

Covid-19 on Twitter

Mapping the actors, their relations and sub-groups

published on March 31, 2020 by [Clément Levallois](#), Associate Professor at [emlyon business school](#)

Based on the methodology published in ([free pdf download](#)):

Benabdulkrim, M., Levallois, C., Savinien, J., & Robardet, C. (2020). Opening Fields: A Methodological Contribution to the Identification of Heterogeneous Actors in Unbounded Relational Orders. *M@n@gement*, 23(1), 4-18.

<https://doi.org/10.37725/mgmt.v23.4245>

Contact: levallois@em-lyon.com or @seinecle on Twitter

Very brief note on these pictures

1. I selected 3 Twitter accounts: [@COVID19Tracking](#) [@CoronavirusESP](#) and [@ItaliaCovid19](#)
2. Then our algorithm identified thousands of similar Twitter accounts, based on the [Twitter lists](#) they share
3. The pictures show similar Twitter accounts next to each other. Groups of closely similar Twitter accounts are shown **in different colors**.
4. Text analysis: for each group of Twitter accounts, an algorithm identifies the most relevant words (most frequent words in the Twitter bios of the members of the group)

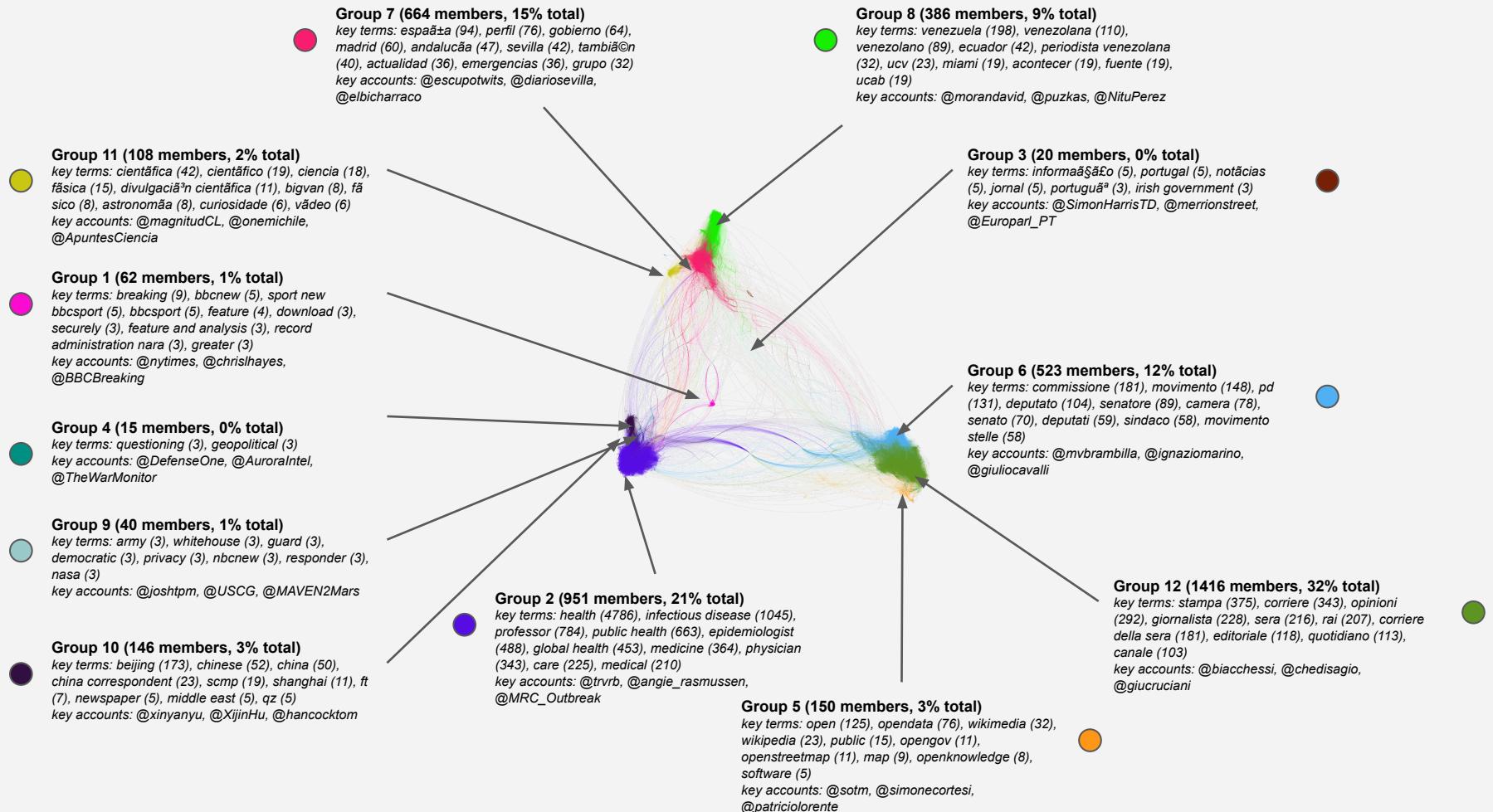
See this free

Objectives and disclaimer

- These maps are provided ‘as is’, in the hope they will be useful to the individuals and organizations trying to make sense of the epidemics (journalists? NGOs? Governments?)
- Get in touch at levallois@em-lyon.com for questions and further research

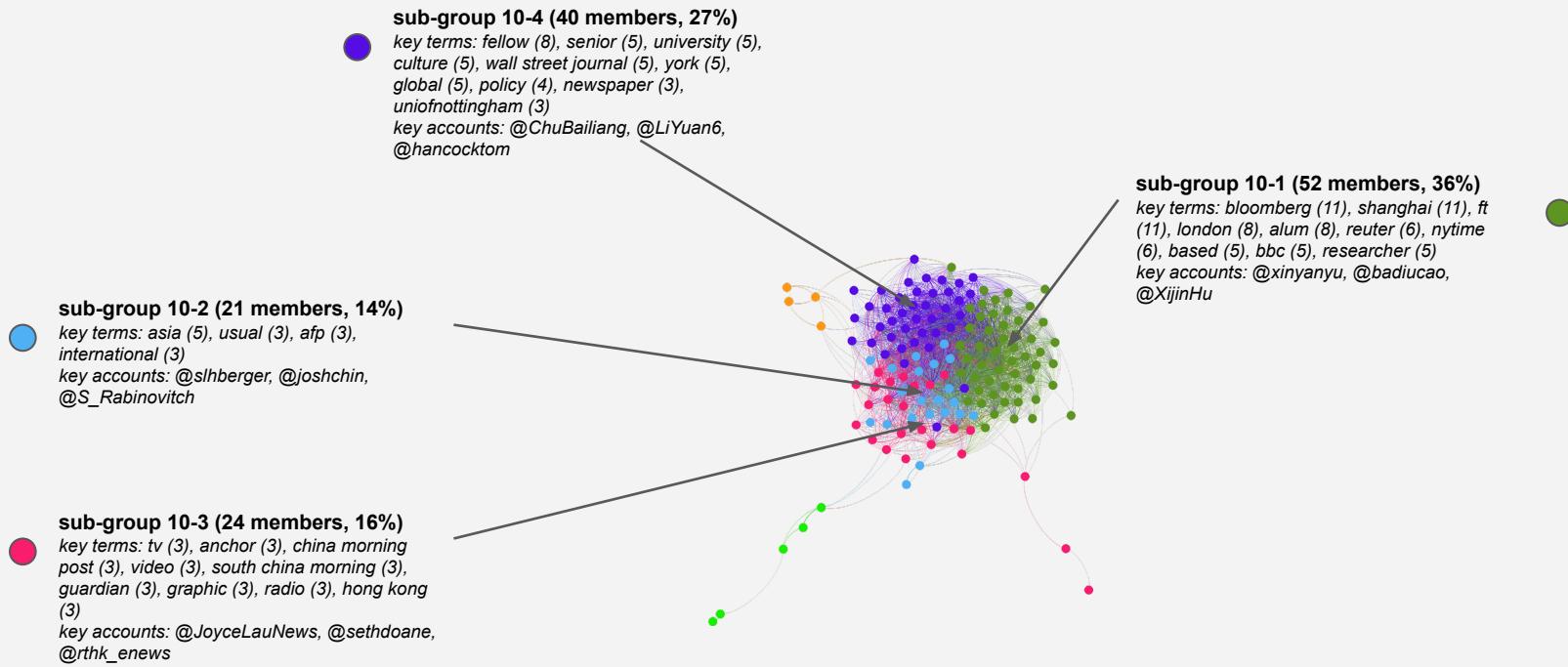
Global picture

4,486 Twitter accounts

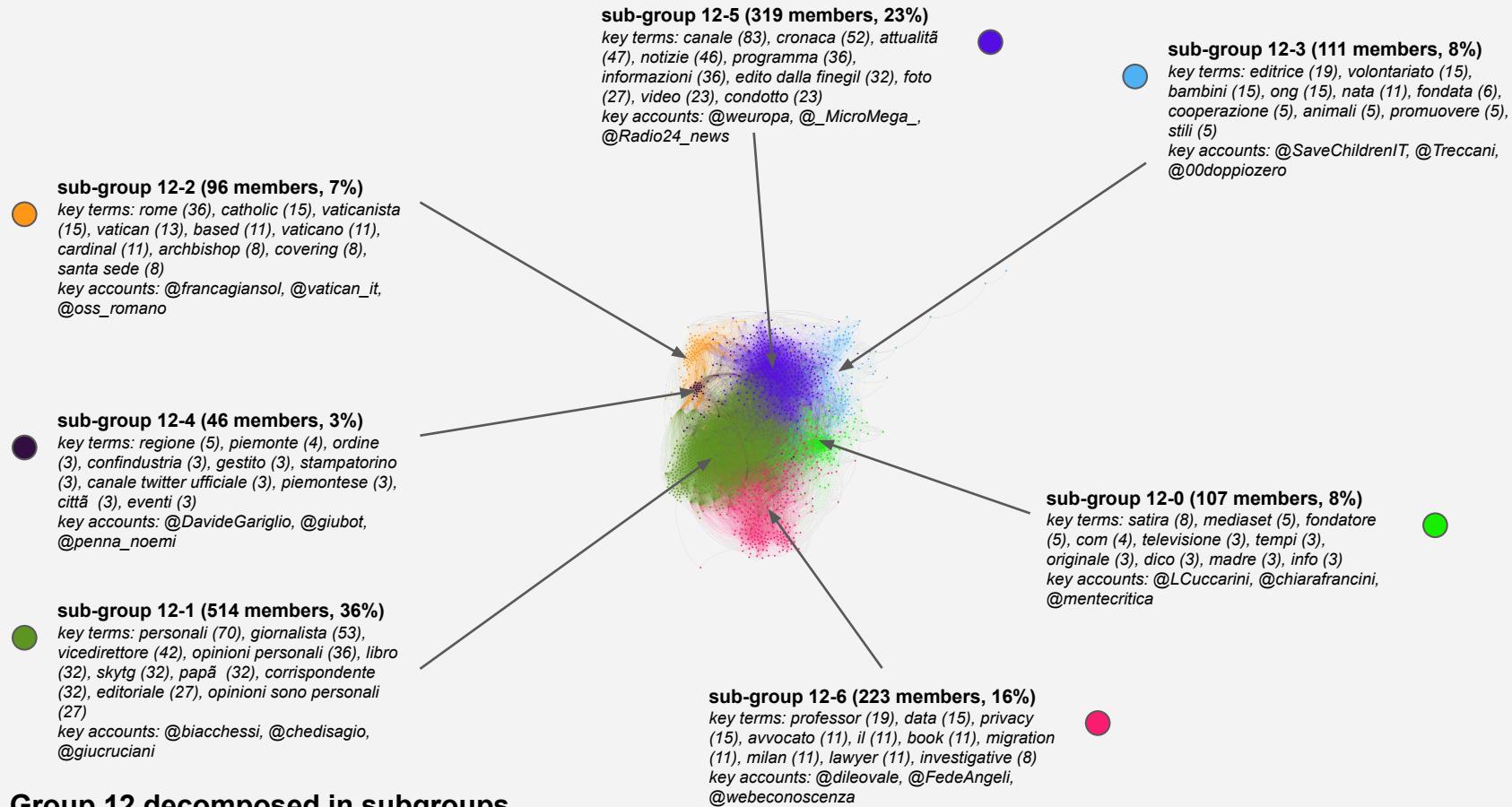


Zoom on key groups

*The following slides zoom on one of the colored regions
of the global picture*



Group 10 decomposed in subgroups.
146 members. Key terms: china, beijing, correspondent



Key group - worth further investigation!

sub-group 2-1 (311 members, 33%)

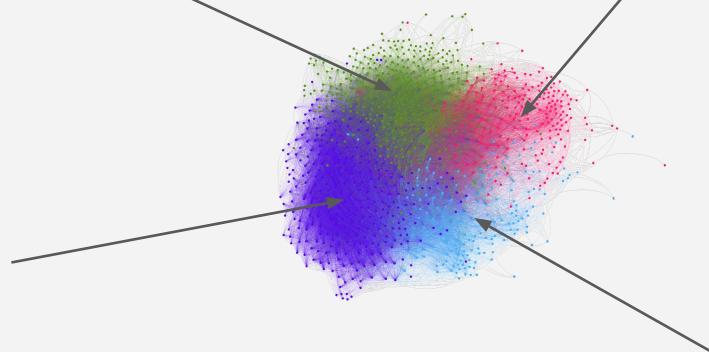
key terms: coronavirus (207), source (32), covid (20), nyc (19), global (15), update (15), covid coronavirus (15), report (15), analysis (15), disaster (15)
key accounts: @trvrb, @angie_rasmussen, @MRC_Outbreak

sub-group 2-3 (281 members, 30%)

key terms: epidemiologist (42), epidemiology (31), infectious disease epidemiologist (26), postdoc (23), mathematical (23), influenza (21), dept (19), epi (19), study (18), studying (18)
key accounts: @SaskiaPopescu, @CT_Bergstrom, @JenniferNuzzo

sub-group 2-2 (193 members, 20%)

key terms: statnew (16), columnist (15), health reporter (15), reporter (13), globe (11), leading (11), pharma (11), write (11), wsj (11), care (10)
key accounts: @Atul_Gawande, @EricTopol, @ashishkjha



sub-group 2-0 (166 members, 17%)

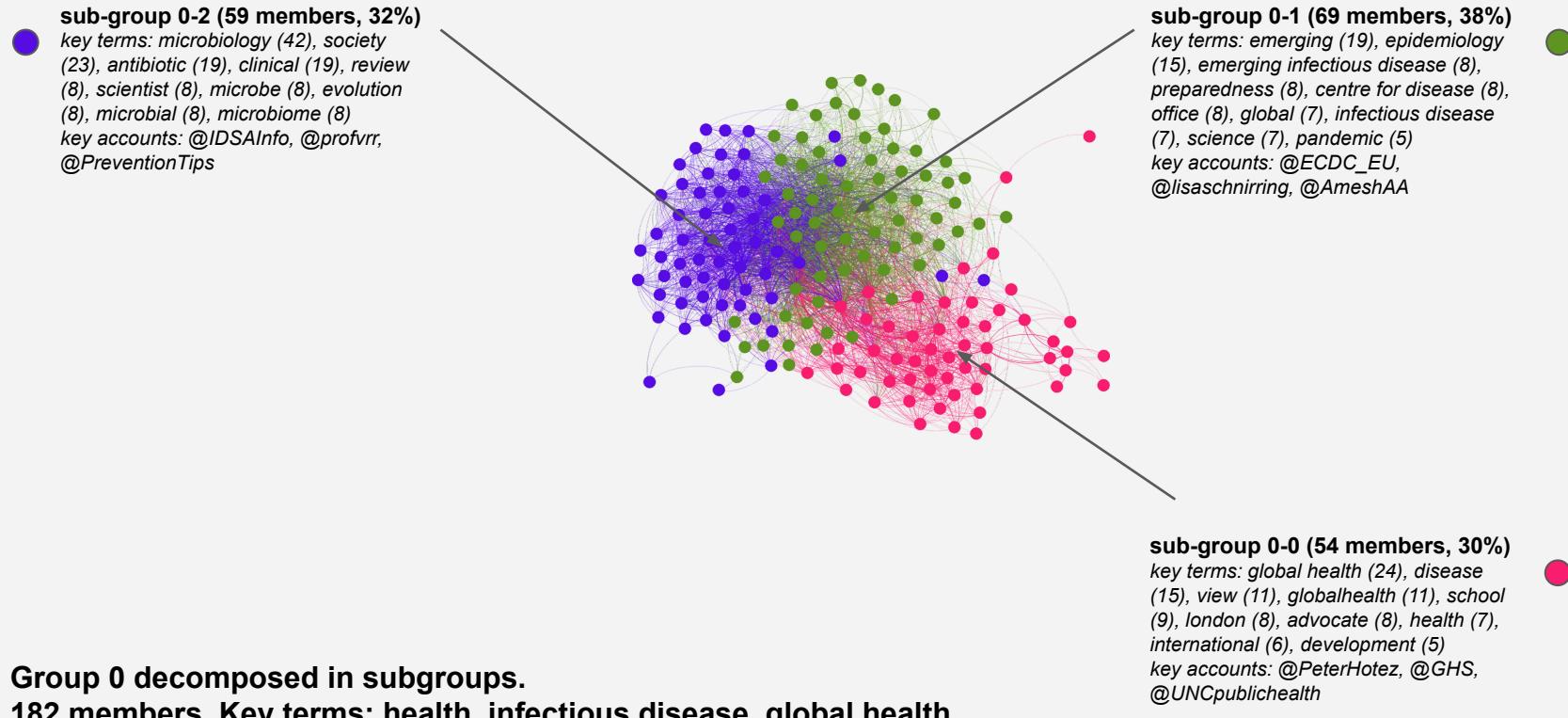
key terms: antibiotic (23), tropical (19), office (15), organization (11), disease (11), peer reviewed (8), bioinformatic (8), prevention and control (8), supporting (8), microbiome (8)
key accounts: @PeterHotez, @ECDC_EU, @profvrr

Group 2 decomposed in subgroups.

951 members. Key terms: health, infectious disease, professor

A zoom on the four subgroups of group 2

Breaking down the 4 groups in smaller communities



sub-group 1-0 (120 members, 43%)
key terms: *globalhealth* (23), *virus* (19), *epidemiologist* (13), *college* (11), *ecology* (11), *doc* (11), *control* (11), *modelling* (11), *infectious disease epidemiology* (8), *associate professor* (8)
key accounts: @SCBriand, @AbraarKaran, @BhadeliaMD

sub-group 1-1 (72 members, 26%)
key terms: *disease* (36), *security* (5), *program* (5), *modeling* (4), *student* (4), *institute* (4), *dept* (4), *health science* (3), *developing* (3), *instagram* (3)
key accounts: @JenniferNuzzo, @joshmich, @hayesluk

sub-group 1-2 (85 members, 31%)
key terms: *global* (42), *centre* (8), *genetic* (5), *advisor* (5), *africa* (5), *regional* (5), *genomic* (5), *reporter* (5), *region* (5), *infection prevention* (5)
key accounts: @SaskiaPopescu, @CT_Bergstrom, @KindrachukJason

Group 1 decomposed in subgroups.
277 members. Key terms: health, infectious disease, epidemiologist



sub-group 2-3 (24 members, 13%)

key terms: director (8), big (5), journalism (5), natgeo (3), blogger (3), mom (3), nerd (3), science policy (3), cell (3), blog (3)
key accounts: @laurahelmuth, @statnews, @picardonhealth



sub-group 2-4 (32 members, 18%)

key terms: leading (8), medical journal (8), cdc (5), disease (5), national (5), weekly (5), red (3), subject (3), link (3), association (3)
key accounts: @CDC_eHealth, @EricTopol, @JohnsHopkinsSPH



sub-group 2-1 (17 members, 9%)

key terms: education (8), community (5), hh (3), providing (3), clinical (3), university (3), visit (3), department (3), integrated (3), privacy policy (3)
key accounts: @HHSGov, @HopkinsMedicine, @MountSinaiNYC



sub-group 2-2 (38 members, 21%)

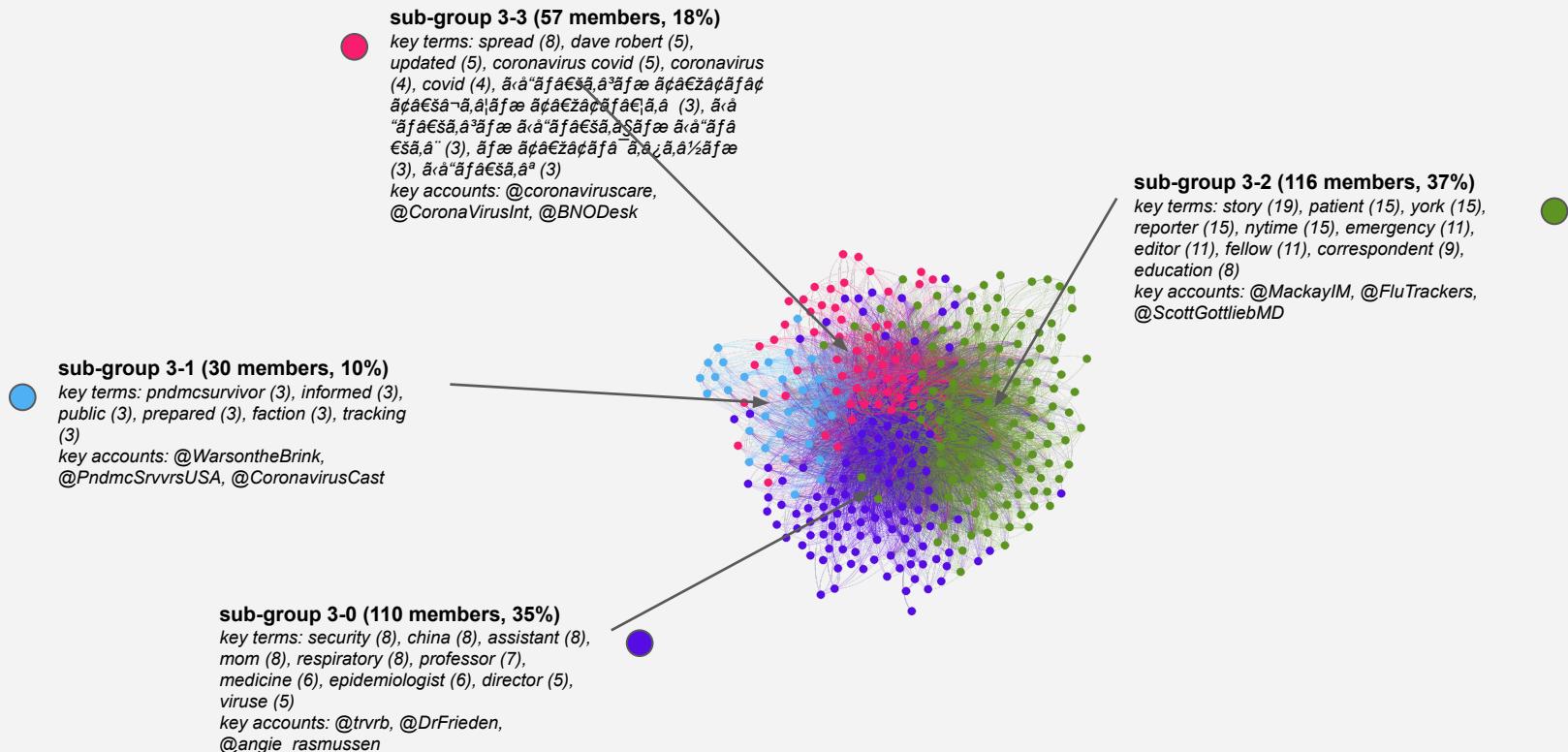
key terms: physician (16), care (12), doctor (6), dean (5), school (5), emergency physician (5), doc (5), advocate (5), foamed (5), faculty (5)
key accounts: @Bob_Wachter, @ashishkjha, @DavidJuurlink

sub-group 2-0 (68 members, 38%)

key terms: reporter (148), statnew (32), health reporter (15), covering (14), writer (11), view (11), wsj (11), biotech (11), senior (9), healthcare (9)
key accounts: @DrewQJoseph, @megaphone, @juliaoftoronto

Group 2 decomposed in subgroups.

179 members. Key terms: health, science, reporter



Group 3 decomposed in subgroups.

313 members. Key terms: health, coronavirus, covid