INTRODUCTION
The emergence of localised community-led “Mutual Aid” groups has proven a valuable asset in the emergency response to the Covid-19 Pandemic. Even though such emergent groups of citizens are commonly seen in disasters, emergency plans rarely make provisions for including them. With the intention of aiding emergency planning, this research report builds a model of the Emergent Mutual Aid Facebook Group using socio-economic population data, structured questionnaire responses and information collected from Facebook group “about” information.

Summary of Findings

• Groups are self-organised at the grassroots level by small groups of individuals adopting a self-autonomous, horizontal mode of organisation.

• Social media is a key factor in the response efforts and overcoming social distancing guidelines.

• Borough-level group membership sizes increase with the percentage of a population aged 25-34 and decrease inversely with crime rate and the percentage of a population characterised as BAME.

• Groups were most likely formed as an indirect response to the inadequacies of institutional responses.

What is Mutual Aid?
‘Mutual aid’ has varying interpretations across different fields of study. From the literature we propose the following definition:

“A horizontally structured relationship between voluntary participants from which help or aid are available mutually between parties, at each’s own discretion, in the face of adversity—most commonly a shared one—unsanctioned by an overriding authority.”

Emergent Groups
As a common feature of disasters, emergent groups form to respond to tasks that are not being met by existing institutions. They may facilitate such purposes as SAR operations, shelter building, information sharing, etc. Despite their regularity, London Resilience Partnership Pandemic Influenza Framework (LRPPI) (2018) makes no reference to the inclusion or expectation of emergent groups.

Implications of Study
The resulting model provides a basis for predicting the scale and speed of emergent community activity responding to a viral pandemic using socio-economic population data.

Suggestions are made for implementing Mutual Aid emergence in emergency plans, including expected working capacity of individuals and groups and types of tasks fulfilled by them.
1. Organisational Structure

Administrators of Mutual Aid Facebook groups were approached with a questionnaire. The summary of results are as follows.

Mutual Aid Facebook groups were non-hierarchical, independent of existing institutions, with no traditional “leaders”. However, Administrative roles were common as well as dedicated coordinators managing various aspects of group activity (table 1).

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<tr>
<th>Table 1. List of roles seen in Mutual Aid Facebook Groups</th>
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<td>External coordinator for support organisation</td>
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<td>Facebook group moderator</td>
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<tr>
<td>Flyering coordinator</td>
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<td>Funds management</td>
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Requests for help by residents are made through localised numbers, email, online request forms, central phoneline. To coordinate and communicate these requests among volunteers, the Whatsapp text messaging service is commonly used.

One respondent specified that other administrative tasks were made available to those volunteering for administrative roles and occupied based on what they felt comfortable with.

2. Emergence of Mutual Aid Groups

The majority of groups formed within the immediate days following the 12th March, with a progressively slower growth of total number of groups over time. This was generally prior to and independent of the responses of existing institutions.

3. Socio-economic factors affect membership

Based on Borough-level group membership sizes and socio-economic population data, an increase in the percentage of those in the age group 25-34 increases the rate of membership by 11%. By contrast, a unit increase in the percentage of those characterised in the BAME demographic shows a decrease in the rate of membership by 2%. Additionally, a unit increase in the rate of crime per thousand was modestly associated with a decrease in the rate of membership by 2%.

4. Tasks fulfilled by Mutual Aid volunteers

Of the respondents that had provided mutual aid volunteering, 74% had volunteered to shop for groceries, 46% picked up prescriptions, 44% provided advice and information, 35% provided emotional support, and 47% had provided some other form of mutual aid (table 2).

Averaging individual volunteer contributions over 90 days the following four main tasks can be fulfilled:

<table>
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<th>Table 2. Other tasks fulfilled by volunteers.</th>
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<td>Phone service</td>
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<td>Poster making</td>
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<td>Admin support</td>
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<td>Information research</td>
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<td>Befriending</td>
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5. Improving Social Capital

Social Capital has been related to higher levels of volunteering. 75% of Mutual Aid volunteers had volunteered in some capacity before, while, of those that hadn’t, 80% felt they were likely to volunteer in the future.

The effect of socio-economic factors on membership rates suggests that social capital has a bearing on mutual aid emergence.

48% of mutual aid volunteers had made personal or professional connections as a result of their work within the mutual aid group, suggesting that mutual aid volunteering increase social capital.

6. Social Media

Social media and online messaging services such as Facebook and Whatsapp have been instrumental in connecting coordinators, volunteers and those in need, overcoming the restrictions of social distancing guidelines.

Its usage reduces the dependency for emergence on existing social networks within the community and is shown to connect large groups of previously unconnected citizens quickly.

Implications for Emergency Planning

- We have presented a third tool with which to assess the expectations of emergence and therefore make necessary alterations in how they plan for emergencies.
- There is an innate community resource that activates at times of crisis. This resource is flexible and responsive to the needs of the public at the grassroots level. Recognition of the inevitability of such emergent activity would legitimise the efforts of groups and empower the groups with more outreach and therefore capacity.
- Mutual Aid groups provided help with tasks not yet offered by existing institutions and prior to the Government lockdown. Planners can assess inadequacies of institutional responses using the responses of the public.
- Online technologies and social media is an effective way of organising community action during disasters.
- Preparing policy and personnel dedicated to monitoring activity of online Mutual Aid group emergence would encourage the building of connections, facilitate collaborations. Understanding their motivations and workings of such emergent activity can increase the effectiveness of their innate resources and reduce operational conflict.

Limitations

‘BAME’, is not an adequate classification for reflecting cultural and ethnic diversity in London and the results could be misleading. A larger sample size which can withstand regression analysis with more variables would be useful in further determining socioeconomic factors of emergence including more specific ethnic diversities.