Works Limited	Individual level Equity Issues: None apparent	Gaining experience - experience or connection as a gateway to volunteering	"Volunteers also stressed the organic nature of finding their volunteer roles and the centrality of word of mouth in this process. For some volunteers, their volunteering stemmed from their interests in particular activities or social connections to particular organisations, for example, through their children. For these respondents, digital methods of finding volunteering opportunities seemed unnecessary as they felt they accessed these more organically."	Becoming a volunteer	"I used to go to the drama school that I now volunteer at, so that followed on from that. I used to do it when I was there. Then, the chaperoning, I just applied for, it was a part of my school, but an extension. Whenever shows came with children, they'd always ask the kids from my school to go do it. They needed chaperones, and I applied, and I had to get checked and everything. The Africa school [volunteering] was just through a friend. None of it was random, I knew people and I've been	Qualitative statements and author interpretation *Note study blends COVID specific data with other data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					asked by them. [Volunteer, culture]	
Taylor-Collins	Individual level Equity Issues: This mechanism may be amplified among those who share similar challenges to beneficiaries	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	"When case studies did discuss these impacts, testimonials focused on increased life satisfaction among volunteers, along with a sense of purpose and personal growth, and relational benefits manifesting in feelings of social connection and inclusion."	Becoming a volunteer	"He was subsequently asked to volunteer himself and began making kindness calls and shopping for people, as well as learning how to run the local foodbank. He said: My confidence is endless now. I am no longer afraid to go outside. I love meeting new people. [The volunteer centre] gave me my life back. They gave me a purpose."	Qualitative statements from case studies and author interpretation *Note the authors suggest that this was not a predominant theme across studies as benefits for volunteers were not widely discussed
Wakefield	Individual level	Gaining experience - Drawing on previous skills and experiences and gaining from new experiences	this study identified pre- pandemic volunteer role identity as a predictor of coordinated COVID- 19 aid- giving	Becoming a volunteer (during COVID-19)	"This study identified pre- pandemic volunteer role identity as a predictor of coordinated COVID- 19 aid- giving. Moreover, as hypothesised, the longitudinal survey results showed that volunteer role identity at T1 (pre- pandemic) positively predicted between- group closeness between	Author interpretation of quantitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					volunteers and beneficiaries at T1, which in turn was associated with increased community identification at T1, and that this in turn was associated with increased engagement in the provision of coordinated COVID- 19 aid at T2 (3 months later) revealing a mediated indirect effect"	
Ali et al 2021	adjust to others' needs /bo	Adaptable to rapid changes	"Regarding resilience, this showed me that I can adapt to a new challenge, even if it is frightening, and make myself useful and productive" p 4	Responding to others' needs- developing new ways of working	"I learned the importance of evidence- based practice and the role it plays in guiding the treatment of patients." p.4	Qualitative statements and author interpretation
Bruce 2021	Individual level Equity: • Age and declining health	Adaptable to rapid changes	"New ways of interacting were also observed in the volunteer role. Volunteers found innovative ways to stay in touch with their clients. They would do quick check-ins to ensure safety, drop off thoughtful items such as fresh vegetables, help set up virtual health care appointments, and run errands when normal	Responding to others' needs- staying in touch and using new technology	" Not a lot needed to be said, but there was a feeling that someone was there: [She] was just watching TV or literally putting her head back not saying anything [] but I'm on Facetime with her and that made her feel good (V82)." P.7	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			services had been discontinued." p.5			
Bynner et al., 2022	Individual level Equity: Low income neighbourhoods	Adaptable to rapid changes	"Frontline voluntary sector staff invested significant effort in the relational work of maintaining contact with these families by delivering both practical support (organising food deliveries) and emotional support (regular phone calls, online activities)." p.6	Responding to others' needs- providing new services	"Frontline voluntary sector staff invested significant effort in the relational work of maintaining contact with these families by delivering both practical support (organising food deliveries) and emotional support (regular phone calls, online activities)." p.6	Author interpretation
Chevee A., 2022	Community	Adaptable to rapid change	"Based on their local knowledge of what was immediately needed, Mutual Aid groups presented high adaptability. Very early in the lockdown, they diversified their panel of solidarity activities, sometimes in coordination with charities and other organizations" p.4	Responding to others' needs	Among other things, they centralized donations for foodbanks, delivered free hot meals, set up seed swaps, helped people find accommodation after expulsion, and created online workshops on community-organizing, or to raise awareness on issues like racism and domestic violence. They also organized social activities to respond to what became an anxious demand for social interaction. Online pub quizzes, window-	Author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Fearn et al., 2021	Individual level	Adaptable to rapid changes	"Volunteers engaged in remote befriending, particularly those that did it via telephone,	Responding to others' needs	drawing competitions for kids, and free online yoga classes proliferated, in addition to the 'friendly call' proposed on every leaflet. While physical interaction in London was drastically reduced under lockdown, Mutual Aid group members engaged in intense social interaction online." P.4 " I called him at about 10 past two or something because I	Qualitative statements and author interpretation
			commented that being flexible with their availability to call and knowing when was the best time to call the resident" p.6		know most places have happy hour around 2:30 or 3:00 on a Friday, so I'm like right, he should be in his room hopefully, before. So just trying to time it. (Individual interview, female, 36 years)" p.6	
Japling and Jones (2021)	Individual level Equity: Age, those with long term conditions; those who have English as a second language; and others who are at risk fo exclusion	Adaptable to rapid changes	"It is also easier to miss planned calls if someone does not pick up, and, in some services, because calls are arranged on an ad hoc basis. There is also greater variation in the frequency of calls - with some schemes making calls as frequently as clients wanted (in some cases	Responding to others 'needs	"The telefrienders, they seem to have just slotted into it really easily, but those people who were doing visits, they find it really hard having had those [face- to-face] relationships then, and now over the phone it's changed the	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			daily) and others shifting deliberately from a weekly visit to two calls per week. Others have been forced by capacity constraints to make more limited offers" p.10		dynamic and it wasn't really what" p.10	
Lyon et al., 2021	Individual level	Adaptable to rapid changes	"Student leaders developed a volunteer- staffed consult service model at ZSFG" p.1	Responding to others' needs	"Providers referred patients in need of video visits by paging the Connecting During COVID team, who coordinated and facilitated video calls using a small fleet of donated tablets and free video conference soft- ware." P.1	Qualitative statements and author interpretation
Pichan et al., 2021	Individual level Equity: Age and declining health	Adaptable to rapid changes	"it is critical that volunteers or trainers have an open mind, to be able to adapt to whatever resources the patient has rather than making the patient fit the needs of the health care system." p.7	Responding to others' needs	"it is critical that volunteers or trainers have an open mind, to be able to adapt to whatever resources the patient has rather than making the patient fit the needs of the health care system." p.7	Qualitative statements and author interpretation
Satterfield et al., (2021)	Agency level	Adaptable to rapid changes	"This volunteer program was implemented rapidly (from ini- tial conceptualization to operation in a matter of days) to help address the needs of GCHD and the Galveston County community as they arose during the COVID- 19 pandemic."p.4	Responding to others' needs	"This volunteer program was implemented rapidly (from ini- tial conceptualization to operation in a matter of days) to help address the needs of GCHD and the Galveston County community as they arose during the COVID- 19 pandemic."p.4	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Alalouf-Hall and Grant-Poitras D, 2021	Individual level	Adaptable to rapid changes- resources	"For some of them, it's probably the first time that they have even thought of giving their time because they had a lot of time on their hands all of a sudden" p.8	Becoming to be a volunteer	"Our challenge is going to be to keep these people volunteering" p. 8	Qualitative statements and author interpretation
Bertogg and Koos. 2021	Individual level Equity: Socioeconomic status	Adaptable to rapid changes- resources	"More highly educated are more likely to help and this has to do with their distinct network structure" "The lowest income group is more likely to help than those with low incomes (900–1499 Euros); this largely consists of	Becoming to be a volunteer	"students and unemployed who - during the first lockdown, where chances of getting a new job were scarce - had more time to help and volunteer." p. 8	Qualitative statements and author interpretation
Taylor-Collins et al., 2021	Individual level Equity: Greater equity as a product of volunteering through developing social connection	Adaptable to rapid changes- resources	"Several cases studies referred to new volunteers who were on furlough or working from home wanting to 'keep busy' and 'feel useful'." p.17	Becoming to be a volunteer	"The case studies showed that the pandemic made it possible for people to volunteer who otherwise may not have had time." p.17	Qualitative statements and author interpretation
Forsyth et al., 2021	Individual level Equity: Age	Adaptable to rapid changes- resources and capacity	"People aged 60 and above, usually retired, who tended to have more free time and fewer competing responsibilities. • Young adults, usually students, who sought out volunteering opportunities to gain skills relevant to their academic or vocational interests." p.23	Becoming to be a volunteer	"Stakeholders across all sectors reported that in their experience volunteers tended to be in the following two demographic groups: • People aged 60 and above, usually retired, who tended to have more free time and fewer competing responsibilities. • Young adults, usually students, who sought out	Qualitative/quantitati ve statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			"Capacity to volunteer was also reduced due to an increase in caring responsibilities during lockdowns (e.g. for children due to school closures or for vulnerable family members who were shielding). In this sense, it was the case that the supply of volunteers was reduced by the fear of infection with COVID-19 and/ or the fact that lockdown and shielding significantly changed people's ability to volunteer."		volunteering opportunities to gain skills relevant to: their academic or vocational interests." p.23 "Despite feeling more motivated to volunteer, this made it difficult for volunteers with these additional responsibilities to do so: "My motivation to volunteer definitely increased because I had fewer social commitments and stuff. Obviously with everything going on I wanted to be able to get involved in community things that were going on, food drop-offs and things like that, but I didn't feel comfortable doing it because of caring responsibilities and shielding." (Volunteer, Group 1, regular, pre-COVID)" p.29	
Grey et al., 2022	Individual level Equity: Places- deprivation areas	Adaptable to rapid changes- resources	"However, a shift in the demographic profile of volunteers was noted as a result of the older, retired population shielding (leading to some volunteering organisations/groups having to restructure their services to continue), alongside	Becoming a volunteer	"However, a shift in the demographic profile of volunteers was noted as a result of the older, retired population shielding (leading to some volunteering organisations/groups having to restructure their services to continue), alongside	Qualitative/quantitati ve statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			emerging new volunteers who felt they had more time to help because of being on furlough, self- employed or now working from home (see Section 3.2.4)." "Individuals who probably were too busy for community work prior to this but maybe furloughed, working from home, thought differently about their community because they were of a demographic that could help, and they stepped forward. (Strategic Lead, Monmouthshire)" p.15 "The survey also found that looking at barriers to volunteering across deprivation quintiles that volunteer respondents in the more deprived quintiles tended to be more likely to report that distance and lack of transport was a problem (7.8%, 14/180), as well as health problems (16.1%, 29/180) or having no time due to work (32.8%, 58/180), compared to the less deprived quintiles" p.23		emerging new volunteers who felt they had more time to help because of being on furlough, self-employed or now working from home (see Section 3.2.4)." "Individuals who probably were too busy for community work prior to this but maybe furloughed, working from home, thought differently about their community because they were of a demographic that could help, and they stepped forward. (Strategic Lead, Monmouthshire)" p.15	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Alalouf-Hall and Grant-Poitras D, 2021	Organisation/agency Equity: Financial costs for moving online	Adaptability- using new technology	"Tele-volunteering became the method of choice for several types of services. To take one example, CABs generally provide friendly visits to the elderly. These drop- ins help break down social isolation. They also offer the chance to make sure that the senior's needs are taken care of and, when necessary, provide an opportunity to refer them to relevant organizations. Given the importance of these drop-in visits to seniors' well-being, the decision was made to reimagine these visits as "friendly calls." Numerous volunteers were mobilized to make support calls and keep the lines of communication with vulnerable groups open and stay attuned to their needs. However, as our Parole d'excluEs representative points out: During the pandemic, I saw people give up their phone service for financial reasons. Their isolation becomes even more acute! How can you have exchanges with other people, get news, and, of	New ways of working	"organizations took on the task of redeploying services virtually where possible." p. 9	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			course, get the information you need? This is a major issue." p. 9			
Colibaba et al., 2021	Organisation/agency Equity: Places- access to internet; age	Adaptability- using new technology	"The use of technology was common among all three programs as a way to adapt to the changes brought on by the first wave of the COVID-19 pandemic)" p. 6 "So that was a thing. If anything, it's not so much as the aspect of applying the technology but more so rural internet which has challenges. We are all rural and the internet is spotty out here. Especially with weather issues. (P13, Abbeyfield House, male, early 60s)" "Older volunteers and the public were at times challenged by the rapid switch to online, as discussed by a library participant: I feel it went pretty well, but	New ways of working	" The fire department conducted bi-weekly training via online platforms with all oft heir volunteers, the library implemented programming such as virtual book club and trivia nights, and Abbeyfield House switched from in-person to Zoom meetings." P.6	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			then again, technology challenges and an older communityso we try to help them as much as we can and serve our community. (P6, library, female, mid 30s)"			
Chevee A., 2022	Community	Adaptability- using new technology	"Based on their local knowledge of what was immediately needed, Mutual Aid groups presented high adaptability. Very early in the lockdown, they diversified their panel of solidarity activities, sometimes in coordination with charities and other organizations" p.4	Responding to others' needs	Among other things, they centralized donations for foodbanks, delivered free hot meals, set up seed swaps, helped people find accommodation after expulsion, and created online workshops on community-organizing, or to raise awareness on issues like racism and domestic violence. They also organized social activities to respond to what became an anxious demand for social interaction. Online pub quizzes, window- drawing competitions for kids, and free online yoga classes proliferated, in addition to the 'friendly call' proposed on every leaflet. While physical interaction in London was drastically reduced under lockdown, Mutual Aid group members engaged in intense social interaction online." P.4	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Fearn et al., 2021	Organisation/agency Equity: Age; health conditions	Adaptability- using new technology	"The volunteers used innovative means to keep in touch with the residents they were befriending to maintain contact while staying safe, and to reduce the risk of loneliness or social isolation." p.5 "Connecting via telephone was also sometimes difficult. Some residents did not have their own phone in their room, or the befriender did not have their direct phone number, and therefore the befriender was required to call the nursing home." "Residents who did have their own phone did not always answer the phone (both landline and mobile) as they were not in their room or at different activities. I went through the main aged care number, and they said they'd put me through. And the phone just rang out. So that happened each time. (Group interview, female, 73 years)" "Befrienders commented that some of the residents found some forms of remote	New ways of working/conti nuing of services	"The main methods used to continue befriending remotely were telephone calls, video calls, such as Skype or FaceTime, letter writing, e-mails and text messages." "The aged care facility offered the opportunity to speak to the resident via Skype which was good. (Group interview, female, 31 years)" "So even with the Coronavirus we still do (keep in touch) - because she preferred texting so I literally message her a couple of times a week. Whenever she reply to me I can reply her as well. (Group interview, male, 23 years)" p.5	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			befriending difficult due to health conditions, memory problems and hearing impairments (Group interview, female, 76 years) She's slightly deaf but doesn't want to wear her hearing aids, and it's probably tiring for her to just hold the phone up all the time. (Individual interview, male, 68 years) I said to (staff member), 'Look, I'd love to be able to ring her but my personal feeling is she won't know who I am from a bar of soap if I'm on the end of the telephone.' (Individual interview, female, 85 years)"			
Forsyth et a., (2021)	Organisation/agency	Adaptability- using new technology	"Organisations adapted existing services such as social clubs to take place online and" (Stakeholder, Community group). P.20	New ways of working	"Organisations adapted existing services such as social clubs to take place online and" (Stakeholder, Community group). P.20	Qualitative statements
Gresh et al., 2021	Organisation/agency	Adaptability- using new technology	" BNN obtained older adult phone numbers from Target SMART List Builder, a database of publicly available contact information. p.4	Improve efficiency/ref errals	Volunteers submitted an AirTable form entry after each phone call so that organizers could track calls placed and referrals made (e.g., to food, pharmacy, mental health resources) p.4	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Grey et al., 2022	Organisation/agency Equity: Accessibility of those who are digitally excluded- e.g. from deprived areas with poorer infrastructure; those who can't afford devices or internet connection	Adaptability- using new technology	 "digital technology and access to the internet, including use of social media platforms, was critical for communicating and accessing support (e.g. online shopping), as well as formal support services shifting to online modes of service delivery" p.24 "To address some of the above challenges, community groups and organisations adopted alternative solutions to reach those who were digitally excluded. For example, ensuring they utilised multiple communication channels, such as setting up dedicated telephone helplines, alongside door-to-door leafleting, newsletters, or word of mouth - so that those digitally excluded individuals were still able to access support. p.26 "I always had to get my sister to find numbers for me to try and access information, because I couldn't get on the internet. So, that was difficult. Once you got 	Continuing of services/expa nded volunteer opportunities, making training more flexible and accessible.	"Harnessing digital tools and platforms enabled continuity of services during the pandemic and expanded some volunteering opportunities. For example, by reaching a greater pool of volunteers unlimited by geographic boundaries, reducing travel time and costs, and making volunteering and training more flexible, and accessible. Organisations realised the potential of remote training and volunteering to make opportunities more inclusive and expressed intention to move towards a mixed delivery model in the future." p.24	Qualitative statements and author interpretations of quantitative and qualitative data

Study	Level and	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	Context/Equity issues					
	reported		and the second states and the second states and			
			numbers, it would then just totally direct you back to the internet, so you could not find anything out. Everything was done online, applying for any help was all online, so haven't been able to access any help because for me having to pay £25-£30 a month for internet before the pandemic, you know I don't use the internet, I haven't got Facebook or any of the things that you would use on the internet, so it wasn't really a problem. But it became a problem in the pandemic when I was stuck at home all the time. (Recipient of support, Monmouthshire)" p. 26			
Jabling and	Organisation/agency	Adaptability-	"During lockdown, all	New ways of	"A number of	Author interpretations
Jones, 2021	Equity: Access to those with health issues	using new technology	services moved to telephone befriending. Most participants arranged an initial round of welfare calls, checking in on service users, explaining that face-to- face visiting was ending and offering alternatives - typically telephone befriending." p.10	working /new referrals	organisations that had not previously offered befriending but supported individuals at risk of loneliness and social isolation through other services, developed telephone befriending offers in place of these services."	of quantitative and qualitative data
			"The flexibility offered by remote befriending		p.10	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			has allowed organisations to support some people whose circumstances made it harder to arrange face-to-face befriending, such as heavy smokers." p.10 ""Even where video calls were offered, take-up was very low, primarily due to a lack of access to, and confidence with, digital technologies and a lack of familiarity with video calling." "Most schemes had a small number of people who wouldn't or couldn't move to telephone befriending - including those with hearing loss or dementia. Some organisations offered alternatives, such as letter writing, to those who refused befriending calls. Video calls proved a good alternative to the phone for some people with hearing loss. However, people with cognitive impairments were not generally able to shift to video calls." p.10 "Lockdown has also driven positive changes in terms of digital volunteer		 "here have been increased referrals from existing and new sources, as awareness and concern about loneliness has spread. New referral routes have also been opened up - for example as a result of data sharing between local authorities, health bodies and local voluntary sector organisations. Some local authorities proactively contacted all those at risk of loneliness, identifying large numbers of individuals who were extremely isolated and lonely and had not previously been supported." p. 12 "In our survey, 70% of participants had changed their volunteer processes. Schemes have developed online training, moved to remote supervision and reporting, and introduced video calls for peer support, 	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			management and administration." p.25		refresher courses and social interaction". p.25	
Lyon et al., 2021	Organisation/agency Equity: Those with barriers to access technology	Adaptability- using new technology	"The tablet fleet initially consisted of 5 tablets and 3 stands, which later expanded to a total of 15 tablets and 10 stands donated to the program". P.1	New ways of working	"Rapidly changing hospital visitor policies necessitated development of a rapidly executable model for connecting patients with loved ones. Meeting this need without relying on clinical staff made it sustainable. Patients with barriers to technology access were uniquely suited to benefit from the service." P.1	Author interpretations of qualitative data
Mao et al., 2021	Organisation/agency Equity: Digitally excluded populations	Adaptability- using new technology	"Whilst such methods may raise a problem of digital exclusion, many groups explicitly sought to tackle this possibility by combining online volunteering with offline methods such as mass leafleting [34]" p.9	New ways of working	"In many cases, existing voluntary organisations and projects adapted their services by transferring to digital infrastructure, often at a rapid pace [37]. Some groups entirely recreated their activities online, such as a weekly Facebook-based inter- active youth club, or a lunch club for people living with dementia held via Zoom [40, 51]; others utilised a plethora of online tools and technologies to complement offline	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Pichan et al., 2021	Organisation/agency	Adaptability- using new technology	"This innovative project describes the rapid development and implementation of a video virtual care training program for the geriatric	New ways of working	activities [46]. Whilst WhatsApp was one of the most popular organising platforms, some groups adopted more streamlined services such as Slack. Plat- forms such as Zoom and Skype were used for group calls; Google Docs for meeting minutes; and Google Sheets for compiling databases of volunteers and re- quests [35]." P.9 "Volunteers and patients decide together which video software would be best, based on patient comfort and experience with technology,	Author interpretations of qualitative data
			patient population in response to the COVID-19 pandemic." P. 7		functional limitations, and who needs to be present for the visit." p.	
Fish et al., 2021	Organisation/agency	Adaptability- using new technology	"The participants described many transformative actions, such as setting up new systems and ways of working that they intend to continue, including working more collaboratively with other services, as well as utilising online technology to simplify referrals and volunteer planning:" p.4	New ways of working /referrals	"The participants described many transformative actions, such as setting up new systems and ways of working that they intend to continue, including working more collaboratively with other services, as well as utilising online technology to simplify referrals and volunteer planning." p.4	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Satterfield et al., (2021)		Adaptable to rapid changes	"This volunteer program was implemented rapidly (from ini- tial conceptualization to operation in a matter of days) to help address the needs of GCHD and the Galveston County community as they arose during the COVID- 19 pandemic."p.4	New ways of working /referrals	" In addition, because all volunteer efforts were remote, we used Zoom to hold team meetings and trainings. For ongoing projects, such as patient monitoring, GCHD provided training videos and updates as its internal processes evolved." "The projects available for student involvement varied widely in terms of time commitment, and because all projects were conducted remotely, much of the work could be completed according to the students' schedules and location needs. The flexibility of remote volunteer opportunities	Author interpretations of qualitative data
					allowed for involvement from students who may otherwise have been unable to volunteer because of personal or financial constraints." P.5	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Volunteer Scotland (2022)	Agency Equity: Online reaching remote locations Exclusion for some social groups such as older adults, disabled people and those who lack of equipment	Adaptability- using new technology	"COVID-19 has required very significant adaptation of service delivery models by VIOs to try"	Continuing of services	"COVID-19 has required very significant adaptation of service delivery models by VIOs to try and maintain business continuity and, in many cases, the very survival of their organisation. Top of these adaptations has been the use of phone/digital platforms, with the majority of VIOs surveyed moving some or all of their activities online in Scotland.5 OSCR's survey of 2,500 charities stated: "The single greatest impact of the pandemic and restrictions on almost all charities was going online"	Qualitative and quantitative statements and author interpretation
Budger et al.,	Organisation/agency	Adaptability-	"Through enabling	Satisfaction	"as a result of the	Qualitative
2022		empowerment	volunteers to choose their roles, having a genuine need for volunteer assistance and the sense of belonging experienced by students	and expanding volunteer opportunities	reciprocal benefits for both volunteer and service, there was fulfilment of these needs and this may explain the success of the pro- gramme. Therefore, the high satisfaction expressed by volunteers within this programme may not translate to service- learning programmes where student's	statement, and author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					motivations are more egoistic." P.6 "During the check-back interviews one clarified how this commitment to service provision led to a sense of community and positive professional identity formation: Seriously. I didn't know any of the other students I worked with before volunteering, but all of them 100% committed and will make inspirational doctors in the future" p.8	
Boelman et al., (2021)	Organisation/agency	Adaptability- empowerment and flexibility	"Mutual aid has also provided opportunities for people who were traditionally isolated or excluded from their community to become more actively involved." P.27	Engaging with volunteers and expanding volunteer opportunities	"Mutual aid has also provided opportunities for people who were traditionally isolated or excluded from their community to become more actively involved." P.27	Author interpretations of qualitative data
Cooney et al., (2022)	Organisation/agency	Adaptability- empowerment and flexibility	"It was evident that restrictions had given rise to a loss of social interaction amongst the volunteers." P.6	Engaging with volunteers and expanding volunteer opportunities	"However effects of restrictions on connecting with fellow volunteers was heavily emphasised by all, with a sense of separation and distance prevalent which affected both the social aspect of the role and the support between volunteers" (p.7)	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Forsyth 2021	Organisation/agency	Adaptability- empowerment and flexibility	" This has been facilitated by the growth of flexible and remote opportunities, which enabled volunteers to work from home, for example." (Stakeholder, VCSE) p.24	Engaging with volunteers and expanding volunteer opportunities	" This has been facilitated by the growth of flexible and remote opportunities, which enabled volunteers to work from home, for example." (Stakeholder, VCSE) p.24P.24	Qualitative statements and author interpretations of qualitative data
Hauck et al., 2021	Organisation/agency	Adaptability- empowerment and flexibility	"To strategize and operationalize change, we created the nimble COVID Army working group consisting of operational and clinical leadership to effect the following fivefold strategy" p.1	Engaging with volunteers and expanding volunteer opportunities	"Identify faculty: Using REDCap, we surveyed the entirety of the NYU Langone clinical faculty for willingness to volunteer, ability to lead a ward team and/or an ICU team as well as the presence of an authorized medical exemption (including age). Faculty who participated opted to do this instead of outpatient telemedicine or other assignments, and were not forced to participate if they felt unable." P.1	Author interpretations of qualitative data
Gardner et al., 2021	Organisation/agency	Adaptability- empowerment and flexibility	"Speed of volunteer recruitment, onboarding and deployment (surge volunteering): Respondents involved in the health and social care or community volunteering discussed passporting in the context of emergency response volunteering, as in the current Covid-19 pandemic or in response to the flooding in the UK	Engaging with volunteers/ Engaging with volunteers and expanding volunteer opportunities	xamples of such initiatives included: NHSVR in the UK, which created a large pool of volunteers who were identity checked and could be deployed rapidly against local needs; a pilot in Australia to create a volunteer passport system that could be used for surge volunteering; and	Qualitative statements and author interpretations of qualitative data

Study	Level and	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	Context/Equity issues					
	reported					
			or bush fires in Australia. Passporting was used in this context in several initiatives as a mechanism to recruit, onboard and match large numbers of volunteers with local needs for their help at speed" p.17 " I think it's about different types of volunteering, more flexible volunteering, more volunteering where you're enabling people to be empowered to do their best because you've done all the assurance framework to know there's somebody that we can let off to do their best, but with the backstop of being able to seek support and information. [VIO group, health] p.45		smaller-scale, local collaboration between volunteer centres and/ or VIOs to provide a single-entry point for volunteers across participating VIOs, for example, as in the case of the Lewisham Covid- 19 Response Hub.31" p.17	
Adaptability-ne	w services/continuation of	services				
Alalouf-Hall et al., 2021	Organisation/agency	Adaptability	"we had to adjust rapidly to not leave anyone in dire straits" p.6	New services/ continuation of services	"We started up new services, which we were able to provide thanks to our volunteers, like the home delivery of food baskets. As well, the government contacted us to ask us to put in place additional shelters in the downtown area, such as	Author interpretations of qualitative data

Study	Level and	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	Context/Equity issues					
	reported				in the Place Dupuis Hotel for homeless individuals." "The crisis has shown us that this type of scheduling does not really line up with the availability of people who work. We have less of the kind of volunteer who comes week after week, and that was happening even prior to the crisis. We, therefore, have to adjust our offer and demonstrate more flexibility in order to adapt to the realities of different kinds of volunteers." P.8	
Avdoulos et al., 2021	Organisation/agency	Adaptability	"Decisions on where to allocate resources and how to deploy volunteers were made swiftly and responded to the immediate needs of communities." P. 10	New services/ continuation of services	"a representative from a local council in London explains how this rapidly unfolding situation made it difficult to strategise, expressing, "Of course, there was a lot of stuff that was very last- minute and couldn't be planned ahead". That led to an immediate focus on the most vulnerable, on those most in need of rapid support. However, as the pandemic progressed and organisations were able to adapt, participants in this research noted that they	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					were able to offer their services to more people." P.11	
Badger et al., 2022	Organisation/agency	Adaptability	"The scheme administrators reported that requests for student volunteer assistance outweighed the supply of volunteers at the peak of the pandemic, related to extraordinary service demands compounded by staff absences due to illness or isolation." P.8	New services/ continuation of services	"Student volunteers were therefore viewed as integral to maintaining services: 'The hospital would have struggled without their support!'" p.7	Author interpretations of qualitative data
Fernandes-Jesus et al., 2021	Organisation/agency	Adaptability	"The focus in this theme is on the intentional and conscious things done by organizers to sustain the groups." P.7	New services/ continuation of services	"These strategies involve invoking identification, group care, facilitating communication, an informal but organized leadership structure, and group's meetings and events." P.6	Author interpretations of qualitative data
Forsyth et al., 2021	Organisation/agency	Adaptability	"They go into one centralised system and geographically, the software says, 'Right, the best person for that individual, who also has the right skills, is this volunteer here', and then we'll try and match them with that. Then if it's a long-term goal, then we'll get that volunteer then becomes their good neighbour, and they'll go and do whatever that person needs them to do for them." (Stakeholder, Community group)" p.22	New services/ continuation of services	" VCSEs and local authorities highlighted that many services had not been taking on, or involving volunteers, due to the challenges associated with switching to remote volunteering and making workplaces COVID-safe. The former was demonstrated where volunteers performing administrative tasks for a volunteer centre had	Qualitative statement and author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					been unable to continue during the pandemic. This was because the database system they used was only compatible with certain devices, and the phone system could not be operated remotely without a handset, of which there were limited numbers." P.19	
Gardner et al., (2021)	Organisation/agency	Adaptability	"CBs will need to continue to be agile and adaptable and look for new opportunities to meet the needs of their communities" p.12	New services/ continuation of services	"Many CBs began to utilise digital platforms to maintain direct contact with their communities, ranging from Facebook to Zoom, and have updated their websites and set up separate email addresses to enable online ordering. P.10	Author interpretations of qualitative data
Grey et al., (2021)	Organisation/agency	Adaptability	"Organisations realised the potential of remote training and volunteering to make opportunities more inclusive and expressed intention to move towards a mixed delivery model in the future." P.24	New services/ continuation of services	"Harnessing digital tools and platforms enabled continuity of services during the pandemic and expanded some volunteering opportunities." P.24	Author interpretations of qualitative data
Mao et al., (2021)	Organisation/agency	Adaptability	"In many cases such organisations shifted their activities rapidly to COVID- 19, mobilising volunteers and relationships with other local groups to create	New services/ continuation of services	"For example, Homebased in Anfield, a community bakery, closed down much of its traditional operations and started baking 50 to 70 loaves a day, which it	Author interpretations of quantitative qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			local support schemes [37]." P.9		provided to the local food bank and community centre." P.9	
Pichan et al., (2021)	Organisation/agency	Adaptability	"We explored modalities for video visits that were relatively user friendly, could be used on different electronic devices, and were compliant with the health care system. We created a volunteer manual that included a structured process for how to call patients, a walk through of the video modalities, an algorithm for choosing which modality is best for each patient (Figure 1), and troubleshooting resources. We created a basic three-call format." P.2	New services/ continuation of services	"We explored modalities for video visits that were relatively user friendly, could be used on different electronic devices, and were compliant with the health care system. We created a volunteer manual that included a structured process for how to call patients, a walk through of the video modalities, an algorithm for choosing which modality is best for each patient (Figure 1), and troubleshooting resources. We created a basic three-call format." P.2	Author interpretations of qualitative data
Rees et al., (2021)	Organisation/agency	Adaptability	"Short, time-limited or flexible opportunities have worked well with the younger and working age volunteers but it was felt that organisations needed to 'embrace equality, diversity and inclusion" p.13	New services/ continuation of services	"Some new roles have been developed, for example our own face- to-face befriending services changed to telephone befriending during the pandemic and moving forward, we will be providing volunteers with the option of doing either face-to-face or telephone support." P.9	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Walshe et al., (2021) Adaptability→ e	Organisation/agency fficiency	Adaptability	"Some services had identified safe ways of adapting roles, or developed new functions that volunteers could more safely fulfil during the pandemic." P.10	New services/ continuation of services	"Some services had identified safe ways of adapting roles, or developed new functions that volunteers could more safely fulfil during the pandemic. This included support, befriending and bereavement roles, often delivered remotely. Other roles included services such as driving, delivering, shopping and gardening. Occasionally completely new roles were identified which could include those directly arising as a result of the pandemic (e.g. making scrubs), but also coordination and information sharing roles." P.10	Author interpretations of qualitative data
Kate et al., 2021	Organisation	Adaptation	"The shift to the telephone has increased our capacity, as a volunteer can typically support four or five clients by telephone in roughly the same time as a face-to-face visit." Service Manager" p.12	Efficiency	""The shift to the telephone has increased our capacity, as a volunteer can typically support four or five clients by telephone in roughly the same time as a face-to-face visit." Service Manager" p.12	Qualitative statements and author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Rees et al., 2021	Organisation	Adaptation	"The move towards a more pronounced online presence led to reflections on how the internet and digital technology could improve the organisation's practice." P.9	Efficiency	"Several respondents noted an intention to continue with enhanced online or remote activities, which demonstrated a more efficient use of time and money. Organisations who had continued to hold meetings online had significantly reduced time spent travelling between meetings and visits (035, Voluntary/Community organisation, across northern Wales). P.9	Qualitative statements and author interpretations of qualitative data
Gardner et al., 2021	Organisation	Adaptation	"For example, one respondent stressed the NHSVR scheme and the GoodSAM app made it easier to volunteer in a place-based rather than organisation-based way, which they felt was how many volunteers wanted to help during the pandemic." P.35	Efficiency	"Respondents reported how local training-based passport initiatives reported saved cost and time to VIOs by using centralised training as part of their volunteer induction. This was also the case with portability-oriented passporting systems, as centralising some aspects of volunteer vetting also saved cost and time to participating organisations. We are looking at making it	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					easier and cheaper for	
					VIOs and volunteers, I	
					think that's at the core	
					of why we're doing this.	
					[VIO, cross sector]" p.33	
Adaptation by fir	nancial support policies \rightarrow V	olunteering opport	tunities		·	
Forsyth et al., 2021	Systems	Adaptation	"It was noted by participants that meeting demand for volunteers was made easier by the unprecedented increase in interest from the public to volunteer, partly driven by the fact that more people had more free time due to the furlough scheme" p.22	Volunteering opportunities	"It was noted by participants that meeting demand for volunteers was made easier by the unprecedented increase in interest from the public to volunteer, partly driven by the fact that more people had more free time due to the furlough scheme" p.22 "In particular, the disruption to many employment sectors and the government's Job Retention Scheme meant that many people of working age experienced an increase in personal capacity to offer help and support to others. Some organisations had, therefore, taken advantage of furloughing to meet increased demand. For example, a participating VCSE had recruited furloughed volunteers to deliver COVID-19 testing, which helped them to run	Author interpretations of qualitative data
Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
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					testing centres alongside paid staff. One organisation looked specifically to recruit furloughed staff who already had some clinical training and DBS checks, such as from airlines. They formed the foundation of the organisation's volunteer vaccination programme." P.29	
Gardner et al., (2021)	Systems	Adaptation	"An encouraging finding is that the pandemic led younger people to take a more active role in their communities. This was partly due to the government scheme allowing furloughing of staff in mainstream work, which enabled fur- loughed workers to volunteer and to help CBs." P.11	Volunteering opportunities	"New and less experienced volunteers were looking to ?ll their time and appeared to have a genuine desire to become more involved with their communities by working in shops, foodbanks and delivering shopping to vulnerable, self-isolating community members." P.11	Author interpretations of qualitative data
Rees et al., (2021)	Systems	Adaptation	"Similarly, one respondent noted that the sector also needs to be more flexible in its approach: 'We have seen a different cohort of volunteers due to furlough, and it's been important to capture that group to help them continue to volunteer."p.13	Volunteering opportunities	"Similarly, one respondent noted that the sector also needs to be more flexible in its approach: 'We have seen a different cohort of volunteers due to furlough, and it's been important to capture that group to help them continue to volunteer."p.13	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Ali	Individual Equity issues: Mechanism is expressed in study on health care workers	Feeling supported	The support of family and team members was reported as key to staying resilient. "The support of family members and other team members helped with coping, and in that way I stayed resilient despite the pressure and intensity of the environment.	Continuation/ participation Mental wellbeing	Implied "coping, and in that way I stayed resilient despite the pressure and intensity of the environment"	Qualitative statements and author interpretation (mechanism)
Badger *Note - this example shows the counterfactual	Individual Equity issues: Mechanism is expressed in study on health care workers	Feeling supported - needing to provide information on self-care	Student volunteers described desire for more emotional support "Additionally, some volunteers felt the induction could have done more to prepare them for the emotional aspect of treating Covid- 19 patients."	Mental wellbeing	"I wish we had been prepared a bit more for the reality of COVID and the deaths. Just a lecture in the introduction to acknowledge the difficulties of the treatment and the potential emotional side of it"	Qualitative statements and author interpretation
Badger	Individual Equity issues: Mechanism is expressed in study on health care workers	Feeling supported - feeling part of a team	Student volunteers described how relationships with colleagues helped to mitigate challenges: "Others in busier pressurised environments, described how challenging experiences were mitigated by feeling involved, useful or helpful"	Mental wellbeing	"I think the big- gest impact was that I saw a lot of deaths, and patients' families grieving. I found this really challenging, but my supervisors were very supportive, as were the people on my team" "My well-being improved greatly from volunteering as I was able to interact with a wide variety of people and make friends with fellow volunteers"	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Badger	Individual Equity issues: Mechanism is expressed in study on health care workers	Feeling supported - feeling part of a team	Relationships with clinical supervisors appeared to be modulated by this shift in role: volunteers described being "treated me like a peer"	Role identity	The volunteering programme appeared to have a pro- found impact on volunteer learning and professional identity formation as well as cognitive- emotional development: Volunteering during the pandemic showed me what it means to be a doctor more than any clinical placement	Qualitative statements and author interpretation
Colibaba	Individual	Feeling supported - feeling part of a team/ community	"I think the benefit of being a part of a board or a volunteer organization, in times of COVID, I think it helps to normalize your day as opposed to focused on just the pandemic."	Mental health and wellbeing	From an isolation and mental point of view, having the Abbeyfield group and communicating with them and working with them is beneficial.	Qualitative statements and author interpretation
Cooney	Individual Equity issues: some indications that volunteers experienced reduced social connectedness with other volunteers and this may have more acute impacts among volunteers with weaker forms of social capital	Feeling supported - feeling part of a team/ community	As noted, the connections between volunteers is a salient part of the role and this contributed to the sense of support, both as a Samaritan and as an individual outside of the role, with the Samaritans community referred to as 'a little family'	Mental health and wellbeing (implied)	"You'd argue it's a family anyway, but I mean you-you know that they're there supporting you and you know they have your back() if you go into anything, highs, lows, or anything they will be there to cheer you on."	Qualitative statements and author interpretation
Hauk	Individual Equity issues: Mechanism described	Feeling supported and part of a team	"I liked having a team and people above me to turn to. It was nice to feel a part of the overall care group and feel	Volunteer satisfaction	"The oneness I felt with all the health care team made the experience quite a remarkable one. I feel the support	Qualitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	for frontline healthcare workers		involved with what's going on."		everyone gave each really did help save the lives of so many people."	
Lee	Individual Equity Issues: Mechanism described in study of occupational group (healthcare workers)	Feeling supported and acknowledged	"People around me applauded me, saying to me that "you made a big contribution, you are amazing""	Volunteer satisfaction	People around me applauded me, saying to me that "you made a big contribution, you are amazing" So I felt that my ability as a nurse was helpful to someone and to my country. This became a source of great pride for me as a nurse	Qualitative data and author interpretation
Lee	Individual Equity Issues: Mechanism described in study of occupational group (healthcare workers)	Feeling supported and part of a team	Although nurses who participated in the COVID-19 emergency response had different backgrounds and experiences, they had a common goal. They relied on each other to provide high quality care to patients with confirmed or suspected COVID-19, and even with the few resources, strived to provide the best nursing care to their patients during the pandemic. With their colleagues, participants developed work systems and educational programmes for themselves.	Volunteer wellbeing; Quality of service	Participants experienced stressors from many sources during their time at the medical support sites. Teamwork enabled them to over- come hardships under this unique work situation.	Qualitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Bertogg *Note counterfactual outcome	Beneficiary Equity issues: Age and parenthood seem to be the prime factors structuring different types of support - older people actually less likely to experience unmet need because of public debate about need to protect older people. However, the receipt of support also strongly depends on the availability of informal and formal network ties	Feeling supported through social networks	"Support in terms of strong ties, and weak, formal network connections through associational membership"	Unmet needs not met through informal volunteering	"we found that unmet need is especially prevalent among those with smaller social networks"	Quantitative data and author interpretation
Carlsen *Note counterfactual outcome	Beneficiary Equity issues: Low social capital inhibits experiencing support through informal means	Feeling supported through social networks	"Support groups that emerged on social media, most notably Facebook, sought to bypass the draw of social networks and offer support to those with only few or no social contacts. Yet, despite these organisational intentions and technological affordances, there can be multiple challenges that make it hard to attract, locate, and help vulnerable and socially isolated people because this part of the	Unmet needs not met through informal volunteering	"Our data indicate that social networks under the pandemic are effective, attentive, and adaptive suppliers of help to the evolving needs of vulnerable citizens. Importantly, we found that not all ties matter equally. Citizens who lack strong ties are most likely to have an unsatisfied need for help"	Quantitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			population tends to have low generalised trust"			
Grey	Beneficiary Equity issues: Benefits described as being activated through face-to-face contact; possibly more difficult to enact in very rural areas	Feeling supported through social and community networks	Accessing support during the pandemic on the local level was also valued greatly by the recipients, who saw the additional benefit of personalised contact and seeing someone face-to- face, and the sense that they can rely on their local community for support It's a feeling of being cared about by your local	Meeting people's needs; mental wellbeing	It's a feeling of being cared about by your local community. And again I think that binds you to your community, that gives you that sense of feeling not on your own. *Note volunteer speaking about perceived benefits from perspective of beneficiary	Mixed method study - qualitative data and author interpretation
Alalouf-Hall	Equity issues: Mechanism describes how supporting volunteers to carry out duties safely can	Supporting volunteers to carry out their duties safely	community. And again I think that binds you to your community An initial problem during the first wave of the pandemic was the scarcity of personal protective equipment,	Less direct contact with beneficiaries	"But what was gained in terms of safety was lost in terms of the quality of person-to-person interaction, which is	Qualitative statements and author interpretation
	inadvertently lead to poorer beneficiary outcomes		such as specialized masks. Additionally, organizations had to ensure that volunteers received the proper training, the nature of which varied according to the working environment. Training was needed not only on a professional level but also for the hygiene measures. For		often an integral part of the aid that volunteers provide. Here is how the director of the FCABQ puts it: Yes, there is the delivery of a meal, but there is also everything associated with it. In other words, checking in with the elderly individual, who is often alone and vulnerable,	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			meals-on-wheels deliveries, for instance, volunteers were directed to leave the meals on a porch or stoop to avoid contact with recipients.		and making sure they are alright. It is often during the delivery activity that volunteers detect other problems going on with the older person. They can then refer them to other services. With the pandemic, that kind of extra step was not possible."	
Ali	Agency Equity issues: Mechanism is expressed in study on health care workers	Supporting volunteers through clear vision for volunteers	Medical students were recruited from the early years of their medical programme (years 1-3). Their role was clearly defined as the pronation and supination of ventilated patients suffering from acute respiratory distress syndrome secondary to COVID- 19 infections. Students volunteered for 3 months from March to May of 2020.	Continuation/ participation	Implied	Qualitative statements and author interpretation (mechanism)
Ali *Note - this example shows the counterfactual	Agency Equity issues: Mechanism is expressed in study on health care workers	Supporting volunteers through caring practices or encouraging self-care	Some participants reported using self- care to alleviate the mental burden of working in the ICU	Mental wellbeing	One participant reported the negative impact that a lack of self- care had on their mental health.	Author interpretation of qualitative data
Badger *Note this example shows the counterfactual	Agency Equity issues: Mechanism is expressed in study on health care workers	Supporting volunteers through acknowledging the value of	Others emphasised the relationship between the value they attributed to their role and its perceived relationship to their expectations, with many expressing	Volunteer Satisfaction and Continuation	"I couldn't see how that was a direct COVID related job. Therefore, the role didn't feel meaningful"	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
		non-frontline roles	dissatisfaction if they did not feel they were directly contributing to the pandemic response		This had implications for continuation as a volunteer: 'No longer feeling useful' was cited as a reason for leaving the scheme by 44% of respondents, suggesting this as an important factor motivating participation'	
Badger	Agency Equity issues: Mechanism is expressed in study on health care workers	Supporting volunteers through achieving a balance between support and autonomy	As volunteers, participants described a higher level of entrustment than as a student, citing staff workload as a factor in this: everyone had their metaphorical plates so full that they didn't have any more room to watch over me largely, and thus any mistakes I made would truly be my own	Volunteer Satisfaction and Continuation Role identity	"This is the first time I've been in a hospital and felt properly valued. Everyone in the team knew my name, acknowledged my presence and made me feel welcome. I felt part of the team." "They linked feeling useful to the quality of their learning experience, and to team inclusion: I think the entire difference is down to the fact that in volunteering it is a mutually beneficial arrangement whereas on placement doctors can often view you as an added burden to their already high workload"	Qualitative statements and author interpretation
Badger	Agency Equity issues: Mechanism is expressed in study on health care workers	Supporting volunteers and boosting their morale	Implied - enthusiastic volunteers resulting from supportive scheme	Mental wellbeing among broader organisation	"Several staff also reported improved wellbeing related to the scheme: "I actually think that having student volunteers boosted morale as they	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					were so enthusiastic to have around that everyone really appreciated more hands!"	
Boleman	AgencyEquity issues:Volunteers with health conditions were those who were shielding for longest.For some volunteers being unable to volunteer because of lockdown held particular significance, and supporting volunteers may have had particular impacts: "For instance, some of the LGBTQI+ organisations we spoke to reported that some volunteers (particularly those who are not 'out of the closet' at home) feel that by not being 	Supporting volunteers and boosting their morale	One of the biggest challenges during lock down has been how we support our volunteers who are struggling with isolation and lack of purpose We are emailing, phoning and producing regular newsletters but it's still been really tough on some of them Quite worryingly so in some cases.	Mental wellbeing	Implied	Qualitative statements and author interpretation (mechanism)

Study	Level and Context/Equity issues reported which reflect connecting with others and being able to express group	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Bruce	identity."AgencyEquity issues: Potential equity issues related to age as disruption in relationships was experienced more acutely among those who were unable to supplement face-to- face interaction with online meansIn this type of example - the role of the orgnaisation is to broker relationships - both sides need consideration	Supporting volunteers to maintain relationships *Note mechanism not well defined	"What this study also points to is the critical need for developing strategies that allow that relational continuity to develop during times when physical visiting is not possible. Further research is required to better understand what these virtual strategies might be.	Mental wellbeing	"Volunteer and client dyads in this study had developed meaningful relationships that when disrupted resulted in feelings of distress on both sides."	Qualitative statements and author interpretation (outcome)
Chawlowska	Agency Equity issues: Mechanism is expressed in study on medical students Incentives were offered but other forms of support	Supporting volunteers through offering incentives to attract volunteers	The organisation "offered three incentives to attract student volunteers: [1] gaining a credit for a compulsory internship; [2] postponed and more flexible assessment of e-learning outcomes; [3] concessionary prices for PUMS accommodation.	Volunteer recruitment	"The project, widely promoted through official university channels and student- led campaigns, soon became very popular: 1,126 students (19.19% of all students) of 16 (out of 19) fields of study taught at PUMS took part between 12 March and 30 June"	Author interpretation of quantitative process data

Study	Level and Context/Equity issues reported including PPE was offered inconsistently	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Chow	Agency Equity Issues: Mechanism Expressed in Particular Occupation group - HCWs volunteering in a migrant centre	Supporting volunteers through offering incentives and acknowledging value (hypothesised)	"While most participants felt that incentivizing volunteerism contradicts its premise, many were supportive of recognition of their contributions through non-financial means, such as official certificates or special mentions by senior management."	Volunteer continuation	Implied	Qualitative statements and author interpretation
Chow	Agency Equity Issues: Mechanism Expressed in Particular Occupation group - HCWs volunteering in a migrant centre	Supporting volunteers through management structures and training	"While most participants felt supported by their families to volunteer, they felt that increased support from senior management would encourage more volunteerism from their clinical service, such as providing substitute manpower to cover their usual duties and "making sure that people have adequate resources when they need them and have a sounding board to come back to, and they can opt out when they want to"	Volunteer continuation	"From a longer-term perspective, peace-time pandemic response training especially for younger staff would boost volunteer confidence in true healthcare crises if and when they arise."	Qualitative statements and author interpretation
Cooney	Agency	Supporting volunteers through creating support systems	With respect to the organisational culture, volunteers felt looked after, with the Samaritans support system identified by most	Mental health and wellbeing (implied)	Implied "Despite the prevailing sense of change and loss, it was evident that volunteers also found	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			as their main way of coping with distressing calls: I would deal with them within-within the system, I talk about them with my- whoever was on duty with me, or the leader. Ahm, yeah- no, no the whole idea is to kind of be supported within Samaritans, because everybody understands what the calls are like, that's-that's the way the structure works and I think it works very well.	Volunteer continuation (implied)	positive experiences through their role during the pandemic"	
Fearn	Agency Equity Issues: Concern that switch to video calls (which volunteers received support and training to deliver) was perceived as expensive and inaccessible by some	Supporting volunteers to carry out duties with adequate support	 "Respondents reported on what helped them with undertaking remote befriending, including having the opportunity to do a face-to-face visit prior to starting remote befriending, using key staff at the nursing home to assist and finding the right time to get in contact with the resident" "So, I've been able to get through to her by speaking to the staff, and they have taken a phone to her room and I've been able to have a chat with her like that (Individual interview, female, 85 years)" "We 	Continuation and delivery of services to beneficiaries	Implied	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Fernandes-Jesus	Agency level	Supporting volunteers through communication Supporting volunteers through emotional support	were told we can't visit them and stuff, so I spoke to (staff member) and she was like, "You can send emails" "because anyways (resident) is not in a condition to speak", so I preferred emailing him too. So his first email went through and (staff member) - and then she said, "Yes, he has the email with him," because she'd printed it out for him." I think the main thing I do to help sustain the group is to support the coordinators. The coordinators are the ones that are in direct contact with our volunteers. We hold fortnightly meetings with the coordinators so we're able to, you know, talk about the various things that are happening or have happened within the group over the last 2 weeks. It's all about communication.	Volunteer role identity (implied); Sustaining volunteer contributions Volunteer wellbeing	"I think that's why our volunteers, they feel part of the organization. We update them regularly on things that are happening within the organization Some groups were starting to implement measures to avoid personal burnout, such as delegating work:" "interviewees also mentioned the importance of ensuring that no volunteer would get overloaded, of distributing the workload fairly, and of providing emotional support to volunteers when necessary As part of this culture of group care and support,	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					20 interviewees mentioned that they actively tried to keep the communication regular within the group, including by asking volunteers about their needs regularly, and trying to respond to these needs	
Forsyth	Individual level Equity Issues: Mechanism may be particularly important for different PROGRESS-Plus and may be a way of broadening the profile	Supporting volunteers through feedback and identifying opportunities for mutual growth	There were also calls for volunteering to be conceptually reframed when volunteering roles were advertised or publicised. Stakeholders said that consideration should be given to changing the language of volunteering to capture the mutual benefits and the way in which volunteering can empower volunteers by giving them greater knowledge, confidence and skills. One suggestion was that volunteering should be framed more as being about 'connecting communities', rather than as a resource of unpaid work. "That's very much the way that I think I'm starting to see volunteering roles that are about unpaid work, but so much of the community-based	Becoming a volunteer; sustaining volunteers; broadening the profile of volunteers	Implicit.	Qualitative statements and author interpretation (mechanism)

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			volunteering work is not about that. It's about just being out in the community, understanding your community, connecting in your community with people and places more effectively, and just helping each other out. That's the way that I see it and I think that's, if we talk about it in that way, it actually helps to empower people.			
Forsyth	Individual level Equity Issues: Mechanism may be particularly important for those in work or with caring responsibilities	Supporting volunteers through understanding their needs	Advanced warning of when volunteering would be needed: flexible volunteering was considered an important way of managing volunteering alongside work or other commitments (e.g. childcare responsibilities).	Sustaining volunteers; broadening the profile of volunteers	Implicit.	Qualitative statements and author interpretation (mechanism)
Forsyth *Counterfactual example	Agency Equity Issues: Some groups in particular may be deterred by burdensome training needed to volunteer	Supporting volunteers through providing training in a balanced way	However, in some cases, there was a mismatch between the level and intensity of requirements and training imposed by organisations, and the eventual role that volunteers were given, which was a barrier to retention. For instance, a participant from an organisation whose volunteers completed an intensive training course said that dissatisfaction	Sustaining volunteers; broadening the profile of volunteers	"There's a barrier in recruitment, in terms of people are put off by the time commitment and formality of the approach. However, that doesn't stop us getting people in. What stops us getting people in is that people go through a huge amount of training and then don't feel like the opportunities they do meet their needs in terms of that training."	Qualitative statements and author interpretation (mechanism)

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			arose among volunteers when the opportunities they were subsequently provided did not reflect this level of training: "There's a barrier in recruitment and there's a barrier in retention.			
Forsyth	Agency Equity Issues: understanding value could broaden the profile of volunteers	Supporting volunteers through understanding and feeding back on the contribution they make	A further driver in demand was organisational views on the value of volunteers in contributing to service delivery. Volunteers were in demand where services, and those who managed them, understood their value to enhance service delivery	Sustaining volunteers; broadening the profile of volunteers Developing the skills of volunteers	"I think once you get people who understand how volunteers can really enrich what you can deliver, that's what drives the need for them if that makes sense." "We don't use volunteers in a way that we need volunteers to run our activity; we develop leaders and volunteers to better themselves for the purpose of what we believe as an organisation."	Qualitative statements and author interpretation
Forsyth	Agency Equity Issues: understanding value could broaden the profile of volunteers	Supporting volunteers through keeping in touch	Participants discussed the extent to which volunteering was prominent in public consciousness. Stakeholders reported high levels of supply in frontline delivery roles, such as food banks and public space maintenance. In one example, this manifested itself in having to turn	Sustaining volunteers; broadening the profile of volunteers	"people contacting my office who will be like, 'I read in the paper that food banks are seeing this real increase in demand. I went to my food bank and they said they didn't have any space for me. How does that make sense?"	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			volunteers away from food banks			
Gardener	Agency	Supporting volunteers and boosting their morale	I know that a lot of them are missing it because I've been keeping in touch with a lot of them and they're all saying it would be great to come back depending on what the situation is at the time, whether they feel that they can safely come back	Mental health and volunteer continuation	Implied	Qualitative statements and author interpretation
Grey	Agency	Supporting volunteers through training	"To reach those most vulnerable, local authorities, public and third sector organisations, together with the community groups pro-actively reached out to all individuals listed on the shielded list to identify what support was needed and to raise awareness of what was available. All interviewees reflected that there was a huge value in doing that. To identify any additional needs possibly unknown to services, many volunteers received training to be able to notice any signs of recipients requiring any other additional support,	Improving beneficiary outcomes; Improving quality of services	Important points raised by most of volunteers and strategic leads also included awareness of the population groups which perhaps were just about surviving prior to the pandemic, but their livelihood and ability to continue to financially cover the basics became severely impacted. "As time went on, it was people who had lost their jobs, or people who had been furloughed, and people who needed actually support around things like benefits, they needed access to small grants, they needed support with debt counselling, and they	Mixed method study - qualitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			for example, when delivering shopping or prescriptions."		needed food actually in some instances. (Strategic Lead, Monmouthshire)"	
Grey *Note counterfactual implied	Agency Equity issues: Example illustrates the role of SES in shaping volunteer outcomes	Supporting volunteers through offering practical support (e.g. incentives or subsidising transport costs) and understanding their needs	"Individual and area structural challenges in more deprived areas It is important however to recognise that those experiencing greater inequalities (i.e. on lower incomes; in precarious employment or housing, unemployed) will often face multiple challenges and have other practical priorities competing with the prospect of engaging in volunteering" The survey also found that looking at barriers to volunteering across deprivation quintiles that volunteer respondents in the more deprived quintiles tended to be more likely to report that distance and lack of transport was a problem (7.8%, 14/180), as well as health problems (16.1%, 29/180) or having no time due to work (32.8%, 58/180), compared to the less deprived quintiles	Becoming a volunteer; Continuing as a volunteer; Broadening profile of volunteers	There's a lot of people out there who just can't afford to be volunteers, they are too busy making a living, yes, maybe they have 2 or 3 jobs on the go at one time, they can't really take the time out to do that kind of thing, and we're lucky. There's only the two of us, we haven't got children, we've made our money essentially, we're fairly stable, so that's there as well. Volunteers in the more deprived quintiles tended to be more likely to report as reasons to continue volunteering activities: the positive impact it was having on their own health and wellbeing, gaining new skills and experience, wanting a more active role supporting a specific cause or charity	Mixed method study - qualitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Hauk	Agency Equity issue: mechanism reported for frontline healthcare workers	Supporting volunteers through providing training	"Would suggest a video that would go through the day, what your responsibilities are, and how to handle them. Would outline the Epic tools you need, especially the admission order sets, and charting, as this is what most time was spent on. ::: more granular[ity] regarding how to transfer a patient and clinical criteria for each of the units, etcetera. Also, clear ways of clinical elevation (how to reach alert team and then ICU), a lot of people coming on are not used to calling consults. Better training"	Mental health, safety and volunteer continuation	My co-volunteer did not have a good sense of the role of PPE or infection control, and made me very apprehensive about possible spread as that individual was not following the guidelines	Qualitative data and author interpretations
Jopling	Agency	Supporting volunteers through relational activities	"We have a monthly almost like an online office hour. We're on Zoom for an hour once a month and volunteers join us for as much or as little of that hour as they can. And it's very informal, but it's their chance to meet other volunteers, but also bring any challenges that we can work through"	Wellbeing (implied)	"Peer support sessions for volunteers have been particularly valuable given the challenges of sustaining befriending relationships during difficult times"	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Jopling	Agency Equity issues: Evidence that shifts to online support introduced issues due " to a lack of access to, and confidence with, digital technologies and a lack of familiarity with video calling"	Supporting volunteers through training	"Many schemes have revised their volunteer training and support, for example to focus more on listening skills and open questioning. They now also offer more opportunities for volunteers to share ideas and experiences with each other (see section 9).	Service improvement (implied)	"What has worked best is having one-on-one conversations with the volunteers to help them reimagine the relationship. Helping them bring themselves into the conversations to make them more two- way. Starting a joint book club together, watching a TV show before the chat, playing and discussing a podcast" Service Manager"	Qualitative statements and author interpretations
Lee *Note counterfactual example	Agency Equity Issues: Mechanism described in study of occupational group (healthcare workers)	Supporting volunteers through offering practical support (e.g. incentives or subsidising transport costs) and understanding their needs	There were a lot of areas where I felt insufficient supports One thing was about board accommodations. We were not provided proper accommodations or even for food.	Volunteer satisfaction (implied) Broadening profile of volunteers (implied)	Nurses had to spend their own money for food and accommodations and had to wait for a long time for reimbursement.	Qualitative data and author interpretation
Lee *Note counterfactual example	Agency Equity Issues: Mechanism described in study of occupational group (healthcare workers)	Supporting volunteers through training and information	Lack of information and education Until the very day before, no important information was given and I got no training. So, I had to prepare myself and rush to the scene.	Volunteer satisfaction (implied) Quality/ preparedness of volunteers (implied)	But we were not properly given any specific information like what kind of tasks we would do at the frontline. The briefing was about the basic information of the structure of hospital. Well, during the briefing, I finally was informed that all	Qualitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					patients in that hospital were infected with COVID-19.	
Mao (rapid review)	Agency	Supporting volunteers through understanding their needs and acknowledging their contributions	In terms of sustaining volunteering, factors identified by groups as being important to successful retention of volunteers included: not asking volunteers to engage in activities they are uncomfortable with; allowing volunteers to say no; providing social rewards; nurturing relationships with volunteers; and recognising the contributions of volunteers.	Volunteer retention Volunteer satisfaction (implied)	In terms of sustaining volunteering, factors identified by groups as being important to successful retention of volunteers included: not asking volunteers to engage in activities they are uncomfortable with; allowing volunteers to say no; providing social rewards; nurturing relationships with volunteers; and recognising the contributions of volunteers	Author interpretations of literature
Mao (rapid review)	Agency	Supporting volunteers through reducing volunteer burden	"Other volunteering schemes found it hard to generate sufficient demand or faced high bureaucratic procedures that delayed their interventions."	Volunteer retention	"For example, the length of time it took for volunteers to hear back from the NHS Volunteer Responders Scheme caused initial enthusiasm to dissipate"	Author interpretations of literature
Rees	Agency Equity impacts: a sense that traditional models of supporting volunteers haven't broadened the profile of volunteers	Supporting volunteers through offering practical support (e.g. incentives or subsidising transport costs) and	Other respondents shared that they were working with others to develop volunteering opportunities; reflecting on what they had learnt throughout the pandemic to accommodate people's needs, availability, and locations.	Volunteer recruitment; broadening the profile of volunteers	Short, time-limited or flexible opportunities have worked well with the younger and working age volunteers but it was felt that organisations needed to 'embrace equality, diversity and inclusion'	Qualitative data and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Rees	Agency	understanding their needs Supporting volunteers	We started an online weekly support group for	Volunteer retention;	Proper living wages that mean people do not have to work such long hours and therefore miss out on volunteering. Change the image of volunteering; it is heavily white, female, aged 30/40 plus dominated - it needs to be made more attractive to wider demographic In the first lockdown, we realised that the	Qualitative data and author interpretation
	Equity impacts: a sense that traditional models of supporting volunteers haven't broadened the profile of volunteers	through offering emotional support	them to come along and talk to us about their fears	mental health of volunteers	volunteers were all feeling helpless but at the same time were struggling with the situation, so we started an online weekly support group for them to come along and talk to us about their fears. We had an average of 10 people who came along each week out of our bank of 140 volunteers. Some volunteers we have not heard from despite repeated attempts to contact them.	
Research Works Limited	Agency Equity issues: "While the respondent stressed the accreditation was a 'hook' that attracted	Supporting volunteers through acknowledging their contribution	This involved volunteer passports as portfolios of volunteer experience and skills, which they could use as evidence to validate their learning with other volunteering organisations or employers.	Volunteer continuation; Broadening profile of volunteers; improving the quality of	Respondents involved in such initiatives stressed the confidence-building and public recognition aspects of such passports, as well as their role in supporting young people, unemployed people or	Qualitative data and author interpretation

Study	Level and	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	Context/Equity issues					
	reported					
	some volunteers to the			volunteer	marginalised groups in	
	training, they			workforce	terms of personal	
	wondered if others				development, wellbeing,	
	were put off by the				employment and social	
	time commitment and				integration. Wanting to value and thank	
	accreditation. In				volunteers was also	
	particular, the				cited as a driver for	
	respondent wondered				volunteer award and	
	if that may be the case				reward initiatives.	
	with some marginalised					
	groups of young				"For example,	
	people. Instead, they				respondents explained how students used the	
	thought that a more				accreditation they	
	flexible approach				obtained through a local	
	where volunteers could				volunteer passport	
	'mix and match'				training for UCAS points	
	different elements of				or how it helped	
	training delivered				individuals in	
	through diverse media				challenging circumstances start their	
	may be more appealing				own charity work. The	
	and accessible to those				young chap I mentioned,	
	groups. The accredited				he came to the	
	side has been				celebration evening with	
	successful, it has been				his mum and his gran	
	a hook for many of the				who did the award	
	people that have come				together, and they then	
	on board. They have				set up this grassroots football thing, and on he	
	enjoyed it and it has				went. For him to have	
	been good, but we're				been excluded from	
	also interested in the				school and to be not on	
	many people that				a pathway to achieving	
	haven't come on board				in a traditional academic	
	[] and we're				sense, I think that's	
	wondering why that is.				really powerful.	
	Whether it is the				"To log their hours, to	
					log their achievements,	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	10-hour commitment and the accreditation, on top of everything else. So, we're trying to make it so we reduce the barriers as much as we can.				to log their training, to basically develop as a person"	
Research Works Limited	Agency Equity issues: Burden may be more acute among smaller organisations	Supporting volunteers through acknowledging their contribution (incentives) and measuring development	The research also highlighted some challenges involved in terms of administrative burden and cost potentially involved in reward schemes based in time banks.	High administrativ e burden on agencies	e had a form of time banking, but it was called rewarding volunteering. [] It was very labour intensive and also the programme was really, really expensive. The license fee was £71,000 plus our costs, and it would have cost around £50k to run the scheme, and we didn't have that kind of money. So, the downside, we pulled the plug on that.	Qualitative data and author interpretation
Bradley	Community Equity Issues: Communities with weaker bonds less likely to benefit from mechanism; socially excluded within community less likely to benefit	Supporting community members through civic activism (mutual aid groups)	"Such radical movements can influence local political economies by generating an increased capacity for mutual- ism and reciprocity. This, in turn, increases the potential for new political expressions to emerge"	Provision of support for provision of basic essentials for community members	"as this study suggests, during the pandemic, when it came to acting to help local people and bring mutual aid to those in need—albeit in localities that are not the most deprived in the country—it is the anarchists who were at the front of the queue, helping people "to go about their everyday lives."	Quantitative approaches and author interpretation (mechanism)

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Chevee A. 2022	Community Equity Issues: Communities with weaker bonds less likely to benefit from mechanism; socially excluded within community less likely to benefit	Supporting community members through civic activism (mutual aid groups)	"In basic terms, this group is a way of connecting us with our communities so that we can come together and help one another outside of state and charity structures and institutions. This means that we support one another. The group is NOT: - a volunteer coordination centre a professional operation a charity, or anything to do with charities. (Barnet COVID-19 Mutual Aid, n.d.)"	Provision of support for provision of basic essentials for community members	Implied	Qualitative statements and author interpretation (mechanism)
Diz	Community Equity Issues: Communities with weaker bonds less likely to benefit from mechanism; socially excluded within community less likely to benefit	Supporting community members through civic activism (mutual aid groups): Care- centred activism as a means of re-imagining democracy and providing a network of support in spite of lockdown restrictions	"The pandemic provoked a chain reaction of solidarity. While the government was portraying the pandemic as a war (Presidencia del Gobierno, 2020), the GAM pooled their vulnerability and sewed facemasks. Those branded as incapable organized themselves by circumventing the state of alarm. In a mocking tone, some claimed to be 'dealing clandestinely' with masks, escaping the scrutiny of the police and frightened neighbours who didn't like them going out on the street Others claimed to be 'skipping' the state of	Provision of support for provision of basic essentials for community members (potentially in contravention of government guidance)	"This logic of action spurred numerous practices, inside and outside people's homes. Therapists offered what they called a 'friendly ear' on the phone to accompany vulnerable others in their solitude. Listening became a caring gesture, also when confidentially recorded people's needs. Tupperware containers of food were distributed. Resistance funds were set up in shops. Bicycles went round the city with masks. The Housing GAM mobilized to stop evictions and provide shelter, for example, for	Qualitative statements and author interpretation (mechanism)

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			alarm to support the most vulnerable, disobeying the government" GAM enabled neighbours to become engaged in a process of socio-material invention		a refugee couple in flight from anti-LGBTIQ violence in their country. This group also rehearsed a rent strike. On the eve of May Day, they circulated on Twitter and Telegram the hashtag #HuelgaAlquileres, along with this message: 'Many of our neighbours will have to choose between eating and paying rent. Will we continue to put rents above people's lives? If we don't get paid, we don't pay' (GAM Twitter, 30 April 2020). This list of practices is incomplete, but it illustrates a deep affection. While the city hall was not able to rise to the occasion, the GAM were agile and efficient"	
Мао	Community level	Feeling supported through being acknowledged by the community	"Oh, yeah, I've had lovely texts from people saying, you know, 'you've really made such a difference. You know, now that you fixed my anxiety, I've been really worried. I've not been able to sleep knowing that I [inaudible] getting my food and my prescription' and, yeah just little texts like that, and knowing that you	(Implied) Volunteer continuation; Volunteer wellbeing	Being thanked in this way creates a feeling of recognition: of being acknowledged for one's virtuous actions. Additionally, the feedback in this case revealed not only the material, but psychological impact of the participant's actions, and therefore increased	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			really made a difference has been amazing."		their sense of having "made a difference."	
Mao	Community level	Supporting community members through civic activism (mutual aid groups): a demonstration of collective efficacy	"P: actually demonstrating to people, um actually materially improving people's lives through, not charity, through like organisation, making sure we're all organised together, demonstrates this like, demonstrates, like, what power you have when you do, when you are organised together and not atomized in these individual, like not part of the Union, all atomized and all just like transacting, you know, in this like, kind of, transactional kind of society that people are used to."	Provision of support for provision of basic essentials for community members	Implied	Qualitative statements and author interpretation (mechanism)
O'Dwyer	Community Equity Issues: Communities with weaker bonds less likely to benefit from mechanism; socially excluded within community less likely to benefit; Mutual aid viewed as being less	Supporting community members through civic activism (mutual aid groups)	"Our analysis suggests that there is a clear appetite and capacity to bolster "community power" however it cautions against "bureaucratizing" such endeavours and advocates minimal, supportive facilitation by the local and national government."	Provision of support for provision of basic essentials for community members (potentially in contravention of	"The scale of the activities in which participants reported being engaged in some instances resembled a parallel social welfare system, including financial assistance, emotional support, and even a public health component in some cases"	Author interpretation of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	bureaucratic and less likely to enquire about beneficiaries migration status etc.		"Relatedly, we posit that one of the drivers of reported tensions between local councils and mutual aid groups could plausibly be traced to the different models of citizenship inherent in their activities, with the former employing a conceptualization dependent on a determination of legal status, "deservingness" (Andreouli & Dashtipour, 2014), or on a geographical basis, and the latter a broader conceptualization which offers unconditional support from a starting position of trust. From this perspective, the social practices associated with mutual aid are fundamentally a critique of the status quo as they demonstrate the possibility of an alternative, more compassionate, social welfare system."	government guidance)		
Burchell	Social system	Supporting networks between organisations to develop	The second response model identified from the sample focuses around LAs establishing a network of local hubs to coordinate delivery rather than utilising a	Continuation of services (implied)	Implied	Qualitative statements and author interpretation

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
		Coordination	single local infrastructure organisation as the primary coordinator/ facilitator. In these examples, the central response cell utilised the network of hubs to facilitate support across different areas			
Taylor-Collins	Social system	Supporting networks between organisations to develop Coordination	For example, Nanny Biscuit, a community organisation in Flintshire, described a range of support provided by Flintshire Local Voluntary Council (FLVC): We have had weekly (and sometimes daily!) conversations with FLVC	Continuation of services; Efficient service delivery	We have had weekly (and sometimes daily!) conversations with FLVC to help us manage the very fast establishing of such a large infrastructure of food distribution and volunteer management. They have provided a sounding board and have kept us up to date with new issues and provided advice on shaping our offer. They have also provided us with links to other groups and organisations.	Qualitative statements and author interpretation
Altruism				1		
Addario	Individual	Altruism - volunteering without obligation or clear extrinsic incentive	This study also found that participants who were engaging with formal volunteering were more likely to also offer informal help to their family, friends and neighbours without receiving any help in return. They were also more likely to be in mutual informal helping	(Further) Volunteering Behaviour and reinforcing altruism	This study also found that participants who were engaging with formal volunteering were more likely to also offer informal help to their family, friends and neighbours without receiving any help in return. They were also more likely to be in mutual informal helping	Author interpretations of quantitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			out relationships (where they both gave and received specific forms of assistance) than people who avoided formal volunteering.		out relationships (where they both gave and received specific forms of assistance) than people who avoided formal volunteering.	
					This suggests that people who had volunteered before the pandemic and had been forced to stop were more likely to keep helping informally during lockdown when the activities of many formal volunteering organisations ceased.	
Ali	Individual Equity issues identified: Mechanism reported among medical students	Altruism - volunteering because of a sense of duty	"Altruism was certainly a large part of the proning experience as it would not really have been possible to partake in the proning for any reason other than to help and care for others." "'Altruism'. We risked our own health coming to the hospital to help the medical staff and patients."	Volunteering behaviour (implied)	Volunteering behaviour (implied)	Qualitative statements and author interpretations
Badger	Individual Equity issues identified: Mechanism reported among medical students	Altruism - volunteering because of a sense of duty	"From the very beginning of the pandemic I felt the urge to help in any way" "As a medical student, I felt it was my duty to help the NHS and Imperial Trusts as much	Volunteering behaviour	Overwhelmingly, students described altruistic motivations for volunteering, with 98% citing a desire to help	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			as I can in the face of a pandemic"			
Boleman *Counterfactual	Individual	Questionable Altruism - volunteering because of a sense of obligation	"While the majority reported positive experiences, and the reasons that people give for wanting to continue to volunteer are associated with positive mechanisms for change in wellbeing, there are some responses which could be interpreted as potentially negative indicators. In particular, 29% report that they will continue out of "a sense of duty or obligation" and a further 4% because "there is a lack of people to take my place"."	Volunteering behaviour and wellbeing benefits	Overwhelmingly, students described altruistic motivations for volunteering, with 98% citing a desire to help	Author interpretations of the literature
Chawlowska	Individual	Altruism - volunteering because of a sense of duty	Next, we compared the importance of the tangible personal benefit (internship credit) and the intangible normative benefits among the survey respondents. 95.57% (n = 151) of them agreed or strongly agreed with the statement I think it is important to help others, and 77.85% (n = 123) - with I believe that my skills may be of use to the community at	(Further) Volunteering Behaviour and reinforcing altruism	One more aspect of the positive impact of the Pozna'n project on volunteers was the fact that it made them feel useful for the community: they felt needed (75.31%; n = 119) and believed that skills might be of use to the community (77.85%; n = 123)"	Quantitative data and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			this difficult time. In contrast, only 26.58% (n = 42) of the respondents agreed or strongly agreed with the statement I have decided to volunteer mostly to receive a credit for internship			
Chow	Individual Equity issues identified: Mechanism reported among healthcare workers	Altruism - volunteering because of a sense of duty (linked to occupation)	Altruism with an intrinsic desire to help others especially the neglected and vulnerable, to give back to society especially migrant workers who contributed to nation- building, and a sense of moral duty as healthcare workers.	Volunteering behaviour	A physician reflected: "it was largely a sense of duty when we signed up to be healthcare workers we signed up to be healthcare workers for fellow citizens	Qualitative statements and author interpretations
Colibaba	Individual	Altruism - volunteering because of a sense of duty and satisfaction in stepping up	I still love doing the volunteering because you just don't know. It could be your neighbour, relative, or family member. It could be anybody. When they need help, they need help.	Volunteering behaviour	"Even though they keep reminding me how old I amI guess it's just built right into meIf someone is in need, I want to be there. I go. I know that we are protected to the last degree."	Qualitative statements and author interpretations
Elboj-Saso	Individual	Altruism - volunteering because of a sense of duty (to a specific cause/group)	"Among the motivations, the ones most mentioned were those that were grouped into the variables "helping in a project that supports children from disadvantaged families" and "I enjoy reading"	Volunteering behaviour (implied - motivations for volunteering)	Volunteering behaviour (implied - motivations for volunteering)	Author interpretations based on mixed methods data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Forsyth	Individual	Altruism interactions with extrinsic motivators	Nevertheless, intrinsic and extrinsic motivators also interacted to reinforce the desire to volunteer, such as where volunteers recognised that they would be helping others alongside receiving personal benefit. "Helping people is a big part of it. I think there's a double benefit that I kind of get something out of it as well."Consequently, intrinsic and extrinsic motivations 	Volunteering behaviour (implied - motivations for volunteering)	Volunteering behaviour (implied - motivations for volunteering)	Author interpretations based on mixed methods data
Grey	Individual	Altruism interactions with extrinsic motivators	Altruism - gratitude - feeling wanting to contribute to communities that have been supportive	Volunteering behaviour	I've always had ties to my birthplace, but I felt that it had given me so much that I took from the area and now that I'm retired after 38 years of teaching, I knew there was a lot I could give back and it seems my time to give a little bit of payback you know.	Author interpretations based on mixed methods data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Grey	Individual	Altruism - volunteering because of a sense of duty	For new volunteers, feeling able to help was important (89.7% compared to 83.7% of continued volunteers)	Volunteering behaviour	For new volunteers, feeling able to help was important (89.7% compared to 83.7% of continued volunteers)	Author interpretations based on mixed methods data
Lee	Individual Equity issues identified: Mechanism reported among healthcare workers	Altruism - volunteering because of a sense of duty (linked to occupation)	Many participants had a desire to be helpful during the emerging pandemic situation. They regarded working in the COVID-19 medical support sites as their essential duty as a nurse during a national disaster. Beyond the duty to serve the nation and community, several participants said they had volunteered because they knew that other nurses working on the COVID-19 frontlines were facing hardship. Participants wanted to help other nurses who were taking care of patients with actual or suspected COVID-19.	Volunteering behaviour	They regarded working in the COVID-19 medical support sites as their essential duty as a nurse during a national disaster.	Qualitative statements and author interpretations
Tong	Individual	Altruism - volunteering because of a sense of duty (linked to occupation)	Participants expressed a strong desire to help those who were greatly impacted by the emerging pandemic, especially given that their home hospitals were not experiencing a similar surge at that time In addition to providing support for patients and loved ones, many	Volunteering behaviour	"In San Francisco, we barely had a COVID case in the hospital, like it was unrecognizable, compared to what we were experiencing via telehealth in New York" "Participants described varying mechanisms of initial discomfort, including anxiety over not being able to deliver	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			participants emphasized their desire to alleviate the burden of providers at the host institution.		satisfactory care and unease while adjusting to delivering virtual care during a public health emergency. Many felt that their involvement was only a small contribution given the overwhelming nature of the surge, leaving them with "intense feeling[s] of wanting to do more."	
Alalouf-Hall	Social system	Altruism (mass altruism at a public level)	CABs normally do have the resources needed to be able to give volunteers the structure they need, but the influx from March 26 and April 14 was simply too big— contacting and placing the 20,000 people who registered in two weeks was beyond our organizational capacity	Volunteering behaviour; Administrativ e burden among agencies	For the CAB, managing the volunteer bank generated by Je Bénévole, orienting the people who contacted us wanting to get involved, etc., took up a lot of time and really made a dent in our resources. That said, the number of individuals integrated into the voluntary sector is substantial. From the time of the government's appeal on March 26 until the end of 2020, about 40,000 applications were submitted to Je Bénévole. Roughly half of the applicants were accepted and integrated into the sector.	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Ntonis *Counterfactual example	Social system	Altruism (mass altruism at a public level)	Mass altruism in the first lockdown was not replicated during the second This could be due to a range of reasons after the first pandemic wave or at the onset of the second wave people might not have experienced a sense of unity that became the basis for social support. This might have happened for a range of reasons. For example, following the first wave, and during the summer of 2020, some people might have returned to experiencing some sense of normality. Others might have come to feel familiar with the pandemic and with restrictions such as lockdowns, resulting in not re-experiencing the novelty and the sense of camaraderie and community that characterized the first pandemic wave.	Volunteering behaviour	Despite cases during the second wave (and by extension the needs for support) being very high and similar to the first wave, ourdata do not show a re-mobilization of social support similar to the March-April 2020 period.	Author interpretation of quantitative data
Taylor-Collins *Counterfactual example	Social system	Altruism (mass altruism at a public level)	Mass altruism in the first lockdown was not replicated during the second	Volunteering behaviour	This could also be seen in Bridgend, where organisers of the Building Resilient Communities/Communit y Companions scheme saw an increase in	Author interpretation of qualitative data
Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
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					volunteers early in the pandemic because people wanted to help those who were vulnerable or lonely." "However, they subsequently found it more difficult to recruit telephone befrienders later in the year due to individuals returning to work after being furloughed and many volunteers growing tired of staying indoors and wanting more active roles outside of the home.	
Coordination- \rightarrow	work more effectively/ avo	id publication/info				-
Amy et al., (2021)	Systems	Coordination	"mutual understanding and trust in place were important for collaborative working. Established relationships pre-pandemic were seen as a key advantage, as it enabled organisations to come together and act quickly" p. 10 "Funding was identified as an enabler to collaboration, allowing for innovative local authority and voluntary sector collaboration." P. 10	Funding and collaboration and sharing information	"Funding was identified as an enabler to collaboration, allowing for innovative local authority and voluntary sector collaboration." P.10 "Partnerships such as the VCSEP were seen by some to support the communication and coordination between national and local levels, and there was a desire to take learnings from this group and develop it further for the future" p. 12	Author interpretation of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Avdoulous et al., 2021	Systems	Coordination	"One community organisation praised collaborative working for reducing cross organisational rivalry, explaining." P.11	Working more effectively	"We've had to work quite competitively with fellow organisations just by nature of how services have been commissioned and stuff in the past We're now working a lot closer with each other. There are a couple of other infrastructure organisations in the local area, working together a lot more positively, openly, quite closely really, in ways that I don't think anybody ever would have seen coming (Community Organisation, North East)	Qualitative statements and author interpretations
Boelman et al., (2021)	Systems	Coordination	"The concept of mutualism, with its emphasis on horizontal relationships and two- way commitments between people, represents a radical divergence from both traditional public services and traditional volunteerism. In this sense, Mutual Aid groups have offered us a glimpse of something powerful and different". (Tiratelli & Kaye, 2020)" p. 35	Working more effectively	"In Wales, research found that over time, the interactions between public sector and community sector developed, "drawing strength from their difference, with the benefits of community action often stemming directly from its separation from the state, and vice versa" (Havers et al., 2021).	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			"innovative partnerships that included third sector and/or volunteer-led groups, working more closely alongside public and private sector bodies." "The flourishing of new, flexible, and more collaborative ways of working has been seen across the UK, such as in Merthyr Tydfil where housing associations and social businesses collaborated to meet essential needs in the first weeks of the pandemic (Coutts et al., 2021)."			
Burchell et al., 2020	Community, Systems	Coordination	"For those LAs in the sample utilising this model, respondents emphasised that its effectiveness was based upon a strong existing relationship between the LA and the local infrastructure organisation". p.10 "Existing community embedded structures such as Local Area Coordination, social prescribing and other Asset Based Community Development (ABCD)	Working more effectively	"This enabled the local infrastructure organisation to direct support requests to the right organisations with the best skillsets, available local volunteers etc." p. 10 "These command structures were often multi-agency collaborations with members coming from a broad range of organisations and departments. This represented a significant	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			based models offered strong community networks and asset- focused frameworks that were utilised, where available, to help provide local knowledge and coordinate responses." P.8 "In most cases, coordination of the community response was based around cross- sectoral response cells."p.7		transition away from more traditional silo working towards a place- based response. This process of bringing together organisations and different LA departments was highlighted as a key dimension in creating a successful coordination framework. P.7	
Bynner et al., 2020	Systems	Coordination	"The pre-pandemic aspiration of local officials to develop new cross- sector collaborations in response to support the implementation of community empowerment legislation2 aligned with the now urgent and practical need to coordinate services at a local level." P 7	Working more effectively	"These collaborative processes between local state officials and local groups in the Corbett authority quickly developed to meet the most immediate needs. New local cross-sector networks enabled a targeted, place-based service response adapted to the specific needs of different communities." P.7	Qualitative statements and author interpretations
Chevee A., (2022)	Community	Coordination	" Based on their local knowledge of what was immediately needed, Mutual Aid groups presented high adaptability. Very early in the lockdown, they diversified their panel of solidarity activities, sometimes in	Having different approaches of working/ sharing information	"They also organized social activities to respond to what became an anxious demand for social interaction. Online pub quizzes, window-drawing competi- tions for kids, and free online yoga classes proliferated, in addition to the 'friendly call' proposed on every	Author interpretation of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			coordination with charities and other organizations. Among other things, they centralized donations for foodbanks, delivered free hot meals, set up seed swaps, helped people find accommodation after expulsion, and created online workshops on community-organizing, or to raise awareness on issues like racism and domestic violence." P. 4		leaflet. While physical interaction in London was drastically reduced under lockdown, Mutual Aid group members engaged in intense social interaction online." P.4 "In fact, five borough groups (Harringay, Hackney, Camden, Barnet and Brent) insisted on their Facebook that their role was only to help 'coordinate', 'support' or 'connect' Mutual Aid groups together and share information. Their role was to be a hub, not a super-structure, and to allow groups to adapt their structures and activities to local needs: This group is for grassroots mutual aid across the borough of Haringey. We want to support coordination; we don't want to centralise or create a grand plan we want everyone to follow to the letter."p.5	
Forsyth et al., 2021	Systems	Coordination	"Partnerships between community groups and other frontline organisations - these enabled organisations to	Working more effectively and avoid duplication	"Partnerships between community groups and other frontline organisations - these enabled organisations to utilise local knowledge	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			utilise local knowledge to understand needs and meet rising demand whilst avoiding the duplication of support. P.21		to understand needs and meet rising demand whilst avoiding the duplication of support." "community hub to coordinate delivery of services said that this helped the sector meet rising demand, by directing volunteers to organisations where they were most needed. "What we found was that there were lots of organisations in that all of a sudden, because of a massive increase in demand for their services, they needed a massive increase in volunteers. So what we were able to do through our very sophisticated database, and very large cohort of volunteers that we've managed to recruit, was then identify volunteers that we could send them off in batches, to these organisations and fulfil their needs very swiftly". (Stakeholder, Community group) P. 21	
Grey et al., 2021	Community, Systems	Coordination	""Some community-led groups also worked closely with local external agencies (e.g. schools, third sector support organisations,	Working more effectively, having different approaches of working, and	"mapping exercises to understand what services and support charities, third sector groups, and community groups were providing and what geographical	Qualitative statements and author interpretations

Study	Level and Context/Equity issues	Mechanism	Evidence	Outcome	Evidence	Type of evidence
	reported					
	Context/Equity issues		local authority) to help identify individuals who were vulnerable and in need of support (e.g. where shielded households were living), or to help official agencies in a support capacity to meet demand." P.20	avoid duplication	coverage, as well as identifying gaps or duplication in support provision" p, 21 Most local authorities set up locality-based response teams or "community hubs", integrating local organisations, community leaders, and community groups into locality response pathways. In some areas, coordinators were redeployed staff, individuals from community and partnership teams who already knew the area well and had previously developed close links with the community leaders and existing	
					volunteers. In areas where existing community connectors or an equivalent scheme were in place, this was also built upon." "The local authority response to the pandemic was to set up community hubs. So, they used their redeployed staff or their shielding staff to run, to set up four hubs in those main towns. They gathered all the	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					happening, what were the assets, who was helping in those towns, and they gathered that information to make the links between those provisions. So, everybody started to know each other outside their towns or the area that they provided service for. (Strategic Lead, Blaenau Gwent)" "Lots of staff were drafted in to help a particular area of the county, in that they would be there to be a point of contact for any community volunteers, community leaders to support them if things were going wrong, if they knew of people who needed more extreme support. So, that was a fantastic model of supporting the response from the community, was absolutely A* in my view. (Strategic Lead,	
					Monmouthshire) p.20 Some community-led group coordinators also reflected that using the community Facebook page for monitoring referrals was inadequate and unsuitable, due to	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Rees et al., 2021	Systems	(lack) of Coordination	"Some respondents noted that the lack of clarity about the regulations caused confusion and duplication" p. 8	Avoid duplication	the challenges in keeping up with surges of demands and personal information attached to requests. To address this, some groups creatively harnessed resources they had access to, ranging from simple tools such as Google Drive to specific software management systems (e.g. Jira)." P.27 "Some respondents noted that the lack of clarity about the regulations caused confusion and duplication. When people were asked to shield, support was immediately put in place such as shopping and prescription collection and delivery but then, for example, a local authority set up a volunteer-involving service to undertake the same tasks. It was felt that 'it might have been less confusing if the resources went directly to the voluntary organisations and the infrastructures (CVCs) that supported them. If [sic.] was helpful that the Coronavirus Act	Qualitative statements and author interpretations
					less confusing if the resources went directly to the voluntary organisations and the infrastructures (CVCs) that supported them. If [sic.] was helpful that	

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					volunteer recruitment to be done quickly' (031, Local infrastructure organisation" p. 8	
Randall et al., 2022	Community and systems	Coordination	"the complementary form of relationship involved a level of collaborative work- ing between the mutual aid group and their local authority, charities, and other formal organizations within civil society" p,14	having different approaches of working, avoid duplication, sharing information	"This example highlights the change in type of relationship compared to the first stage where the mutual aid group was acting in a supplementary role and had little to no interaction with the public sector. While the local authority was still not providing the service in this example, it does show an instance of complementary collaboration that was repeated more frequently in this stage.	Author interpretations of qualitative data
Research Work Limited 2021	Systems	Coordination	"Multiple agencies using volunteer passport systems"	Avoid duplication, managing volunteer mobilisation	"VIO respondents and stakeholders explained passporting reduced duplication in volunteer vetting and training, thus saving time and cost to both volunteers and VIOs." P.18 They used a Facebook page to share information including: opening hours changing; businesses offering deliveries or closing altogether; updates from the local authority	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					and NHS; stories from the media; requests for help, or requests for advice and information." P. 6	
Shukra	Systems	Coordination	"The Hub started life as a unique collaboration of five organisations, gradually expanding to include a wider range of partners," p.11	Working more effectively and funding	" the Council was already providing funds to some of the main partner organisations, it was this particular relationship that allowed the organisations to agree a suspension of normal duties and redeployment to the COVID-19 emergency response." p.11	Author interpretations of qualitative data
Knearem et al., 20221	Systems	Coordination	"members willingly exchanged contact information to work on initiatives and facilitate aid exchange. P.3	Sharing information	members willingly exchanged contact information to work on initiatives and facilitate aid exchange." P. 3	Author interpretations of qualitative data
Mao et al., (2021)	Systems	Coordination	"Champions receive messages through WhatsApp or email most days, including infographics which are available in a variety of languages." P.11	Sharing information	"These volunteers were given the latest information about COVID-19 and were asked to share this information in their community, whilst feeding back which communications are effective, and which are no" " 57% of volunteers in mutual aid groups also	Author interpretations of quantitative and qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					supported their neighbours by providing information about the virus." P.11	
Senedd et al., (2021)	Systems	Coordination	"The Welsh NHS Confederation told us that one of the challenges was the "range and amount" of guidance emanating from the UK and Welsh Government both at the outset and throughout the pandemic. They outlined, how they had used their already established policy forum, which has over health and care organisations share information with the likes of WCVA, and Macmillan, then enabling those organisations to "distribute that information both within their communication channels and to their service users." P.20-21	Sharing information/ Avoid duplication	" SCVS said that one of their priorities was on "communicating information both internally and externally." They reconfigured their website, to include a COVID-19 micro-site, with sections focused on volunteering; where individuals could access support; and information for third sector organisations. "In our focus groups, we heard of the challenges some groups found in terms of disseminating information. Participants told us about the challenge of often finding the most up to date information; and that there was sometimes duplication between communication at a local and a national level." P 20	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Soden R ; Owen E (2021)	Community	Coordination	"Mutual aid groups also debated how to sustain themselves institutionally and financially without clear models to work from. The question of whether to formally register as nonprofit organizations arose frequently in discussions about sustainability. Many groups felt hamstrung without formal status, lacking bank accounts and unable to take funds directly or access government grants and other resources that established non-profits rely on."p.12	New way of working- becoming a more formal organisation	"whether advocacy efforts by mutual aid groups should focus on demanding the government provide essential services and support to communities during disaster or aim to build autonomous support networks outside of government, continue" p,12	Author interpretations of qualitative data
	ing up (Tentative)	ing opportunities/id	lentifying resources, making t	cimely decisions,	-	ations, naving new
Boelman (2021)	Community	Trust and sense of community	" the chance to connect with others, and it gave them a sense of individual and collective pride in their actions." " fostered a strong sense of community among social workers. P.29	Volunteering opportunities	"The author concludes by noting that:" "supported social workers' advocacy for their and others' needs" p.29	Author interpretations of qualitative data
Burchell et al., (2020)	Community	Trust and sense of community	"pre-existing levels of trust and collaboration, groups were able to coordinate a quick response and share and	Constructing new social relations, volunteering opportunities	"As well as existing relationships of trust, interviewees also discussed how adopting partnership approaches	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
			distribute roles and responsibilities." P.6		helped them to engage with new groups." P.7	
Diz et al., (2021)	Community	Trust and sense of community	"In A Coruña, organizing the community network enabled these people to become neighbours in the pandemic. Being a neighbour meant shedding their particular iden- tities, taking an interest in others and caring for them through the GAM." P.15	Sense of community/ Volunteering opportunities	In our interviews, mutual aid was often described as a chain. Gloria, a woman in her thirties who defined herself as a GAM volunteer despite her activist experience in autonomous movements, described this idea with great sensitivity: 'It's like a chain. I'm one link and you're another'," "The pandemic worked as a collective affect bringing everyone together in the same atmosphere, p.17	Author interpretations of qualitative data
Fernandes-Jesus et al., 2021	Community	Trust and sense of community	"Overall, participants expressed the importance of building trust between the mutual aid group and the community, and in particular trust with established organizations and bodies; other support groups; and the sections of the community most in need." P.8	Sense of community. Constructing new social relations	"These participants tended to describe the local community as more connected and cohesive in relation to the pandemic, and that mutual aid groups experienced during the pandemic have shown that it is possible to "to bring everyone together" p.11	Qualitative statements and author interpretations

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
					"Finally, for those participating in organized help, new community bonds and ties have been created, which is in line with previous arguments that practices of solidarity often involve the construction of different and new social relations (Drury et al., 2019; Playerer, 2020), P. 12	
Grey et al., (2022)	Community	Trust and sense of community	"Community groups worked closely with the wider public and third sector organisations and had the advantage of agility, operating from a position of trust" p.20	Making timely decisions	Pleyers, 2020). P.13 "Community groups worked closely with the wider public and third sector organisations and had the advantage of agility, operating from a position of trust, with the ability to make decisions quickly and flexibly respond to changing priorities." P.20	Author interpretations of qualitative data
Knearem et al., (2021	Community	Trust and sense of community	"Possibly due to trust that was developed between people in the group [8], members willingly exchanged contact information to work on initiatives and facilitate aid exchange.P.3	Having new relationships/ sharing information	"Localized offline disaster relief builds weak ties between community members and strengthens community bonding, which is an attribute of resilient communities" p.3	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Mao et al., 2021	Community	(lack of) Trust and sense of community	" By contrast, smaller mutual aid groups who attempted to scale up their operations beyond street level often found that they were lacking in organisation, coordination, local relationships, and trust [30]."p.10	Scaling up	" By contrast, smaller mutual aid groups who attempted to scale up their operations beyond street level often found that they were lacking in organisation, coordination, local relationships, and trust [30]. This was the case with a group formed in Dalston, London, which quickly attracted hundreds of volunteers but was unable to attract requests for support due to distrust from the local community" p. 10	Author interpretations of qualitative data
Senedd et al., (2021)	Community	Trust and sense of community	"Practical cooperation at community level was often good with local authorities though willingness to trust community groups has been very mixed. Pre- existing relationships (which contributed to levels of trust) were a major predictor of close working links during Lockdown.	Having new relationships	"However, the crisis did help breakdown some of the pre-crisis barriers to co- operation such as poor communication, risk aversion and silo working, as people in both the statutory and voluntary sectors were driven overwhelmingly by the crisis to do things differently. P. 25	Author interpretations of qualitative data

Study	Level and Context/Equity issues reported	Mechanism	Evidence	Outcome	Evidence	Type of evidence
Volunteer Scotland, 2022	Community	Trust and sense of community	"Scottish Government's trust in third sector representatives was critical in informing and guiding the rollout and management of the Scotland Cares campaign" p.136	Having new relationships	"There is also an opportunity to reflect on the wider contribution of mutual aid groups in improving community engagement and cohesiveness. COVID-19 has resulted in communities coming together, where people forge new relationships and support each other"	Author interpretation

Appendix 5 - Rapid Realist Review Checklist

Section	Checklist Items		Reported
Title			
1		In the title, identify the document as a realist review	Title page
Abstract			
2		While acknowledging publication requirements and house style, abstracts should ideally contain brief details of: the study's background, review question or objectives; search strategy; methods of selection, appraisal, analysis and synthesis of sources; main results; and implications for practice.	Executive summary
Introductio	on	•	
3	Rationale for review	Explain why the review is needed and what it is likely to contribute to existing understanding of the topic area.	Introduction and Methods chapters
4	Objectives and focus of review	State the objective(s) of the review and/or the review question(s). Define and provide a rationale for the focus of the review.	Introduction chapter
Methods			
5	Changes in the review process	Any changes made to the review process that was initially planned should be briefly described and justified.	Methods chapter
6	Rationale for using realist synthesis	Explain why realist synthesis was considered the most appropriate method to use.	Methods chapter
7	Scoping the literature	Describe and justify the initial process of exploratory scoping of the literature.	Methods chapter
8	Searching processes	While considering specific requirements of the journal or other publication outlet, state and provide a rationale for how the iterative searching was done.Provide details on all the sources accessed for information in the review.Where searching in electronic databases has taken place, the details should include, for example, name of database, search terms, dates of coverage and date	Methods chapter

Section	Checklist Items		Reported
		last searched. If individuals familiar with the relevant literature and/or topic area were contacted, indicate how they were identified and selected.	
9	Selection and appraisal of research findings	Explain how judgements were made about including and excluding data	Methods chapter
10	Data extraction	Describe and explain which data or information were extracted from the included documents and justify this selection.	Methods chapter
11	Analysis and synthesis processes	Describe the analysis and synthesis processes in detail. This section should include information on the constructs analysed and describe the analytic process.	Methods chapter
Results	·	•	•
12	Document flow diagram	Provide details on the number of documents assessed for eligibility and included in the review with reasons for exclusion at each stage as well as an indication of their source of origin (for example, from searching databases, reference lists and so on). You may consider using the example templates (which are likely to need modification to suit the data) that are provided.	Figure A
13	Document characteristics	Provide information on the characteristics of the documents included in the review	Results chapter and Appendix 3
14	Main findings	Present the key findings with a specific focus on theory building and testing.	Results chapter
15	Summary of findings	Summarise the main findings, taking into account the review's objective(s), research question(s), focus and intended audience(s).	Discussion and conclusions
16	Strengths, limitations and future research directions	Discuss both the strengths of the review and its limitations. These should include (but need not be restricted to) (a) consideration of all the steps in the review process and (b) comment on the overall strength of evidence supporting	Discussion and conclusions

Section	Checklist Items		Reported
		the explanatory insights which emerged.	
		The limitations identified may point to	
		areas where further work is needed.	
17	Comparison with	Where applicable, compare and contrast	All chapters
	existing	the review's findings with the existing	
	literature	literature (for example, other reviews)	
		on the same topic.	
18	Conclusion and	List the main implications of the findings	Discussion and
	recommendations	and place these in the context of other	conclusion
		relevant literature. If appropriate, offer	
		recommendations for policy and	
		practice.	
19	Funding	Provide details of funding source (if any)	N/A
		for the review, the role played by the	
		funder (if any) and any conflicts of	
		interests of the reviewers	

Adapted from Wong et al., 2013 and Dickson et al., 2016

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